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Mr David Maria SASSOLI
President of the European
Parliament
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Subject: Transmission of Clean Sky 2 Joint Undertaking Final Accounts & Budgetary implementation report for the year 2019

Dear Mr Sassoli,

According to Article 52(3) of the Clean Sky 2 Joint Undertaking Financial Rules, please find attached to this letter the Final Accounts which include the financial statement and the reports on the implementation of the budget for the financial year 2019.

Yours faithfully,

Axel KREIN

Executive Director
Clean Sky 2 Joint Undertaking

Annexes: Final Accounts & Budgetary Implementation Report of the CS2 JU for the Year 2018
Opinion of the Governing Board on the Final Accounts and Budgetary Implementation Report 2019 – Written Procedure 2020-04

cc. Ms. Monika HOHLMEIER, Chairwoman of the Committee on Budgetary Control monika.hohlmeier@europarl.europa.eu



Opinion of the Governing Board on the Final Accounts and Budgetary Implementation Report 2019

THE GOVERNING BOARD OF THE CLEAN SKY 2 JOINT UNDERTAKING,

Having regard to Council Regulation No 558/2014 of 6 May 2014 establishing the Clean Sky 2 Joint Undertaking¹;

Having regard to the Statutes of the Clean Sky 2 Joint Undertaking as annexed to Council Regulation No 558/2014 of 6 May 2014 and in particular to Article 20(3);

Having regard to the Financial Rules of the Clean Sky 2 Joint Undertaking², and in particular Article 52,

Having regard to the Preliminary observations of the European Court of Auditors on the provisional accounts 2019 of the Clean Sky 2 Joint Undertaking,

WHEREAS:

- 1) The Clean Sky 2 Joint Undertaking transmitted to the European Court of Auditors and to the external auditors its provisional accounts on 13 February 2020;
- 2) The external auditors stated in their report dated 11 March 2020 that the provisional annual accounts show a fair view in all material aspects;
- 3) The Preliminary observations of the European Court Auditors report dated 26 May 2020, state that the accounts of the JU for the year 2019 present fairly, in all material respects, the financial position of the JU at 31 December 2019, 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 and are legal and regular.
- 4) The Governing Board should deliver an opinion on the final accounts of the Clean Sky 2 Joint Undertaking;

¹ OJ L 169, 7.6.2014, p. 77.

² Doc. reference CS-GB-Writ proc 2019-07 Revised Financial Rules

5) The Executive Director should, by 1 July of the following financial year, send the final accounts to the European Parliament, the Council, the Commission and the Court of Auditors, together with the Governing Board's opinion.

HAS ADOPTED THE FOLLOWING OPINION:

Article 1

The Governing Board provides a favourable opinion on the Final Accounts and Budgetary Implementation Report 2019 of the Clean Sky 2 Joint Undertaking as annexed to this opinion.

Article 2

The Governing Board, having taken note of the preliminary observations of the European Court of Auditors, expresses the request to the Executive Director to follow up the recommendations identified by the Court of Auditors and to submit a reply by 30 September.

Done in Brussels, 25 June 2020

On behalf of the Governing Board



*Axel Krein
Executive Director*

Enclosures:

Annex I: Final Accounts and Budgetary Implementation Report 2019 of the Clean Sky 2 JU



FINAL ACCOUNTS

&

BUDGETARY IMPLEMENTATION REPORT

OF

THE CLEAN SKY 2

JOINT UNDERTAKING

FOR THE YEAR

2019

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1 INTRODUCTION

The Clean Sky Joint Undertaking, an independent legal entity, was set up as a public-private partnership by Council Regulation (EC) No 71/2008 dated 20th December 2007, originally for the period up to 31st December 2017. The Council Regulation No 71/2008 has been repealed by Council Regulation (EU) No 558/2014 of 6 May 2014¹ establishing the Clean Sky 2 Joint Undertaking. The new Regulation entrusted the Joint Undertaking with new tasks under the Horizon 2020 Framework Programme for Research and Innovation and extended its lifetime for the period up to 31 December 2024. The Clean Sky 2 Joint Undertaking replaced and succeeded the Clean Sky Joint Undertaking, established by Regulation (EC) No 71/2008.

The seat of the Clean Sky 2 Joint Undertaking is located in Brussels, Belgium.

The Clean Sky JTI (Joint Technology Initiative) represents a unique Public-Private Partnership between the European Union (represented by the European Commission) and the aeronautic industry, managed by the Clean Sky 2 Joint Undertaking.

Clean Sky is the most ambitious aeronautical research programme ever launched in Europe. Its mission is to develop breakthrough technologies to significantly increase the environmental performances of airplanes and air transport, resulting in less noisy and more fuel efficient aircraft, hence bringing a key contribution in achieving the Single European Sky environmental objectives. The new programme is leveraged by further research activities funded at national and regional level and by large private investments.

The objectives of the CS2 JU are to contribute to the finalisation of research activities of the Seventh Framework Programme initiated under Regulation (EC) No 71/2008, in particular Theme 7, Transport (including Aeronautics) of the Specific Programme Cooperation; and to contribute to improving the environmental impact of aeronautical technologies, including those relating to small aviation, as well as to developing a strong and globally competitive aeronautical industry and supply chain in Europe.

The objectives can be realised through speeding up the development of cleaner air transport technologies for earliest possible deployment, and in particular the integration, demonstration and validation of technologies capable of:

- (a) increasing aircraft fuel efficiency, thus reducing CO₂ emissions by 20 to 30 % compared to 'state-of-the-art' aircraft entering into service as from 2014;
- (b) reducing aircraft NO_x and noise emissions by 20 to 30 % compared to 'state-of-the-art' aircraft entering into service as from 2014.

¹ OJ L 169, 7.6.2014, p.77.



The Clean Sky 2 programme continues this work in decreasing the environmental footprint of the aeronautical industry and falls under the societal challenge pillar in H2020, namely Smart, Green and Integrated transport.

These objectives require both near-term solutions that can be implemented in the next generation of aircraft, and breakthrough innovations to address the longer-term objectives – the air transport system from 2035 onward.

As technologies become more complex and interconnected, validation through demonstration is essential to enable industry to justify the substantial and increasing investment in new products.

The members of the Clean Sky 2 Joint Undertaking are:

- (a) the Union, represented by the Commission;
- (b) the Leaders and the Associates as listed in Annex II of Council Regulation No 558/2014, and the Core Partners who are selected through an open, non-discriminatory and competitive call subject to an independent evaluation.

The members of the Clean Sky 2 Joint Undertaking other than the Union are referred to as the ‘private members’.

The Clean Sky 2 Joint Undertaking is jointly funded by the Union and the private members and their affiliated entities through financial contributions paid in instalments and contributions consisting of the costs incurred by them in implementing indirect actions that are not reimbursed by the Clean Sky 2 Joint Undertaking (in-kind contributions).

The Union financial contribution to the Clean Sky 2 Joint Undertaking under Horizon 2020 (to cover both administrative and operational costs) will be up to Euro 1,755,000,000.

The total in-kind contribution from the private members shall be of at least Euro 2,193,750,000.

The administrative costs under Horizon 2020 shall not exceed Euro 78,000,000 and will be covered through financial contributions divided equally on an annual basis between the Union and the private members. If part of the contribution for administrative costs is not used, it may be made available to cover the operational costs of the Clean Sky 2 Joint Undertaking.

Governance

The Governing Board of the Clean Sky 2 Joint Undertaking is composed of:

- (a) one representative of the Commission on behalf of the Union;
- (b) one representative of each Leader;
- (c) one representative of Core Partners per ITD;
- (d) one representative of Associates per ITD;
- (e) one representative of Core Partners per IADP.



The Union holds 50 % of the voting rights. The voting rights of the Union are indivisible. Each other representative holds an equal number of votes. Failing consensus, the Governing Board takes decisions by a majority of at least 80 % of all votes, including the votes of those who are absent.

The financial reporting of the CS2 JU is governed by the provisions of the Financial Rules of the Clean Sky 2 Joint Undertaking², which take into account the particular needs to combine public and private funding. The Final Accounts comprise of the financial statements of the JU and the reports on implementation of the budget.

The Final Accounts 2019 cover the period 1st January to 31st December 2019.

2 FINANCIAL STATEMENTS

2.1 Balance Sheet

² Governing Board decision ref. CS-GB-Writ proc 2019-07, adopted on 27 January 2020

BALANCE SHEET			
ASSETS		31/12/2019	31/12/2018
A. NON CURRENT ASSETS			
Property, plant and equipment (net)	4.1.1	101,142.00	103,457.00
Intangible assets (net)		31,758.00	123,888.00
TOTAL NON-CURRENT ASSETS		132,900.00	227,345.00
B. CURRENT ASSETS			
Short-term pre-financing	4.1.2	185,467,601.57	164,971,534.47
Short-term pre-financing Clean Sky JU		185,467,601.57	164,971,534.47
Short-term receivables		19,119,210.51	15,503,185.87
Short term receivables - recoveries from members and partners		987,839.34	2,578,947.98
Deferred charges and accrued income		191,105.62	83,098.02
Central treasury liaison accounts		17,940,265.55	12,841,139.87
Cash and cash equivalents		0.00	0.00
TOTAL CURRENT ASSETS		204,586,812.08	180,474,720.34
TOTAL ASSETS		204,719,712.08	180,702,065.34
LIABILITIES		31/12/2019	31/12/2018
C. NET ASSETS			
Contributions received from Members (EU & industry)	4.2.1	1,973,361,198.24	1,645,595,765.84
Contributions in kind received from Members (Industry)		867,952,442.92	867,952,442.92
Contributions used during previous years		(2,510,688,137.64)	(2,091,006,329.87)
Contributions used during the year (EOA)		(474,182,123.54)	(419,681,807.77)
TOTAL NET ASSETS		(143,556,620.02)	2,860,071.12
D. CURRENT LIABILITIES			
Members contribution to be validated	4.2.2	318,985,107.30	156,850,621.66
Accounts payable and accrued charges		29,291,224.80	18,948,774.21
Amounts payable - consolidated entities		0.00	142,275.94
Amounts payable - beneficiaries and suppliers		23,914,409.12	8,711,444.06
Amounts payable - other		75,847.44	42,436.76
Accrued charges		5,300,968.24	10,052,617.45
Provision for risks and charges - short term		0.00	2,042,598.35
Provision for risks and charges - short term		0.00	2,042,598.35
TOTAL CURRENT LIABILITIES		348,276,332.10	177,841,994.22
TOTAL LIABILITIES		204,719,712.08	180,702,065.34

2.2 Statement of Financial Performance

STATEMENT OF FINANCIAL PERFORMANCE			
	Ref.	2019	2018
REVENUES			
NON-EXCHANGE REVENUES			
Recovery of expenses	4.3.1	1,595,566.79	1,092,614.73
Exchange gains		0.00	173.26
TOTAL NON-EXCHANGE REVENUES		1,595,566.79	1,092,787.99
OPERATIONAL EXPENSES			
Operational expenses funded by CSJU in cash	4.3.2	306,266,493.17	247,955,402.12
Operational expenses contributed in kind by members		162,568,549.23	165,835,427.75
TOTAL OPERATIONAL EXPENSES		468,835,042.40	413,790,829.87
OPERATING EXPENSES			
Staff expenses	4.3.3	4,190,605.75	4,335,220.58
Administrative expenses		2,751,290.87	2,648,090.18
Total administrative expenses		6,941,896.62	6,983,310.76
Other operating expenses			
Exchange losses		33.96	152.58
Total other operating expenses		33.96	152.58
TOTAL OPERATING EXPENSES		6,941,930.58	6,983,463.34
OPERATING RESULT		(474,181,406.19)	(419,681,505.22)
FINANCIAL INCOME			
Interest on late payment (income)	4.3.4	995.11	3,142.55
Total financial income		995.11	3,142.55
FINANCIAL EXPENSES			
Financial expenses	4.3.4	1,712.46	3,445.10
Total financial expenses		1,712.46	3,445.10
FINANCIAL RESULT		(717.35)	(302.55)
ECONOMIC RESULT OF THE YEAR		(474,182,123.54)	(419,681,807.77)

2.3 Statement of Changes in Net assets 2019



Changes in Net Assets and Liabilities	EURO	EURO
Net Assets		
Balance as of 31st December 2019		2,860,071.12
Contributions received from members during the year 2019:		
Private members Clean Sky 2 Programme (H2020) (cash)	4,760,173.40	
EC Clean Sky 2 Programme (H2020) (cash)	323,005,259.00	
Other members contributions in kind from 2008-2019 validated in 2019	0.00	
Total contributions in 2019		327,765,432.40
Economic Outturn for 2019		(474,182,123.54)
Balance as of 31st December 2019		(143,556,620.02)

2.4 Cash Flow Analysis³

	2019
Economic result of the year	(474,182,123.54)
Operating activities	
Amortisation and depreciation	135,414.77
Non-cash expenses in-kind	162,568,549.23
Cash contributions from Members (EC & Industry)	327,765,432.40
Increase/(decrease) in provisions for risks and liabilities	(2,042,598.35)
(Increase)/decrease in pre-financing	(20,496,067.10)
(Increase)/decrease in exchange receivables and non-exchange recoverables	(3,616,024.64)
Increase/(decrease) in payables and accruals	10,342,450.59
Other non-cash movements	(434,063.59)
Net Cash Flow from operating activities	40,969.77
Investing activities	
(Increase)/decrease in intangible assets and property, plant and equipment	(40,969.77)
Net Cash Flow from investing activities	(40,969.77)
Net increase/(decrease) in cash and cash equivalents	0.00
Cash and cash equivalents at the beginning of the period	0.00
Cash and cash equivalents at the end of the period	0.00

³ The treasury of the CS2 JU is managed by the European Commission's treasury services. Due to this the CS2 JU does not have any bank accounts of its own. All payments and receipts are processed via the Commission's treasury and registered on intercompany accounts that are presented under the heading exchange receivables.

3 NOTES TO THE FINANCIAL STATEMENTS

3.1 Accounting Principles

The financial statements for the financial year 2019 are prepared on the basis of the EU Accounting Rules which adapt the International Public Sector Accounting Standards (and in some cases the International Financial Reporting Standards) to the specific environment of the European Union, while the reports on implementation of the budget continue to be primarily based on movements of cash. They are in line as well with Regulation (EU, Euratom) No 2018/1046 ("Financial Regulation")⁴ and with the CS2 JU Financial Rules.

The objectives of the financial statements are to provide information about the financial position, performance and cash flows of an entity that is useful to a wide range of users. In the particular case of the CS2 JU, considering its nature and activities, the objectives are to provide information for decision making, and to demonstrate the accountability of the entity for the resources entrusted to it.

The overall considerations (or accounting principles) to be followed when preparing the financial statements are laid down in EU Accounting Rule 1 'Financial Statements' and are the same as those described in IPSAS 1: fair presentation, accrual basis, going concern, consistency of presentation, materiality, aggregation, offsetting and comparative information. The qualitative characteristics of financial reporting are relevance, reliability, understandability and comparability.

3.2 Basis of preparation

3.2.1 Reporting period

Financial statements are presented annually. The accounting year begins on 1 January and ends on 31 December.

3.2.2 Currency and basis for conversion

The financial statements are presented in euro, which is the CS2 JU's functional and reporting currency. Foreign currency transactions are converted into euro using the exchange rates prevailing at the dates of the transactions.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are converted into euro on the basis of the exchange rates applicable on 31 December 2019.

⁴ OJ L 193, 30.7.2019.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the economic outturn account.

3.2.3 Use of estimates

In accordance with IPSAS and generally accepted accounting principles, the financial statements necessarily include amounts based on estimates and assumptions by management based on the most reliable information available. Significant estimates include, but are not limited to; accrued and deferred income and charges, provisions, financial risk on accounts receivables, contingent assets and liabilities, and degree of impairment of assets. Actual results could differ from those estimates.

Reasonable estimates are essential part of the preparation of financial statements and do not undermine their reliability. An estimate may need revision if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience. By its nature, the revision of an estimate does not relate to prior periods and is not the correction of an error. The effect of a change in accounting estimate shall be recognised in the surplus or deficit in the periods in which it becomes known.

3.2.4 Accounting Rules

The accounting rules applied by the Clean Sky 2 Joint Undertaking allow for consolidation with the accounts of the EU institutions. In accordance with Article 40 of the Financial Rules of the CS2 JU the financial statements shall be drawn in accordance with generally accepted accounting principles for the public sector as outlined in the accounting rules according to Article 80 of Regulation (EU, Euratom) No 2018/1046 or the accrual based International Public Sector Accounting Standards (hereafter "IPSAS").

3.3 Balance Sheet

3.3.1 Intangible assets

Acquired computer software licences are stated at historical cost less accumulated amortisation and impairment losses. The assets are amortised on a straight-line basis over their estimated useful lives. The estimated useful lives of intangible assets depend on their specific economic lifetime or legal lifetime determined by an agreement. Internally developed intangible assets are capitalised when the relevant criteria of the EU accounting rules are met. The costs to capitalise include all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management. Costs associated with research activities, non-capitalisable development costs and maintenance costs are recognised as expenses as incurred.

3.3.2 Property, plant and equipment

All property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition or construction of the asset. Subsequent costs are included in the asset's carrying

amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits or service potential associated with the item will flow to the entity and its cost can be measured reliably. Repairs and maintenance costs are charged to the statement of financial performance during the financial period in which they are incurred. Land and works of art are not depreciated as they are deemed to have an indefinite useful life. Assets under construction are not depreciated as these assets are not yet available for use. Depreciation on other assets is calculated using the straight-line method to allocate their cost less their residual values over their estimated useful lives, as follows:

Type of asset	Straight line depreciation rate
Intangible assets – Computer software	25%
Plant machinery and equipment	12.5% to 25%
Furniture	10% to 25%
Fixtures and fittings	12.5% to 25%
Computer hardware	25%

Gains or losses on disposals are determined by comparing proceeds less selling expenses with the carrying amount of the disposed asset and are included in the statement of financial performance.

3.3.3 Leases

Leases of tangible assets, where the entity has substantially all the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalised at the inception of the lease at the lower of the fair value of the leased asset and the present value of the minimum lease payments. The interest element of the finance lease payment is charged to statement of financial performance over the period of the lease at a constant periodic rate in relation to the balance outstanding. The rental obligations, net of finance charges, are included in financial liabilities (non-current and current). The interest element of the finance cost is charged to the statement of financial performance over the lease period so as to produce a constant periodic interest rate on the remaining balance of the liability for each period. The assets held under finance leases are depreciated over the shorter of the assets' useful life and the lease term.

Leases where the lessor retains a significant portion of the risks and rewards inherent to ownership are classified as operating leases. Payments made under operating leases are charged to the statement of financial performance on a straight-line basis over the period of the lease.

3.3.4 Pre-financing

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e. a float. It may be split into a number of payments over a period defined in the particular contract, decision, agreement or basic legal act. The float or advance is either used for the purpose for

which it was provided during the period defined in the agreement or it is repaid. If the beneficiary does not incur eligible expenditure, he has the obligation to return the pre-financing advance to the entity. The amount of the pre-financing may be reduced (wholly or partially) by the acceptance of eligible costs (which are recognised as expenses). Pre-financing is, on subsequent balance sheet dates, measured at the amount initially recognised on the balance sheet less eligible expenses (including estimated amounts where necessary) incurred during the period.

3.3.5 Receivables

As the EU accounting rules require a separate presentation of exchange and non-exchange transactions, for the purpose of drawing up the accounts, receivables are defined as stemming from non-exchange transactions (when the entity receives value from another entity without directly giving approximately equal value in exchange) and recoverables are defined as stemming from exchange transactions.

Receivables are carried at original amount less write-down for impairment. A write-down for impairment is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms. The amount of the write-down is the difference between the asset's carrying amount and the recoverable amount. The amount of the write-down is recognised in the statement of financial performance.

3.3.6 Cash and cash equivalents

In 2017 the treasury of the CS2 JU was integrated into the European Commission's treasury system. Consequently, the CS2 JU does not have any bank accounts of its own. All payments and receipts processed via the Commission's treasury system. The transactions registered on intercompany accounts under the heading short-term receivables.

3.3.7 Net assets

Net assets are the residual of assets and liabilities and comprise of accumulated contributions received from the members of the JU (EU and industry) less the accumulated contributions used. The contributions include financial contributions received by the JU and contributions provided by the members to the funded projects in-kind. The net assets also contain reserves, if applicable.

Members' contributions

Financial contribution:



According to the notes of the Accounting Officer of the Commission (ARES (2010)303380 and ARES (2009)366251, Annex 2), subsidies and contributions that the JU receives from the European Union and other members are considered as investments of the members. They are not recognised in the financial statements of the JU as income from grants, but are treated as contributions from owners and are shown in the Net Assets of the JU as *Contribution received from Members (EU and industry)*. Financial contributions comprise of funds for operational expenses of the JU as well as for its running costs.

In-kind contributions:

Under Horizon 2020 programme the total contribution from the private members shall be of at least Euro 2,193,750,000. The in-kind contribution consists of the following:

- (a) *in-kind contributions to operational costs*: in-kind contributions by private members and their affiliated entities consisting of the costs incurred by them in implementing indirect actions less the contribution of the Clean Sky 2 Joint Undertaking and any other Union contribution to those costs.
- (b) *in-kind contributions to additional activities*: in-kind contributions of at least Euro 965,250,000 consisting of the costs incurred by private members in implementing additional activities outside the work plan of the Clean Sky 2 Joint Undertaking contributing to the objectives of the Clean Sky Joint Technology Initiative.

The in-kind contributions to operational costs (IKOP) are linked to the work plan of the JU and co-financed by the Joint Undertaking. These contributions reflect the involvement of the private sector within the Joint Undertaking. These contributions are recognised as contributions from owners under the net assets heading of the balance sheet according to EU Accounting Rule 1.

The in-kind contributions in implementing additional activities (IKAA) are not part of the CS2 JU work programme and not co-financed by the Joint Undertaking. The IKAA contributions contribute to the overall Joint Technology Initiative, but they are not linked to the statutory tasks of the JU. Consequently the IKAA contributions, contrary to the IKOP contributions, are not recognised in the accounts of the JU. Additional information about the IKAA contributions is disclosed in the Annual Activity Report of the CS2 JU.

The in-kind contributions are subject to evaluation and opinion by the CS Governing Board.

The in-kind contributions to operational costs are reflected in the annual accounts of the JU at the end of the year. Contributions related to transmitted cost claims or calculated on the basis of estimates, are shown in the liabilities of the JU as *Contribution from members to be validated*. The related operational expense is included in the EOA and therefore appears in the *Contributions used during the year (EOA)*.

After the acceptance of the in-kind contributions by the Governing Board the contributions are shifted from the liabilities to the net assets as *Contributions received from members*.

3.3.8 Provisions

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

3.3.9 Payables

Included under accounts payable are both amounts related to exchange transactions such as the purchase of goods and services and non-exchange transactions related e.g. to cost claims from beneficiaries, grants or other JU funding.

Where grants or other funding is provided to the beneficiaries, the cost claims are recorded as payables for the requested amount when the cost claim is received. Upon verification and acceptance of the eligible costs, the payables are valued at the accepted and eligible amount. Payables arising from the purchase of goods and services are recognised at invoice reception for the original amount and corresponding expenses are entered in the accounts when the supplies or services are delivered and accepted by the entity.

3.3.10 Accrued and deferred income and charges

Transactions and events are recognised in the financial statements in the period to which they relate. At year-end, if an invoice is not yet issued but the service has been rendered, the supplies have been delivered by the entity or a contractual agreement exists (e.g. by reference to a contract), an accrued income will be recognised in the financial statements. In addition, at year-end, if an invoice is issued but the services have not yet been rendered or the goods supplied have not yet been delivered, the revenue will be deferred and recognised in the subsequent accounting period. Expenses are also accounted for in the period to which they relate. At the end of the accounting period, accrued expenses are recognised based on an estimated amount of the transfer obligation of the period. The calculation of accrued expenses is done in accordance with detailed operational and practical guidelines issued by the Accounting Officer which aim at ensuring that the financial statements provide a faithful representation of the economic and other phenomena they purport to represent. By analogy, if a payment has been made in advance for services or goods that have not yet been received, the expense will be deferred and recognised in the subsequent accounting period.

3.4 Statement of Financial Performance

3.4.1 Revenue

Revenue comprises gross inflows of economic benefits or service potential received and receivable by the entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Depending on the nature of the underlying transactions in the statement of financial performance it is distinguished between:

(i) Revenue from non-exchange transactions

Revenue from non-exchange transactions are taxes and transfers because the transferor provides resources to the recipient entity without the recipient entity providing approximately equal value directly in exchange.

Transfers are inflows of future economic benefits or service potential from non-exchange transactions, other than taxes. The entity shall recognise an asset in respect of transfers when the entity controls the resources as a result of a past event (the transfer) and expects to receive future economic benefits or service potential from those resources, and when the fair value can be reliably measured. An inflow of resources from a non-exchange transaction recognised as an asset (i.e. cash) is also recognised as revenue, except to the extent that the entity has a present obligation in respect of that transfer (condition), which needs to be satisfied before the revenue can be recognised. Until the condition is met the revenue is deferred and recognised as a liability (pre-financing received).

(ii) Revenue from exchange transactions

Revenue from the sale of goods and services is recognised when the significant risk and rewards of ownership of the goods are transferred to the purchaser. Revenue associated with a transaction involving the provision of services is recognised by reference to the stage of completion of the transaction at the reporting date.

3.4.2 Expenses

Expenses are decreases in economic benefits or service potential during the reporting period in the form of outflows or consumption of assets or incurrence of liabilities that result in decreases in net assets/equity. They include both the expenses from exchange transactions and expenses from non-exchange transactions.

Expenses from exchange transactions arising from the purchase of goods and services are recognised when the supplies are delivered and accepted by the entity. They are valued at original invoice amount. Furthermore, at the balance sheet date expenses related to the service delivered during the period for which an invoice has not yet been received or accepted are recognised in the statement of financial performance.

Expenses from non-exchange transactions account for the majority of the entity's operating expenses. They relate to transfers to beneficiaries and can be of three types: entitlements, transfers under agreement and discretionary grants, contributions and donations. Transfers are recognised as expenses in the period during which the events giving rise to the transfer occurred, as long as the nature of the transfer is allowed by regulation or an agreement has been signed authorising the transfer; any eligibility criteria have been met by the beneficiary; and a reasonable estimate of the amount can be made. When a request for payment or cost claim is received and meets the recognition criteria, it is recognised as an expense for the eligible



amount. At year-end, incurred eligible expenses due to the beneficiaries but not yet reported are estimated and recorded as accrued expense.

3.5 Contingent Assets and Liabilities

3.5.1 Contingent assets

A contingent asset is a possible asset that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. A contingent asset is disclosed when an inflow of economic benefits or service potential is probable.

3.5.2 Contingent liabilities

A contingent liability is a possible obligation that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation that arises from past events but is not recognised because: it is not probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation or, in the rare circumstances where the amount of the obligation cannot be measured with sufficient reliability.

4 NOTES

4.1 Notes to the Balance sheets - Assets

4.1.1 Non-Current Assets

4.1.1.1 Property, plant and equipment

In 2019 the JU acquired new printers, mobile phones and audio-visual equipment.

4.1.1.2 Intangible fixed assets:

The JU developed internally a grant management tool (GMT2) to manage the grant agreements for Members (GAMs) under H2020 programme. In 2018, the contracts of the new GAMs were transferred into the EC common H2020 tools (Sygma/Compass). GMT2 remains operational for the management of the IKAA (in-kind contributions in implementing additional activities) and for the management of the ex-post audit related adjustments only.

Intangible assets under development

According to the EU Accounting Rules an intangible asset shall be recognised if it is probable that the expected future economic benefits or service potential that are attributable to that asset will flow to the JU and the cost or fair value of the asset can be measured reliably.



Tangible Fixed Assets									
Acquisition Costs					Depreciation			Residual value	
Category of Assets	Opening balance at cost as of 01/01/2019	Additions in 2019	Disposals in 2019	Ending balance cost as of 31/12/2019	Opening depreciation as at 01/01/2019	Depreciation charge for 2019	Disposals in 2019	Closing accumulated depreciation as of 31/12/2019	Balance as of 31/12/2019
Total Plant, machinery and equipment	45,156.10	27,753.87		72,909.97	35,862.10	8,486.87		44,348.97	28,561.00
Total Computer Hardware	235,983.98	13,215.90	-24,025.04	225,174.84	168,281.98	28,363.90	-24,025.04	172,620.84	52,554.00
Total Furniture and Fixtures	78,072.10			78,072.10	51,611.10	6,434.00		58,045.10	20,027.00
Total Tangible Assets	359,212.18	40,969.77	-24,025.04	376,156.91	255,755.18	43,284.77	-24,025.04	275,014.91	101,142.00
Intangible Fixed Assets									
Acquisition Costs					Amortisation			Residual value	
Category of Assets	Opening balance at cost as of 01/01/2019	Additions/ reclassifications in 2019	Disposals/ Reclassifications in 2019	Ending balance cost as of 31/12/2019	Opening amortisation as at 01/01/2019	Amortisation charge for 2019	Disposals in 2019	Closing accumulated depreciation as of 31/12/2019	Balance as of 31/12/2019
Software	736,827.63		-289,003.91	447,823.72	612,939.63	92,130.00	-289,003.91	416,065.72	31,758.00
Software under development	-			-	-			-	-
Total Intangible Assets	736,827.63	-	-289,003.91	447,823.72	612,939.63	92,130.00	-289,003.91	416,065.72	31,758.00
TOTAL FA	1,096,039.81	40,969.77	-313,028.95	823,980.63	868,694.81	135,414.77	-313,028.95	691,080.63	132,900.00



4.1.2 Current Assets

4.1.2.1 Short-term pre-financing

Analysis of net pre-financing as of 31.12.2019								
	Balance as of 01.01.2019	Reversal of accrued of operational expense against pre-financing for project execution in 2018	Pre-financing used in 2019 through execution of projects	Pre-financing paid by the JU in 2019	Pre-financing recovered or reflected under receivables of the JU	Total amount of pre-financing before accrual as of 31.12.2019	Accrual of operational expense against pre-financing for project execution in 2019	Net pre-financing as of 31.12.2019
Members CS2 programme (H2020)	82,986,922.69	168,744,076.60	(59,517,709.41)	100,364,730.81	0.00	292,578,020.69	(198,164,914.04)	94,413,106.65
Partners CS Programme (FP7)	336,375.27	0.00	(38,048.84)	0.00	(298,326.43)	0.00	0.00	0.00
Partners CS2 Programme (H2020)	81,648,236.51	82,368,892.97	(34,902,926.51)	71,946,347.44	(116,114.75)	200,944,435.66	(109,892,257.94)	91,052,177.72
Pre-financing for procurement contract	0.00	0.00	0.0	2,317.20	0.00	2,317.20	0.00	2,317.20
Total	164,971,534.47	251,112,969.57	(94,458,684.76)	172,313,395.45	(414,441.18)	493,524,773.55	(308,057,171.98)	185,467,601.57

The pre-financing remains property of the CS2 JU until the performance of clearance through the acceptance of the expenditure reported in the cost claims. Under EU Accounting Rules the pre-financing balances are reduced at the year-end to the extent that costs relating project execution for each individual project have been accrued.



Under the H2020 programme, according to Article 38 (1) of the ‘H2020 Rules for participation’, a participant guarantee fund was established to cover the risk associated with non-recovery of sums due to the Union. Participants in actions under H2020 are obliged to make a contribution of 5 % of the JU funding for the action. The participants' contribution to the Fund is offset from the initial pre-financing by the JU and paid to the Fund on behalf of the participants. At the end of the action the amount contributed to the Fund is returned to the participants.

The Fund is managed by the Union, represented by the Commission acting as executive agent on behalf of the participants. The financial interest generated by the Fund is added to the Fund and serves exclusively for the purposes set out in Article 39(3).

Where amounts are due to the JU by a participant (e.g. in the event of a participant defaulting), the JU may recover effectively that amount from the Fund.

4.1.2.2 Short-term receivables

	2019	2018
Short term receivables - recoveries from members and partners	987,839.34	2,578,947.98
Running cost contribution	264,842.87	1,669.77
Recovery of unspent pre-financing	2,340,924.78	2,042,598.35
Recovery of ex-post result	789,938.38	534,679.86
Amounts written down	-2,407,866.69	0.00
Other short term receivables	191,105.62	83,098.02
Deferred charges and accrued income	191,105.62	83,098.02
Central treasury liaison accounts	17,940,265.55	12,841,139.87
Central treasury liaison accounts	17,940,265.55	12,841,139.87
Total short term receivables	19,119,210.51	15,503,185.87

According to the provisions of the Funding Agreement, the running cost contribution is invoiced to the private members based on the adopted administrative budget of the year. The unpaid running cost contribution at 31.12.2019 amounted Euro 264,842.87.

The recovery of unspent pre-financing contains the unpaid established recovery orders for Grant Agreements with Partners (Euro 2.340.924,78).

The ex-post audits resulted adjustments in favour of CS2 JU where the CS2 JU had previously recognised the original amount of the claim as an expense. For these adjustments, Euro 789,938.38 short term receivable was recognised in the books.

The write-down is the reduction in the book value of an asset when its fair value has fallen below the carrying book value. The value reduction is intended to indicate in the financial statements the probability of non-recovery of a claim. However, the CS2 JU does not give up recovering these claims in their entirety and putting all the appropriate procedures (legal proceedings) for their collection.



At year-end (excluding the recovery orders included in the write down) Euro 269,574.33 of the established recovery orders were outstanding:

RO type	Number of RO	RO Open Amount (Eur)
Running cost	6	264,842.87
Recovery of prefinancing	0	0.00
Expost recovery	1	4,731.46
Total	7	269,574.33

Amounts to be recovered - ageing balance:

Year of Origin	Number of open recovery orders at 31/12/2019				Amount in € of the open balance of recovery orders at 31/12/2019			
	Total	thereof: against private members	thereof: against partners	thereof: against other entities	Total	thereof: against private members	thereof: against partners	thereof: against other entities
2019	7	7	0	0	269,574.33	269,574.33	-	-
TOTAL	7	7	0	0	269,574.33	269,574.33	0.00	0.00

The JU impaired Euro 2,407,866.69 the established receivables:

	2019	2018
Gross short term receivables	21,527,077.20	15,503,185.87
Impairment allowance opening balance	0.00	0.00
Impairment allowance movement of the year	-2,407,866.69	0.00
Impairment allowance closing balance	0.00	0.00
Total short term receivables	19,119,210.51	15,503,185.87

The treasury of CS2 JU is integrated into the Commission's treasury system. For this reason CS2 JU does not have any bank accounts of its own. All payments and receipts are processed via the Commission's treasury system and registered on intercompany accounts which are presented under the heading short term receivables.

4.1.2.3 Financial instruments and risk management policies

Financial instruments comprise cash, current receivables, current payables, and amounts due to and from consolidated entities. Financial instruments give rise to liquidity, credit, interest rate and foreign currency risks, information about which and how they are managed is set out below.

The carrying amounts of financial instruments are as follows:

	2019	2018
Long term pre-financing	0.00	0.00
Short term receivables - recoveries from members and partners	987,839.34	2,578,947.98
Deferred charges and accrued income	191,105.62	83,098.02
Short term pre-financing	185,467,601.57	164,971,534.47
Central treasury liaison accounts	17,940,265.55	12,841,139.87
Total financial assets – A	204,586,812.08	180,474,720.34
Financial liabilities		
Payables – long term liabilities	0.00	0.00
Amounts payable - beneficiaries and other	23,990,256.56	8,753,880.82
Accrued charges	5,300,968.24	10,052,617.45
Amounts payable - consolidated entities	0.00	142,275.94
Total financial liabilities – B	29,291,224.80	18,948,774.21
Total net financial instruments (A-B)	175,295,587.28	161,525,946.13

Liquidity risk

Liquidity is the risk that arises from the difficulty of selling an assets; for example, the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss or meet an obligation. Liquidity risk arises from the ongoing financial obligations, including settlement of payables.

CS2 JU's liabilities have remaining contractual maturities as summarised below:

At 31 December 2019	< 1 year	1 - 5 years	> 5 years	Total
Payables with third parties	29,291,224.80	0.00	0.00	29,291,224.80
Payables with consolidated entities	0.00	0.00	0.00	0.00
Total liabilities	29,291,224.80	0.00	0.00	29,291,224.80

All the financial liabilities have a remaining contractual maturity of less than 1 year.

Credit risk

Credit risk is the risk of loss due to a debtor's non-payment or other failure to meet a contractual obligation.

Treasury resources are kept with the EC treasury. The JU requests the subsidy from the EC two-three times a year based on cash forecasts. Member contribution to the running cost is collected in one instalment per year.



The maximum exposure to credit risk is:

	2019	2018
Receivables		
Long term pre-financing	0.00	0.00
Short term receivables - recoveries from members and partners	3,395,706.03	2,578,947.98
Deferred charges and accrued income	191,105.62	83,098.02
Short term pre-financing	185,467,601.57	164,971,534.47
Central treasury liaison accounts	17,940,265.55	12,841,139.87
Total financial assets	206,994,678.77	180,474,720.34
Impairment	-2,407,866.69	0.00
Guarantees	0.00	0.00
Total credit risk	204,586,812.08	180,474,720.34

Credit quality of the JU's receivables:

	2019	2018
Counterparties with external credit rating:		
Prime and high grade	17,940,265.55	12,841,139.87
Upper medium grade	533,053.69	0.00
Lower medium grade	0.00	0.00
Non-investment grade	0.00	0.00
Unassigned	0.00	0.00
Counterparties without external credit rating:		
Group 1 - Debtors who never defaulted*	186,113,492.84	167,633,580.47
Group 2 - Debtors who defaulted in the past	0.00	0.00
Total credit risk	204,586,812.08	180,474,720.34

* including all the open pre-financings

Analysis of the age of the receivables:

	Neither past due nor impaired (1)	Past due but not impaired			Total (1+2+3+4)
		< 1 year (2)	1-5 years (3)	> 5 years (4)	
Available for sale financial assets (including accrued interest)	0.00	0.00	0.00	0.00	0.00
Cash and cash equivalents	0.00	0.00	0.00	0.00	0.00
Receivables with Member States	0.00	0.00	0.00	0.00	0.00
Receivables with third parties	186,614,127.93	32,418.60	0.00	0.00	186,646,546.53
Receivables with consolidated entities	17,940,265.55	0.00	0.00	0.00	17,940,265.55
Total	204,554,393.48	32,418.60	-	-	204,586,812.08

Market risk



Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk, and other price risk.

Foreign currency risk

All financial assets and liabilities are in EUR therefore the CS2 JU has no currency exposure. When miscellaneous receipts are received in currencies other than EUR, they are converted into EUR and transferred to accounts held in EUR. Intercompany accounts with the EC treasury held by CS2 JU are in EUR, no material foreign currency risk with regard to these assets.

Interest rate risk

The treasury resources kept with the EC treasury do not earn interest.

4.1.2.4 Contingent Assets

	2019	2018
Draft ex-post audit results in favour of the JU	781,466.00	5,080,851.16
Total contingent assets	781,466.00	5,080,851.16

Potential recoveries of costs from members resulting from ex-post audits

The JU commissioned a number of ex-post audits of cost claims relating to GAMs and GAPs in 2019. As at the date of preparation of the Final Accounts 2019, the results of several of these audits had yet to be formally finalised. In a number of cases the auditors noted several adjustments, some in favour of the CS2 JU, and some in favour of members.

For those audits where the results have yet to be implemented and the inflows of economic benefit are not yet virtually certain, contingent assets are disclosed.

Summary table of the pending audit results:

CS1 (FP7) Programme:

Audit batch	Status of audit report	Treatment	Total adjustment	Cash	In-kind
In favour of the JU - GAM	Final	Short-term Receivable	235,281.20	117,640.60	117,640.60
Total short term receivable			235,281.20	117,640.60	117,640.60

CS2 (H2020) Programme:



Audit batch	Status of audit report	Treatment	Total adjustment
In favour of the beneficiary - GAM	Final	Expenditure	0.00
In favour of the beneficiary - GAM	Preliminary/ Draft	Contingent liability	795,269.00
In favour of the JU - GAM	Final	Short-term Receivable	600,624.41
In favour of the JU - GAM	Preliminary / Draft	Contingent asset	781,466.00

4.2 Notes to the Balance sheet - liabilities

4.2.1 Net Assets

Net assets	2019	2018
Accumulated contributions received from Members (EC & others)	2,841,313,641.16	2,513,548,208.76
Accumulated contributions used during previous years	(2,510,688,137.64)	(2,091,006,329.87)
	330,625,503.52	422,541,878.89
Contributions used during the year (total expenses)	(475,778,685.44)	(420,777,738.31)
Non-exchange and financial revenue	1,596,561.90	1,095,930.54
Economic Outturn of the year (EOA)	(474,182,123.54)	(419,681,807.77)
Net assets	(143,556,620.02)	2,860,071.12

The *Accumulated contributions received from members* comprise of the entire funds received for the operational activity of the JU, which is managed through the Grant Agreements with members (GAMs) and partners (GAPs). Moreover, contributions to the running cost of the JU are included in this amount. For a detailed split, see the table at the end of this section (Carry forward of Net Assets 2019).

The *Accumulated contributions used during previous years* represent the total expense of previous years.

The *Contributions used during the year (EOA)* include the total expense incurred by the JU during the year 2019 as shown in the Economic Outturn Account of 2019. The operational expense shown in this amount contains the expenses incurred in-cash by the JU in 2019 for projects executed as well as the corresponding resources provided by the industry members relating to the same projects in-kind (see comments in the chapter Introduction, and in the chapter Accounting Rules).

The in-kind contribution included in the Net Assets of the JU has been approved by the Governing Board. A detailed split is shown in the following tables.

A part of the contribution provided by members to the research projects has not yet been validated by the JU's management and has not yet been presented for the approval of the Governing Board. It is therefore not reflected in the Net Assets of the balance sheet, but is shown as a current liability of the JU, see notes to 4.2.2.1. Members' contributions to be validated.

Carry forward of Net Assets 2019					
EC contribution to running costs Clean Sky Programme (FP7) (cash)					
Opening balance as of 01/01/19	Amount paid by EC in 2019	Running costs 2019 (50% share)	Adjustments to contributions	Financial income	Ending balance of EC contribution at 31/12/19
(0.00)	0	0	0.00	0.00	(0.00)
EC contribution to running costs Clean Sky 2 Programme (H2020) (cash)					
Opening balance as of 01/01/19	Amount paid by EC in 2019	Running costs 2019 (50% share)	Adjustments to contributions	Financial income	Ending balance of EC contribution at 31/12/19
0.00	3,431,512.15	(3,431,512.15)	0.00	0.00	0.00
Other members contribution to running costs Clean Sky Programme (FP7) (cash)					
Opening balance as of 01/01/19	Amount charged to other members in 2019	Running costs 2019 (50% share)	Adjustments to contributions	Financial income	Ending balance of other members contribution at 31/12/19
880,884.29	0	(80,618.75)	0	0.00	800,265.54
Other members contribution to running costs Clean Sky 2 Programme (H2020) (cash)					
Opening balance as of 01/01/19	Amount charged to other members in 2019	Running costs 2019 (50% share)	Adjustments to contributions	Financial income	Ending balance of other members contribution at 31/12/19
1,623,824.90	4,760,173.40	(3,431,512.15)	0	995.11	2,953,481.27
EC contribution to operational costs Clean Sky Programme (FP7) (cash)					
Opening balance as of 01/01/19	Amount received from the EC in 2019	Operational expense 2019 related to EC contribution (in cash)	Rejected cost claims previously expensed	Financial income	Ending balance of EC contribution at 31/12/19
2,463,109.23	0	(403,317.18)	444,894.19	0	2,504,686.24
EC contribution to operational costs Clean Sky 2 Programme (H2020) (cash)					
Opening balance as of 01/01/19	Amount received from the EC in 2019	Operational expense 2019 related to EC contribution (in cash)	Rejected cost claims previously expensed	Financial income	Ending balance of EC contribution at 31/12/19
154,742,874.36	319,573,746.86	(305,863,175.99)	716,609.01	0	169,170,054.23
Other members contribution to operational expenses Clean Sky Programme (FP7) (in-kind)					
Opening balance as of 01/01/19	In-kind contribution made by other members in 2019	Operational expense 2019 related to in-kind contribution	Rejected cost claims previously expensed	Financial income	Ending balance of other members contribution at 31/12/19
701,003.90	0	0	434,063.59	0.00	1,135,067.49
Other members contribution to operational expenses Clean Sky 2 Programme (H2020) (in-kind)					
Opening balance as of 01/01/19	In-kind contribution made by other members in 2019	Operational expense 2019 related to in-kind contribution	Rejected cost claims previously expensed	Financial income	Ending balance of other members contribution at 31/12/19
(157,551,625.56)	0.00	(162,568,549.23)	0.00	0.00	(320,120,174.79)
Carry forward of Net Assets 2019 (totals)					
Net Assets as of 01/01/2019	Contributions received during 2019	Contributions used during the year 2019	Adjustments	Financial income	Net Assets as of 31/12/2019
2,860,071.12	327,765,432.40	(475,778,685.44)	1,595,566.79	995.11	(143,556,620.02)



Note on negative net assets:

As at 31 December 2019, the CSJU has reported negative net assets of Euro -143.556.620,02.

The main element derives from the non-validated member in-kind contribution of the H2020 (CS2) programme. The reported 2018-2019 in-kind contributions are already booked on the EOA as operational expense, while only the in-kind contribution approved by the Governing Board is recognised in the Net Assets of the CSJU⁵. The declared in-kind contributions related to 2018/2019 (and some of them related to the previous periods) have not been validated by management at the date of the preparation of the Final Accounts. The validated part of these in-kind contributions are going to be approved by the Governing Board later in 2020.

The in-kind contributions for those cost not yet approved by the Governing Board are reflected in the liabilities of the Balance sheet as “contributions to be validated”. Following validation of in-kind contribution declarations by management and approval by the Governing Board later in 2020, these in-kind contributions will be transferred to the Net Assets of the CSJU.

The negative Net Assets do not indicate any risk of solvency, but are the consequence of the accounting method applied according to the specific accounting rules and guidance provided by the European Commission for the Joint Undertakings.

⁵ The JU applies a bi-annual certification process and only certified amounts can be booked into the net assets. The private members provide the certificates related to the 2018-2019 reporting periods in 2020.



The total EC contribution to the CS2 JU in 2019 was Euro 323.005.259,00. The 2019 EC contribution to running costs is determined as 50% of gross running costs incurred in the year (Euro 3.431.512,15) with the remaining 2019 EC contribution attributed to operational expenses.

The cumulative contributions made by the EC and other members to 31 December 2019 are as follows:

	Total contributions to 01/01/2019	Contributions in 2019	Total contributions to 31/12/2019
EC Contribution to running costs	26,398,217.33	3,431,512.15	29,829,729.48
Other members' contribution to running costs	28,938,294.91	4,760,173.40	33,698,468.31
EC contribution to operational expenses	1,590,259,253.60	319,573,746.86	1,909,833,000.46
Other members' in-kind contribution to operational expenses	867,952,442.92	0.00	867,952,442.92
Total contributions	2,513,548,208.76	327,765,432.40	2,841,313,641.16

Breakdown per programme:

	Total contributions to 01/01/2019	Contributions in 2019	Total contributions to 31/12/2019
EC Contribution to running costs CS Programme (FP7)	13,966,538.46	0.00	13,966,538.46
EC Contribution to running costs CS2 Programme (H2020)	12,431,678.87	3,431,512.15	15,863,191.02
Other members' contribution to running costs CS Programme (FP7)	14,882,791.13	0.00	14,882,791.13
Other members' contribution to running costs CS2 Programme (H2020)	14,055,503.78	4,760,173.40	18,815,677.18
EC contribution to operational expenses CS Programme (FP7)	785,991,302.47	0.00	785,991,302.47
EC contribution to operational expenses CS2 Programme (H2020)	804,267,951.13	319,573,746.86	1,123,841,697.98
Other members' in-kind contribution to operational expenses CS Programme (FP7)	594,100,842.92	0.00	594,100,842.92
Other members' in-kind contribution to operational expenses CS2 Programme (H2020)	273,851,600.00	0.00	273,851,600.00
Total contributions	2,513,548,208.76	327,765,432.40	2,841,313,641.16

Under the Clean Sky Programme (FP7) the Other Members of the Joint Undertaking contributed resources at least equal to the Union contribution, excluding those allocated through calls for proposals in order to carry out the research activities. The FP7 program was closed in 2017 but several ex-post audits are still on-going which might result further adjustments (see point 4.1.2.4).

The detailed table below shows the validated in-kind contributions (IKC) under Clean Sky Programme (FP7) as of 31.12.2019:



CS1 (FP7) programme approved In-Kind Contributions 2008 - 2016 projects	
ITD	Total contributions validated
ED	38,405,887.85
GRA	69,380,526.66
GRC	56,573,523.67
SAGE	157,434,329.75
SFWA	147,996,625.01
SGO	109,568,997.30
TE	14,740,952.69
TOTAL	594,100,842.92

Under the Clean Sky 2 Programme (H2020), the IKC consists of the in-kind contributions to operational costs (IKOP) (consisting of the costs incurred by the private members in implementing indirect actions less the contribution of the Clean Sky 2 Joint Undertaking and any other Union contribution to those costs); and additional activities (IKAA; consisting of the costs incurred by private members in implementing additional activities outside the work plan of the Clean Sky 2 Joint Undertaking contributing to the objectives of the Clean Sky Joint Technology Initiative.)

The IKOP is linked to the work plan of the JU and co-financed by the Joint Undertaking. These contributions are recognised as contributions from owners under the net assets heading of the balance sheet according to EU Accounting Rule 1.

The detailed table below shows the validated in-kind contributions to operational costs (IKOP) under the Clean Sky 2 Programme (H2020):

CS2 (H2020) programme approved In-Kind Contributions 2014 - 2017 projects				
SPD	IKOP validated (Written procedure 2017-02)	IKOP validated (Written procedure 2018-03)	IKOP validated (Written procedure 2018-05)	Total IKOP validated
AIR	9,620,362.03	3,104,740.98	44,246,428.09	56,971,531.10
ECO	-	-	1,583,132.62	1,583,132.62
ENG	13,067,187.01	92,919.42	66,382,299.21	79,542,405.64
FRC	5,298,658.81	296,775.99	20,291,362.76	25,886,797.56
LPA	5,189,390.31	5,269,312.49	33,162,655.41	43,621,358.21
REG	800,516.68	4,242,346.69	13,893,246.00	18,936,109.37
SAT	-	144,285.21	110,063.88	254,349.09
SYS	5,192,479.67	1,689,797.72	39,802,288.16	46,684,565.55
TE	-	-	371,350.86	371,350.86
TOTAL	39,168,594.51	14,840,178.50	219,842,826.99	273,851,600.00



The IKAA is not part of the CS2 JU work plan and not co-financed by the Joint Undertaking. The IKAA contributes to the overall Joint Technology Initiative, but they are not linked to the statutory tasks of the JU. Consequently the IKAA, contrary to the IKOP, is not recognised in the accounts of the JU. Additional information about the IKAA contributions is disclosed in the Annual Activity Report of the CS2 JU.

The declared but not yet certified/validated IKOP is booked under the heading “Members’ contribution to be validated” (see point 4.2.2.1).

4.2.2 Current liabilities

4.2.2.1 Members' contributions to be validated

The amounts represent the not yet validated contributions provided by members in-kind for the execution of GAMs. After validation of the contributions through the Governing Board, the amounts will be shifted to Net Assets and presented as Contribution received from members (see notes to 3.3.7 Net Assets).

	2019	2018
Members' contribution to be validated	318,985,107.30	156,850,621.66
Members' contribution to be validated	318,985,107.30	156,850,621.66

Breakdown of the open balance of the Members’ contribution to be validated:

	2019	2018
CS1 programme (FP7) contribution pending validation	(1,135,067.49)	(701,003.90)
CS2 programme (H2020) contribution pending validation	320,120,174.79	157,551,625.56
Members' contribution to be validated	318,985,107.30	156,850,621.66

The CS1 (FP7) programme was closed in 2017, only some ex-post audit related in-kind contribution adjustments are to be validated by the GB.

4.2.2.2 Accounts payable

	2019	2018
Amounts payable - consolidated entities	0.00	142,275.94
Payable to the H2020 Guarantee Fund	0.00	142,275.94
Amounts payable to beneficiaries and suppliers	23,914,409.12	8,711,444.06
Amounts payable to members and partners for cost claims and payables concerning invoices for running costs not yet paid at the year-end.	23,914,409.12	8,711,444.06
Other payables	75,847.44	42,436.76
Returned payments	75,847.44	42,436.76
Accrued charges	5,300,968.24	10,052,617.45
Expenses pertaining to the financial year 2018 for which invoices/claims are received only subsequently in 2019	5,300,968.24	10,052,617.45
Total accounts payable	29,291,224.80	18,948,774.21

Accrued charges

For expenses pertaining to the financial year 2019, when invoices/cost claims were received only subsequently in 2019, the following amounts have been accrued:

	2019 Total	2018 Total
Accrued administrative expenses	275,489.40	303,730.03
Accrued operational expense	5,025,478.84	9,748,887.42
Accrual of operational expense related to GAMs	159,233.57	7,715,441.76
Accrual of operational expense related to GAPs	4,866,245.27	2,033,445.66
Total accrued charges	5,300,968.24	10,052,617.45

The part of the accrued operational expenses which exceeds the paid pre-financings has been accrued in the liabilities of the JU.

4.2.2.3 Short-term provisions for risks and charges

	2019	2018
Provision for doubtful debts	0.00	2,042,598.35
Total provision for risks and charges - short term	0.00	2,042,598.35

The amount booked previously for doubtful debts as provision was converted into write down (see point 4.1.2.2). The amount is related to pre-financing recovery for which the JU has an on-going legal case.



4.2.2.4 Contingent liabilities

	2019	2018
Draft ex-post audit results in favour of the beneficiary	795,269.00	534,165.44
Ex-post audit expenditure incurred by the EC Common Support Service	801,900.00	801,900.00
Total contingent liabilities	1,597,169.00	1,336,065.44

As noted in Note 4.1.2.4 (Contingent Assets), the JU commissioned a number of ex-post audits of cost claims relating to GAMs and GAPs in 2019. As at the date of preparation of the Final Accounts 2019, some of the audit reports are still not implemented. The CS2 JU management considers that the outcome of these audits is a possible obligation. Taking into account the immature status of these audit results they are disclosed as contingent liabilities.

Amounts relating to legal cases

CS2 JU has no on-going legal case which could result a liability.

4.3 Notes to the Statement of Financial Performance

4.3.1 Non-exchange revenue

	2019	2018
Other revenue - revenue from claims previously expensed	1,581,503.97	1,079,709.96
Miscellaneous administrative revenues	14,062.82	12,904.77
Exchange gains	0.00	173.26
Total non-exchange revenues	1,595,566.79	1,092,787.99

In 2019 the CS2 JU recovered ex-post audit findings related to previous periods' claims.

In accordance with EU Accounting Rule 3 (IV.2.1.4), these negative adjustments have been presented as 'Other Revenue' in the 2019 Final Accounts, and the corresponding liability in 'Members' Contributions to be validated' (if applicable) has been reduced accordingly.

Funds received in cash from the Commission and from the other members of the JU are shown as Contributions received from members in the Net Assets of the Balance Sheet. They do not appear as income of the JU in the EOA.

Financial income is disclosed in section 4.3.4 below.

4.3.2 Operational expenses

Operational expenses are related to the projects funded by the CS2 JU to speed up technological breakthrough developments and shorten the time to market for new and cleaner solutions tested on full scale demonstrators with the aim to contribute significantly to reducing the environmental footprint of aviation.



When any request for payment or cost claim is received and meets the validation criteria, it is recognised as an expense for the eligible amount. At year-end, incurred eligible expenses already due to the beneficiaries but not yet reported are estimated and recorded as accrued expenses.

Reporting period for the GAMs lasted from 1st January 2019 to 31st December 2019. Based on the reported values by the SPDs about the incurred project cost the related operational expenditure for the year 2019 has been reflected in the Economic Outturn Account of the JU.

Projects managed through Grant Agreements for Partners (GAPs) last for different periods, which usually deviate from the calendar year. Operational expense relating to the year 2019 has been recognised by taking into account validated cost claims for applicable projects and periods. The remaining costs have been accrued assuming a pro-rata temporis execution of the projects.

	2019	2018
Operational expenses funded by CSJU in cash Clean Sky Programme (FP7)	403,317.18	517,041.73
Operational expenses funded by CSJU in cash Clean Sky 2 Programme (H2020)	305,863,175.99	247,438,360.39
Operational expenses contributed by members in-kind Clean Sky Programme (FP7)	0.00	37,248.24
Operational expenses contributed by members in-kind Clean Sky 2 Programme (H2020)	162,568,549.23	165,798,179.51
Total operational expenses	468,835,042.40	413,790,829.87

Expenses per category of beneficiaries

	2019	2018
Members	360,135,374.40	337,996,616.41
Partners	108,699,668.00	75,794,213.46
Total operational expenses	468,835,042.40	413,790,829.87

4.3.3 Operating Expenses

4.3.3.1 Administrative expenses

	2019	2018
Staff expenses	4,190,605.75	4,335,220.58
Salaries and related costs incl. SNEs	4,190,605.75	4,335,220.58
Administrative expenses	2,751,290.87	2,648,090.18
Depreciation of tangible assets / Amortisation of intangible assets	135,414.77	160,126.53
Rental fee for the offices	550,163.48	496,354.36
Communication expenditure	525,225.90	410,887.01
Missions	201,220.36	199,284.60
Experts and related expenditures (Scientific Committee etc)	331,533.57	340,377.29
Maintenance and support of IT systems	295,452.45	307,051.66
Other external service provider (consultants, interim staff, ex-post audits etc)	697,691.80	717,831.92
Other	14,588.54	16,176.81
Total administrative expenses	6,941,896.62	6,983,310.76



At 31 December 2019 the JU employed 34 Temporary Agents, 6 Contract Agents and 2 Seconded National Experts.

4.3.3.2 Other operating expenses

	2019	2018
Exchange loss	33.96	152.58
Total other operating expenses	33.96	152.58

Exchange loss related to payments in other currency than EUR

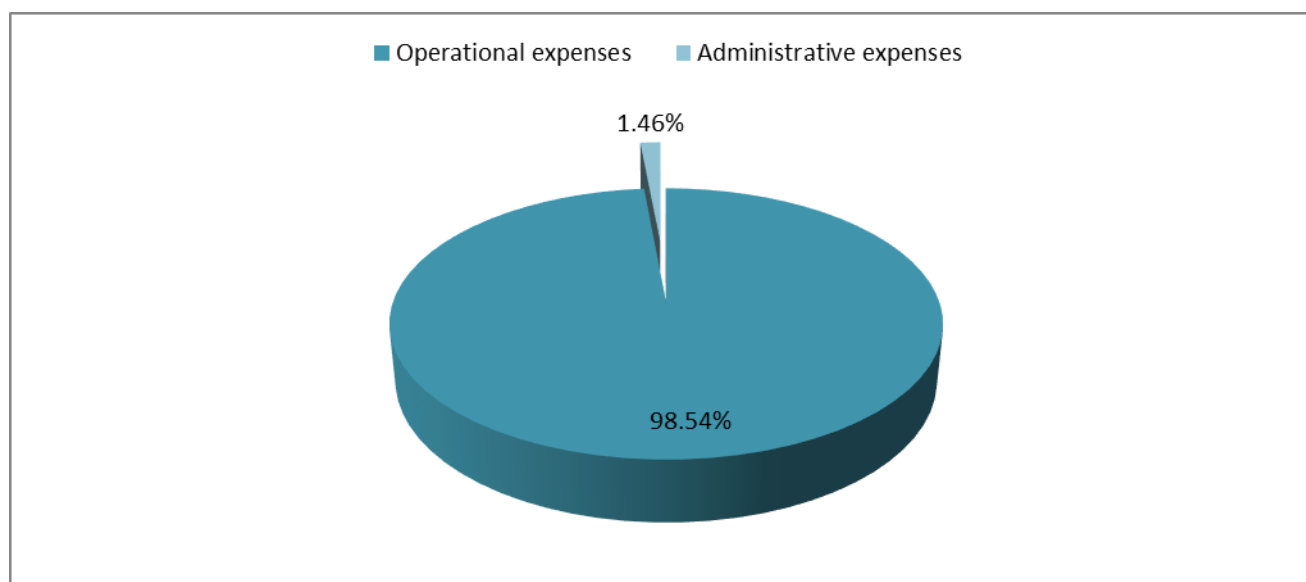
Administrative/total expenditure ratio

According to Art. 15(2) of the CS2 JU Regulation⁶ for the Clean Sky 2 (H2020) programme the administrative costs shall not exceed EUR 78 000 000. As of 31.12.2019 the CS2 JU utilised 40,89% of the available administrative budget:

	2019
Total administrative budget for the Clean Sky 2 Programme (H2020)	78,000,000.00
Administrative expenses Clean Sky 2 Programme in 2014 (H2020)	2,088,792.10
Administrative expenses Clean Sky 2 Programme in 2015 (H2020)	4,550,652.99
Administrative expenses Clean Sky 2 Programme in 2016 (H2020)	5,650,369.51
Administrative expenses Clean Sky 2 Programme in 2017 (H2020)	5,795,131.54
Administrative expenses Clean Sky 2 Programme in 2018 (H2020)	6,944,799.84
Administrative expenses Clean Sky 2 Programme in 2019 (H2020)	6,861,277.87
Total administrative expenses used until 31.12.2019	31,891,023.85
Available administrative budget for the Clean Sky 2 Programme (H2020)	46,108,976.15

⁶ Council Regulation (EU) No 558/2014

The overall ratio between the administrative and total expenditure for 2019 is 1,46 %.



4.3.4 Financial Income and Expenses

4.3.4.1 Financial income

	2019	2018
Interest income on late payment	995.11	3,142.55
Total financial income	995.11	3,142.55

According to Art.30(2) of the CS2 JU Financial Rules, the contributions paid to the CS2 JU by its Members shall bear interest to the benefit of its budget. The interest earned is reflected in the EOA under revenues and thus adds to the total of the Net Assets in the Balance Sheet of the JU.

4.3.4.2 Financial expenses

	2019	2018
Interest expense on late payment	1,712.46	3,445.10
Total financial expenses	1,712.46	3,445.10

On the expiry of the time limits laid down in the Financial Rules, the creditors are entitled to late payment interest. (In the event that the interest calculated is lower than or equal to EUR 200, it is paid to the creditor only on a request submitted within two months of receiving late payment.)



RELATED PARTIES

Highest grade description	Grade	Number of persons of this grade	Loans to related parties	
			Nominal amount	Remaining open amount as of 31/12
Acting Executive Director	AD14	1	0,00	0,00

POST BALANCE SHEET EVENTS

BREXIT

Following the notification by the United Kingdom (submitted on 29 March 2017) of its intention to withdraw from the European Union and Euratom; the procedure under Article 50 of the Treaty on the European Union was triggered, which resulted in the *Withdrawal Agreement*⁷. The latter entered into force on 31 January 2020 at midnight CET. The United Kingdom (UK) ceased to be a Member State of the European Union after this date. Based on the *Withdrawal Agreement*, the UK-based beneficiaries will continue to be fully eligible to participate and receive funding in the current 2014-2020 EU programmes, including Horizon 2020, as if the UK were a member state until the closure of these programmes. UK beneficiaries can continue – without interruption – to receive grants awarded under the current and previous multiannual financial frameworks until their end dates, even if these are after 2020.

Consequently, BREXIT has no direct effect on the current operation CS2 JU. As a non-adjusting event, BREXIT does not require any adjustments to the figures reported in the 2019 annual accounts. However, it is currently not possible to make a reasonable assessment of the impact of the UK's departure on CS2 JU's future financial situation.

COVID-19

During the first half of 2020, the coronavirus outbreak has had big impacts on the EU economy. As a non-adjusting event, the outbreak of the coronavirus does not require any adjustments to the figures reported in the 2019 annual accounts. Based on the information available at the date of signature of these annual accounts, the financial effects of the coronavirus outbreak cannot be reliably estimated.

General considerations for subsequent reporting periods:

⁷ OJ C144 I of 25.4.2019



Revenues:

There is no foreseeable material effect, 84.6% of the EC subsidies for 2020 is already cashed until the accounts are signed.

Expenses:

Due to the lock-down measures, members and partners cannot pursue their activities in the usual way. The implementation rate of project activities may materially slow down, resulting in a significant delay in expensing the pre-financing received.

Budgetary aspects:

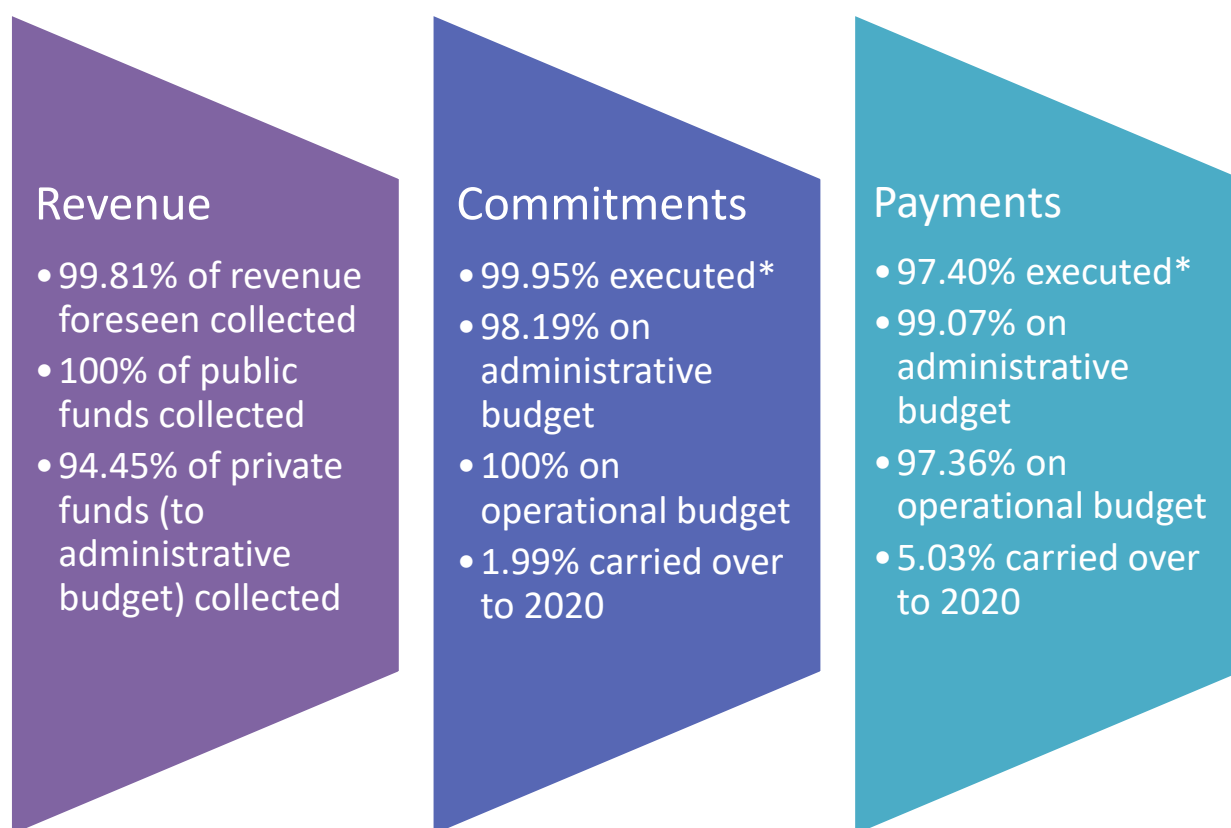
Linked to the effect of the above-mentioned lock-down measures, budgetary execution rates may be significantly lower than planned. According to the derogation granted to the JU, the unused appropriations can be re-entered to the following 3 years, ensuring the maximum utilisation of the available funds.

Other than the aforementioned items, at the date of transmission of these annual accounts, no material issues were reported that would require separate disclosure under this section. The annual accounts and related notes were prepared using the most recently available information.

5 BUDGETARY IMPLEMENTATION REPORT

5.1 Clean Sky 2 Joint Undertaking budget implementation at a glance

The present report reflects the budget execution of the Clean Sky 2 programme (H2020) carried out in 2019. The main highlights are shown below:



** excluding appropriations foreseen as 'unused'*

5.1.1 Principles of the budgetary implementation

The Clean Sky budget is implemented in accordance with the Clean Sky 2 Joint Undertaking Financial rules.

The budget is the instrument which, for each financial year, forecasts and authorizes the revenue and expenditure considered necessary for the Clean Sky 2 Joint Undertaking.

The budget is established and implemented in compliance with the principles of unity, budgetary accuracy, annuality, equilibrium, unit of account, universality, specification, sound financial

management and transparency. The applicability of the budgetary principles requires effective and efficient internal control.

The principles of **unity** and **budget accuracy** mean that the expenditure and revenue must be incorporated in a single budget document and booked to a budget line. Expenditure must not exceed authorised appropriations by the budget. In addition, an appropriation must not be entered in the budget if it is not for an item of expenditure considered necessary.

The principle of **annuality** implies that the appropriations entered in the budget shall be authorized for a financial year which shall run from 1 January to 31 December, and shall contain non-differentiated appropriations and differentiated appropriations.

The principle of **equilibrium** means that the revenue and expenditure shown in the budget must be in balance (estimated revenue must equal payment appropriations). The Clean Sky 2 Joint Undertaking shall implement rigorous cash management, taking into account notably assigned revenue, in order to ensure that its cash balances are limited to duly justified requirements, in particular to avoid surpluses at year end. With its payment requests, it shall submit detailed and updated forecasts on its real cash requirements throughout the year, including information on assigned revenue.

The principle of **unit of account** refers to the fact that the budget is drawn up and implemented in euro (€) and the accounts of Clean Sky 2 Joint Undertaking are presented in euro (€).

The principle of **universality** comprises two rules: the rule of non-assignment, meaning that budget revenue must not be earmarked for specific items of expenditure (total revenue must cover total expenditure) and the gross budget rule, meaning that revenue and expenditure are entered in full in the budget without any adjustment against each other. Adjustments may be made in respect of exchange differences occurring in the implementation of the budget. The provisional gain or loss shall be included in the balance for the year.

The principle of **specification** means that each appropriation is assigned to a specific purpose and a specific objective, by title and chapter; the chapters shall be further subdivided into articles and items.

The principle of **sound financial management** is applied to the Clean Sky 2 Joint Undertaking budget by ensuring that the appropriations are used in accordance with the principle of sound financial management, that is to say, in accordance with the principles of economy, efficiency and effectiveness. The principle of **economy** requires that the resources used by the Clean Sky 2 Joint Undertaking in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price. The principle of **efficiency** concerns the best relationship between resources employed and results achieved. The principle of **effectiveness** concerns the attainment of the specific objectives set and the achievement of the intended results.

The principle of **internal control** of budget implementation means that the budget of the Clean Sky 2 Joint Undertaking shall be implemented in compliance with effective and efficient internal control in order to provide reasonable assurance of achieving effectiveness, efficiency and economy of operations; reliability of reporting; safeguarding of assets and information; prevention, detection, correction and follow-up of fraud and irregularities; and adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multi-annual character of programmes as well as the nature of the payments concerned.

The principle of **transparency** implies that the budget is established and implemented and the accounts presented in compliance with the principle of transparency – the information on the budget and the accounts shall be easily accessible, transparent and comprehensive.

5.1.2 Use of Fund Sources in Budgetary management

The Clean Sky 2 Joint Undertaking uses 4 fund sources for its budgetary management through the ABAC system:

C1: This represents the EU budget subsidy received from the European Commission and the private Members contribution to the running costs of the JU for the current financial year.

C2: This represents the cancelled appropriations from the previous year(s) re-entered to the next financial year. According to the CS2JU financial rules, these can be used up to the following 3 financial years.

C4: This represents the appropriations which can be used again as a result of debit notes issued by the JU (otherwise known as internal assigned revenue) and received (cash) within the same year.

C8: This represents the appropriations which are automatically carried forward to meet obligations arising from previous years. For administrative expenditure and operational expenditure, only commitment appropriations can be carried forward and used until they are no longer needed for payment purposes. Any difference between what is carried forward and provisionally used shall be de-committed and converted into C2 fund source for the JU (see above).

The 2019 budget is distributed in the following budget titles:

Budget title	Year 2019 Appropriations	Re-entered appropriations from previous year(s)	Total budget 2019
1. Staff expenditure	4.988.808,93	0,00	4.988.808,93
2. Infrastructure expenditure	2.536.191,07	0,00	2.536.191,07
3. Operational expenditure CS1 (FP7)	0,00	0,00	0,00
4. Operational expenditure CS2 (H2020)	285.353.934,00	5.971.809,64	291.325.743,64
5. Unused appropriations	1.995.345,00	3.948.599,62	5.943.944,62
Total	294.874.279,00	9.920.409,26	304.794.688,26

Management Information Systems

The Clean Sky 2 Joint Undertaking used the following software during 2019:

- ABAC (Accrual Based Accounting) – EC budgetary accounting system
- SAP ERP – Accounting system and execution of payments
- SyGMA/COMPASS – EC tool for managing CS2 programme (H2020) Grant Agreements
- EMI – EC tool for managing expert claims
- GMT2 (Grant Management Tool for Clean Sky 2 programme) – JU internal database containing information on the beneficiaries of the Grant Agreements for Members (GAMs) used for IKAA reporting and the follow-up of the 2014-2017 GAMs.

These information systems allow the efficient management of the appropriations allocated to the Clean Sky 2 Joint Undertaking while respecting the principles of the financial rules.

The workflow system in ABAC and in SyGMA/COMPASS allows the Authorising Officer to ensure that the “four eyes” principle has been observed for each transaction. In addition, the Delegations put in place by the authorising officer ensure that enough actors are involved in the workflow to ensure segregation of duties.

5.2 Budgetary outturn account 2019

For the financial year 2019, the balance of the budget outturn amounts to **17.893.897,89 €**.

	Title	2019	2018
REVENUE		341.179.848,11	344.450.105,83
<i>of which</i>			
Subsidies from the European Commission	1 0	323.005.259,00	331.863.909,00
Contributions from private Members	2 0	4.495.517,31	5.217.713,62
Re-entered unused appropriations from previous years	3 0	12.651.068,90	3.891.392,00
Recoveries	4 0	1.028.002,90	3.477.091,21
EXPENDITURE		323.285.916,26	331.135.504,22
<i>of which</i>			
Staff expenditure	A-1	4.895.514,94	5.017.822,64
Admin expenditure	A-2	2.059.010,30	1.892.690,36
Operational expenditure CS1	B-3	0,00	158.352,36
Operational expenditure CS2	B-4	316.331.391,02	324.066.638,86
Exchange differences for the year		-33,96	20,68
Budget result		17.893.897,89	13.314.622,29

Notes to the budgetary outturn account

The outturn for the financial year corresponds to the total revenues actually cashed during the year plus appropriations carried over from previous years minus the total payments made during the year.

Revenue

The sources of revenue are explained in section 5.6.1. The amounts shown are the amounts cashed during 2019 and for the '*re-entered unused appropriations from previous years*', the amount actually carried over from 2018.

Expenditure

Details on the implementation of the statement of expenditure are provided in section 5.6.2. The expenses shown in Title 1 and 2 cover the JU's personnel and administrative costs. The amounts reflected in Title 3 and 4 include pre-financing paid for Grant Agreements for Members (GAMs) and Grant Agreements for Partners (GAPs) as well as interim and final payments for cost claims received.

5.3 Reconciliation between budget outturn and economic outturn

The accounting system of the CS2JU comprises general accounts and budgetary accounts. The budgetary accounts are based on the modified cash accounting principle while the general accounts are accruals based. The application of these different accounting principles leads to a different result in the budget outturn and in the economic outturn.

The table below highlights the differently treated elements reconciling the results of the two methods:

Reconciliation of accrual result with budgetary result	2019	2018
Economic result	-474,182,123.54	-419,681,807.77
<i>Adjustment for accrual items (items not in the budgetary result but included in the economic result)</i>		
Adjustments for Accrual Cut-off (reversal 31.12.N-1)	-269,694,836.60	-214,848,360.25
Adjustments for Accrual Cut-off (cut- off 31.12.N)	336,578,467.33	271,987,422.58
Operational expenses contributed in-kind by members	162,568,549.23	165,835,427.75
Inkind revenue deriving from retroactive adjustments	-434,063.59	-738,252.14
Unpaid invoices at year end but booked in charges (class 6)	365,346.47	58,348.53
Depreciation of intangible and tangible assets	135,414.77	160,126.53
Write off receivables	365,881.33	39,222.75
Recovery Orders issued in 2019 in class 7 and not yet cashed	-71,673.37	0.00
Pre-financing cleared in the year 2019	94,458,684.76	120,053,232.92
Provisions	0.00	408,519.67
Financial expenses	0.00	56.16
Interest	-995.11	-3,142.55
<i>Adjustment for budgetary items (item included in the budgetary result but not in the economic result)</i>		
Asset acquisitions (less unpaid amounts)	-40,969.77	-73,747.53
Pre-financing paid in the year 2019	-172,313,395.45	-251,685,581.62
Budgetary recovery orders issued before 2019 and cashed in the year	0.00	244,162.13
Cash contribution from EU	323,005,259.00	331,863,909.00
Cashed contribution from members for running cost	4,495,517.31	5,217,713.62
Invoices paid in 2019 but booked in charges in 2018 (class 6)	-108,348.53	0.00
Payment appropriations carried over from previous year	12,651,068.90	3,891,392.00
Cashed recovery orders for pre-financing recovery	116,114.75	584,677.51
Total	17,893,897.89	13,314,622.29
Budgetary result	17,893,897.89	13,314,622.29
Delta not explained	0.00	0.00

5.4 Clean Sky 2 Programme implementation

The Clean Sky 2 programme was launched in 2014 with the opening of the first call for Core Partners. The first Grant Agreements for Members (GAMs) for the period 2014-2015 were signed in December 2014 with only CS2 Leaders. Subsequently, four calls for new Core Partners were published with accession of new selected members to the CS2 GAMs. The last wave of Core Partners joined the CS2 GAMs in 2017.

Similarly, since the start of the programme, eleven calls for proposals (CfPs) have been successfully launched, with nine calls closed (CfP01-CfP09, grant preparation completed), one call under grant

preparation (CfP10) and one call open at the time of this report's compilation (CfP11, where closure is foreseen by the end of November 2020).

In 2019 the JU signed several new CS2 GAMs to cover the years 2020 and 2021. In addition, grant agreements for partners (GAPs) of the calls for proposals CfP08 and CfP09 were signed and pre-financed.

The maximum funding available as defined in the Council Regulation 558/2014 establishing the Clean Sky 2 Joint Undertaking is 1.755 million €, of which a maximum of 39 million € corresponds to the contribution towards the JU administrative costs. This leads to an estimated net funding available for the Clean Sky 2 research and innovation operations of 1.716 million €.

In addition, the CS2JU needs to ensure the allocation of operational funds according to the Annex I art. 16 of the CS2JU Council Regulation:

- up to 40% shall be allocated to Leaders and their participating affiliates;
- up to 30% shall be allocated to Core Partners and their participating affiliates;
- at least 30% shall be allocated to Partners and calls for tenders.

The table below shows the distribution of estimated funding between Leaders, Core Partners and for Calls for Proposals/Tenders:

Funding envelope to completion	Allocation according to Regulation		2019 CS2 Development Plan	
Leaders	< 40%	< 686,4	39,3%	684,28
Core Partners	< 30%	< 514,8	28,5%	496,75
Calls for Proposals / Tenders	> 30%	> 514,8	32,2%	561,64
Total	1.716,00 million €		1.742,68 million € (max. funding of 1.716 million €)	
Of which Thematic Topics in CfPs			approx. 45 million €	
Of which ‘over commitment’			approx. 27 million €	

(*Status July 2019)

Currently, there is a deviation with reference to the maximum funding value of 1.716 million € of 26,68 million € ('over commitment'). This extra funding allocation will serve as a buffer to absorb incomplete/failed activities and thus ensure that the funding allocated through competitive calls for proposals and calls for tenders will reach the minimum 30% established in the CS2JU Council Regulation.

The table below shows the indicative allocation of funding per SPD:

SPD	Allocation (million €)
LPA	494,80
REG	105,20
FRC	189,36
AIR	320,85
ENG	305,03
SYS	251,56
TE	17,16
ECO	11,06
SAT	3,00
Thematic topics	44,66
Total	1.742,68
Over commitment	-26,68

(*Status October 2019)

Implementation of CS2 programme commitment appropriations

Year	Commitments for GAMs* (€)	Commitments for GAPs (€)	TOTAL (€)
2014	77.819.417,35	0,00	77.819.417,35
2015	85.913.398,90	153.456.861,53	239.370.260,43
2016	168.990.423,45	58.631.838,00	227.622.261,45
2017	140.583.168,27	156.562.020,00	297.145.188,27
2018	257.650.092,81	99.340.073,45	356.990.166,26
2019	210.769.100,79	77.398.453,61	288.167.554,40
Total	941.725.601,57	545.389.246,59	1.487.114.848,16
Operational envelope			1.716.000.000
% of programme consumption			86,66%

(*) including all decommitments until 31.12.2019

The 2019 GAM commitments represent the amounts committed for the signature of the extension of the LPA GAM 2019 and SAT GAM 2019 (signed at the beginning of 2019) in addition to the commitments needed for the new GAMs 2020-2021 for all SPDs except AIR, ECO and LPA.

The 2019 GAP commitments represent the amounts committed for the calls Cfp09 and Cfp10.

Implementation of CS2 programme payment appropriations

Year	Payments for GAMs (€)	Payments for GAPs (€)	TOTAL (€)
2014	20.460.992,77	0,00	20.460.992,77
2015	58.285.612,45	11.052.718,27	69.338.330,72
2016	155.412.003,68	36.659.384,51	192.071.388,19
2017	123.204.969,20	69.846.786,33	193.051.755,53
2018	227.417.900,78	96.648.738,08	324.066.638,86
2019	216.549.217,32	99.782.173,70	316.331.391,02
Total	801.330.696,20	313.989.800,89	1.115.320.497,09
Operational envelope			1.716.000.000
% of programme paid			65,00%

The 2019 GAM payments represent the payments made for the Leaders and Core Partners activities of the year 2018 (interim payment of the GAMs 2018-2019) and the pre-financing payments to the SPDs for their activities of 2019 (extension of GAM 2018-2019 for LPA and SAT) and 2020 (all SPDs except AIR, ECO and LPA).

The 2019 GAP payments represent the pre-financing paid to Partners selected in the calls Cfp08 and Cfp09 as well as interim / final payments for previous calls.

Implementation of payment appropriations: schedule of payments

CS2 Schedule of payments	Year	Commitments (€)	Payments 2019 (€)	Payments 2020 (€)	Payments 2021 (€)	Payments 2022 (€)	Subsequent years (€)
GAP	2014	0	0	0	0	0	0
	2015	6.640.277	3.440.073	3.200.205	0	0	0
	2016	17.008.942	4.637.560	12.371.381	0	0	0
	2017	18.748.131	7.927.510	5.146.033	5.258.209	416.380	0
	2018	58.660.566	11.860.467	9.360.020	16.380.035	14.040.030	7.020.015
	2019	159.989.793	71.916.564	45.553.218	19.100.428	14.665.149	8.754.434
TOTAL GAP		261.047.709	99.782.174	75.630.857	40.738.672	29.121.559	15.774.448
GAM	2014	0	0	0	0	0	0
	2015	0	0	0	0	0	0
	2016	0	0	0	0	0	0
	2017	81.820	81.820	0	0	0	0
	2018	146.068.483	112.545.667	33.522.816	0	0	0
	2019	210.769.101	103.921.730	26.446.475	45.785.568	34.615.327	0
TOTAL GAM		356.919.404	216.549.217	59.969.291	45.785.568	34.615.327	0
TOTAL CS2 Operational		617.967.113	316.331.391	135.600.148	86.524.240	63.736.886	15.774.448

The amount shown in the payments 2019 represents:

- The pre-financing payments (CfP08 and CfP09) and interim and final payments for Partners (CfP01 to CfP07);
- The pre-financing payments to the CS2 GAMs 2019 for LPA and SAT and to the CS2 GAMs 2020;
- The interim payments covering the activities performed in 2018 by the Members.

The amount shown in the payments 2020 represents:

- The pre-financing payments (CfP10 and CfP11) and interim and final payments for Partners (CfP01 to CfP08);
- The pre-financing payments to the CS2 GAMs 2020-2021;
- The final payments covering the activities performed in 2019 by the Members (closure of the CS2 GAMs 2018-2019).

The amount shown in the payments 2021 represents:

- The interim and final payments for Partners (CfP01 to CfP10);
- The pre-financing payments to the CS2 GAMs 2022;
- The payments covering the activities performed in 2020 by the Members (interim payments of the CS2 GAMs 2020-2021).

The amount shown in the payments 2022 represents:

- The interim and final payments for Partners (CfP01 to CfP11);
- The pre-financing payments to the CS2 GAMs 2023;
- The final payments covering the activities performed in 2021 by the Members (final payments of the CS2 GAMs 2020-2021).

5.5 Budget Evolution

At the end of October 2018 the Governing Board adopted the second amendment to the original budget 2018-2019 of the Clean Sky 2 Joint Undertaking for the global amount of 294,9 million € in commitment appropriations and 327,8 million € in payment appropriations (initial Budget 2019).

In April 2019, it required a specific amendment ('third amendment to the 2018-2019 budget') in order to inscribe the carry-over related to the financial year 2018 (unused commitment and payment appropriations) and reallocate it to the administrative and operational expenses of year 2019.

In November 2019, a fourth budget amendment was adopted in order to optimize the use of all the funds available for operational expenditures. This translated into the transfer of 2,0 million € of commitment appropriations and 4,5 million € of payment appropriations from Title 1 (Staff), Title 2 (Infrastructure) and Title 3 (Operational CS1) to Title 5 (Unused) for administrative expenditures.

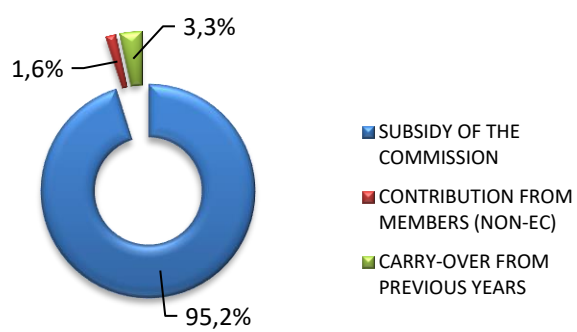
Lastly, some internal transfers (as decided by the Executive Director in accordance with the CS Financial Rules) were operated in order to better allocate the resources needed for the running costs and operational activities implementation.

Note: The Clean Sky 2 Joint Undertaking budget uses chapters for each type of expenditure and no further breakdown of budget is presented in these reports.

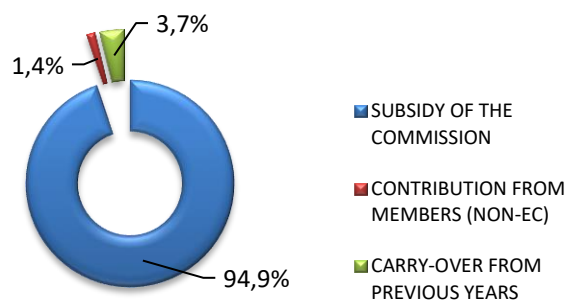
5.5.1 Evolution of Statement of Revenues (fund sources C1 and C2)

Heading of the Budget 2019		Initial Budget 31/10/2018 (Annual Budget 2018-2019) (1)	Third Budget Amendment 09/04/2019 (Annual Budget 2018-2019) (2)	Fourth Budget Amendment 21/11/2019 (Annual Budget 2018-2019) (3)	Final Budget for implementation (4) = SUM (1 to 3)
100	SUBSIDY OF THE COMMISSION	290.114.107	0	0	290.114.107
200	CONTRIBUTION FROM MEMBERS (NON-EC)	4.760.172	0	0	4.760.172
300	CARRY-OVER FROM PREVIOUS YEARS	0	9.920.408	0	9.920.408
500	FINANCIAL REVENUES	0	0	0	0,00
TOTAL REVENUE CS2JU (Commitments)		294.874.279	9.920.408	0	304.794.687
100	SUBSIDY OF THE COMMISSION	323.005.259	0	0	323.005.259
200	CONTRIBUTION FROM MEMBERS (NON-EC)	4.760.172	0	0	4.760.172
300	CARRY-OVER FROM PREVIOUS YEARS	0	12.651.069	0	12.651.069
500	FINANCIAL REVENUES	0	0	0	0
TOTAL REVENUE CS2JU (Payments)		327.765.431	12.651.069	0	340.416.500

Breakdown by contributors (Commitment appropriations)



Breakdown by contributors (Payment appropriations)



5.5.2 Evolution of Statement of Expenditures

Heading of the Budget 2019		Initial Budget 31/10/2018 (Annual Budget 2018-2019) (1)	Third Budget Amend 09/04/2019 (Annual Budget 2018-2019) (2)	Fourth Budget Amend 21/11/2019 (Annual Budget 2018-2019) (3)	Transfers adopted by CS2 JU Director (4)	Final Budget to implement (5) = SUM (1 to 4)
CH 1	STAFF EXPENDITURE - COMMITMENTS					
CH 11	STAFF IN ACTIVE EMPLOYMENT	4.400.000	0	-100.000	-131.191	4.168.809
CH 12	MISCELLANEOUS EXPENDITURE ON STAFF	300.000	0	0	195.000	495.000
CH 13	MISSIONS AND DUTY TRAVEL	350.000	0	-50.000	-60.000	240.000
CH 14	SOCIOMEDICAL INFRASTRUCTURE	120.000	0	-40.000	-18.000	62.000
CH 17	RECEPTIONS AND EVENTS	70.000	0	0	-47.000	23.000
	TITLE 1 - Commitments	5.240.000	0	-190.000	-61.191	4.988.809
CH 1	STAFF EXPENDITURE - PAYMENTS					
CH 11	STAFF IN ACTIVE EMPLOYMENT	4.400.000	0	-100.000	-131.191	4.168.809
CH 12	MISCELLANEOUS EXPENDITURE ON STAFF	300.000	217.244	-177.244	150.000	490.000
CH 13	MISSIONS AND DUTY TRAVEL	350.000	25.213	-135.213	-20.000	220.000
CH 14	SOCIOMEDICAL INFRASTRUCTURE	120.000	42.283	-102.283	-13.000	47.000
CH 17	RECEPTIONS AND EVENTS	70.000	7.670	-7.670	-47.000	23.000
	TITLE 1 - Payments	5.240.000	292.410	-522.410	-61.191	4.948.809
CH 2	INFRASTRUCTURE EXPENDITURE - COMMITMENTS					
CH 20	RENTAL OF BUILDINGS AND ASSOCIATED COSTS	570.000	0	0	0	570.000
CH 21	INFORMATION TECHNOLOGY PURCHASES	550.000	0	-50.000	19.000	519.000
CH 22	MOVABLE PROPERTY AND ASSOCIATED COSTS	15.000	0	0	0	15.000
CH 23	CURRENT EXPENDITURE FOR RUNNING COSTS	65.000	0	0	0	65.000
CH 24	POSTAGE AND TELECOMMUNICATIONS	50.000	0	-25.000	0	25.000
CH 25	FORMAL AND OTHER MEETINGS	300.000	0	0	-164.000	136.000
CH 27	COMMUNICATION ACTIVITIES	600.000	0	0	206.191	806.191
CH 28	EXTERNAL SERVICES	1.000.000	0	-600.000	0	400.000
CH 29	COSTS ASSOCIATED WITH CALLS	1.130.346	0	-1.130.346	0	0
	TITLE 2 - Commitments	4.280.346	0	-1.805.346	61.191	2.536.191
CH 2	INFRASTRUCTURE EXPENDITURE - PAYMENTS					
CH 20	RENTAL OF BUILDINGS AND ASSOCIATED COSTS	570.000	8.849	-23.849	-2.489	552.511
CH 21	INFORMATION TECHNOLOGY PURCHASES	550.000	353.923	-553.923	19.000	369.000
CH 22	MOVABLE PROPERTY AND ASSOCIATED COSTS	15.000	0	-12.000	-1.970	1.030
CH 23	CURRENT EXPENDITURE FOR RUNNING COSTS	65.000	38.787	-73.787	-6.455	23.545
CH 24	POSTAGE AND TELECOMMUNICATIONS	50.000	28.882	-56.882	-1.000	21.000
CH 25	FORMAL AND OTHER MEETINGS	300.000	14.073	-184.073	-44.852	85.148
CH 27	COMMUNICATION ACTIVITIES	600.000	225.823	-375.823	117.031	567.032
CH 28	EXTERNAL SERVICES	1.000.000	975.367	-1.505.205	-18.075	452.086
CH 29	COSTS ASSOCIATED WITH CALLS	1.130.346	0	-1.130.346	0	0
	TITLE 2 - Payments	4.280.346	1.645.704	-3.915.888	61.191	2.071.353

Heading of the Budget 2019		Initial Budget 31/10/2018 (Annual Budget 2018- 2019) (1)	Third Budget Amend 09/04/2019 (Annual Budget 2018-2019) (2)	Fourth Budget Amend 21/11/2019 (Annual Budget 2018-2019) (3)	Transfers adopted by CS2 JU Director (4)	Final Budget to implement (5) = SUM (1 to 4)
CH 3	CS OPERATIONAL EXPENDITURE - COMMITMENTS					
CH 30	SMART FIXED WING AIRCRAFT	0	0	0	0	0
CH 31	GREEN REGIONAL AIRCRAFT	0	0	0	0	0
CH 32	GREEN ROTORCRAFT	0	0	0	0	0
CH 33	SUSTAINABLE AND GREEN ENGINES	0	0	0	0	0
CH 34	SYSTEMS FOR GREEN OPERATIONS	0	0	0	0	0
CH 35	ECO-DESIGN	0	0	0	0	0
CH 36	TECHNOLOGY EVALUATOR	0	0	0	0	0
CH 37	CALLS FOR PROPOSALS	0	0	0	0	0
	TITLE 3 - Commitments	0	0	0	0	0
CH 3	CS OPERATIONAL EXPENDITURE - PAYMENTS					
CH 30	SMART FIXED WING AIRCRAFT	0	0	0	0	0
CH 31	GREEN REGIONAL AIRCRAFT	0	0	0	0	0
CH 32	GREEN ROTORCRAFT	0	0	0	0	0
CH 33	SUSTAINABLE AND GREEN ENGINES	0	0	0	0	0
CH 34	SYSTEMS FOR GREEN OPERATIONS	0	0	0	0	0
CH 35	ECO-DESIGN	0	0	0	0	0
CH 36	TECHNOLOGY EVALUATOR	0	0	0	0	0
CH 37	CALLS FOR PROPOSALS	0	103.477	-103.477	0	0
	TITLE 3 - Payments	0	103.477	-103.477	0	0
CH 4	CS2 OPERATIONAL EXPENDITURE - COMMITMENTS					
CH 40	LARGE PASSENGER AIRCRAFT	66.300.000	32.568.590	0	-32.288.590	66.580.000
CH 41	REGIONAL AIRCRAFT	13.400.000	-6.943.773	0	14.372.773	20.829.000
CH 42	FAST ROTORCRAFT	32.000.000	-21.166.090	0	21.535.890	32.369.800
CH 43	AIRFRAME	36.250.000	-18.247.482	0	-18.002.518	0
CH 44	ENGINES	35.100.000	-19.251.473	0	23.894.848	39.743.375
CH 45	SYSTEMS	33.620.000	-18.541.339	0	33.712.204	48.790.865
CH 46	TECHNOLOGY EVALUATOR	1.100.000	-550.159	0	1.419.969	1.969.810
CH 47	ECO-DESIGN TA	800.000	-291.105	0	1.391.205	1.900.100
CH 48	SMALL AIR TRANSPORT TA	550.000	-300.168	0	1.494.508	1.744.340
CH 49	CALLS FOR PROPOSALS	66.233.934	58.694.810	0	-47.530.290	77.398.454
	TITLE 4 - Commitments	285.353.934	5.971.810	0	0	291.325.744
CH 4	CS2 OPERATIONAL EXPENDITURE - PAYMENTS					
CH 40	LARGE PASSENGER AIRCRAFT	67.500.000	0	0	14.932.561	82.432.561
CH 41	REGIONAL AIRCRAFT	15.500.000	0	0	-244.156	15.255.844
CH 42	FAST ROTORCRAFT	17.100.000	0	0	9.773.090	26.873.090
CH 43	AIRFRAME	32.000.000	0	0	-10.062.066	21.937.934
CH 44	ENGINES	47.200.000	0	0	-11.172.145	36.027.855
CH 45	SYSTEMS	25.600.000	0	0	6.858.165	32.458.165
CH 46	TECHNOLOGY EVALUATOR	850.000	0	0	250.562	1.100.562
CH 47	ECO-DESIGN TA	976.000	0	0	-526.013	449.988
CH 48	SMALL AIR TRANSPORT TA	450.000	0	0	-239.179	210.821
CH 49	CALLS FOR PROPOSALS	111.069.086	6.660.879	0	-9.570.819	108.159.146
	TITLE 4 - Payments	318.245.086	6.660.879	0	0	324.905.965
CH5	UNUSED APPROPRIATIONS NOT REQUIRED IN CURRENT YEAR					
CH 50	TITLE 5 - Commitments	0	3.948.599	1.995.346	0	5.943.945
CH 50	TITLE 5 - Payments	0	3.948.599	4.541.775	0	8.490.374
TOTAL BUDGET - Commitment appropriations		294.874.280	9.920.408	0	0	304.794.688
TOTAL BUDGET - Payment appropriations		327.765.432	12.651.069	0	0	340.416.501

5.6 Budget implementation

5.6.1 Statement of revenue

Type of revenue	Revenue budget	Entitlements established	Revenue received	Outstanding at the end of the year
EC contribution 2019	323.005.259,37	323.005.259,00	323.005.259,00	0,00
Non-EC Members' contribution for running cost 2019	4.760.172,08	4.759.560,41	4.495.517,31	264.043,10
Non-EC Members' contribution for running cost previous years	0,00	799,77	0,00	799,77
Recovery of overpaid pre-financing	0,00	414.441,18	116.114,75	298.326,43
Recovery of ex-post audit results	0,00	963.855,23	892.181,86	71.673,37
Miscellaneous admin recoveries	0,00	19.706,29	19.706,29	0,00
Re-entered cancelled appropriations from previous years	12.651.068,99	12.651.068,90	12.651.068,90	0,00
Total	340.416.500,44	341.814.690,78	341.179.848,11	634.842,67

EC contribution

This refers to the subsidy which the JU receives from the European Commission as part of the 1.755 million € foreseen in the Council Regulation establishing Clean Sky 2 Joint Undertaking. This is composed of the contribution for the annual operational payment needs and the running costs.

Non- EC Members' contribution to running costs 2019

In accordance with Article 15 (2) of the Statutes, the running costs shall be shared equally between the EC and Private Members and thus each year the JU sends out debit notes to its non-EC Members to receive their respective contributions.

For the Clean Sky 2 programme the running costs shall not exceed 78 million €. The allocations per Member are set out in their respective funding agreements per programme.

Recovery of overpaid pre-financing

The 2019 outstanding amount is due to rejected costs of closed FP7 GAPs.

Recovery of ex-post audit results

In 2019, the JU continued to close ex-post audits launched. A consequence of the audits is to recover the over-payments made to beneficiaries following the detection of errors during the ex-post audit exercise. If the payments are not received by the deadline of the debit note, the JU applies the offsetting according to its financial rules (with at least 2 opportunities each year namely with the pre-financing payments and interim payments for the GAMs). In 2019, the JU used the above opportunities several times to recover the over-payments.

Carry-over of cancelled appropriations from previous years

In accordance with Article 6 of the Clean Sky 2 Joint Undertaking financial rules, the JU may carry over appropriations which have been cancelled for up to the 3 following financial years.

5.6.2 Statement of expenditure

5.6.2.1 Implementation of the statement of expenditure (fund sources C1 and C2)

Heading of the Budget 2019		Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
CH 1	STAFF EXPENDITURE	COMMITMENTS		
CH 11	STAFF IN ACTIVE EMPLOYMENT	4.168.808,93	4.168.808,93	100,00%
CH 12	MISCELLANEOUS EXPENDITURE ON STAFF	495.000,00	494.898,85	99,98%
CH 13	MISSIONS AND DUTY TRAVEL	240.000,00	240.000,00	100,00%
CH 14	SOCIOMEDICAL INFRASTRUCTURE	62.000,00	60.000,00	96,77%
CH 17	RECEPTIONS AND EVENTS	23.000,00	18.956,66	82,42%
TITLE 1 - Commitment and Payment		4.988.808,93	4.982.664,44	99,88%
CH 2	INFRASTRUCTURE EXPENDITURE	COMMITMENTS		
CH 20	RENTAL OF BUILDINGS AND ASSOCIATED COSTS	570.000,00	570.000,00	100,00%
CH 21	INFORMATION TECHNOLOGY PURCHASES	519.000,00	488.909,45	94,20%
CH 22	MOVABLE PROPERTY AND ASSOCIATED COSTS	15.000,00	1.030,46	6,87%
CH 23	CURRENT EXPENDITURE FOR RUNNING COSTS	65.000,00	65.000,00	100,00%
CH 24	POSTAGE AND TELECOMMUNICATIONS	25.000,00	25.000,00	100,00%
CH 25	EXPENDITURE ON FORMAL AND OTHER MEETINGS	136.000,00	100.000,00	73,53%
CH 27	COMMUNICATION ACTIVITIES	806.191,07	755.939,45	93,77%
CH 28	EXTERNAL SERVICES	400.000,00	400.000,00	100,00%
CH 29	COSTS ASSOCIATED WITH CALLS	0,00	0,00	-
TITLE 2 - Commitment and Payment		2.536.191,07	2.405.879,36	94,86%
Total TITLE 1 & 2 - Commitment and Payment		7.525.000,00	7.388.543,80	98,19%

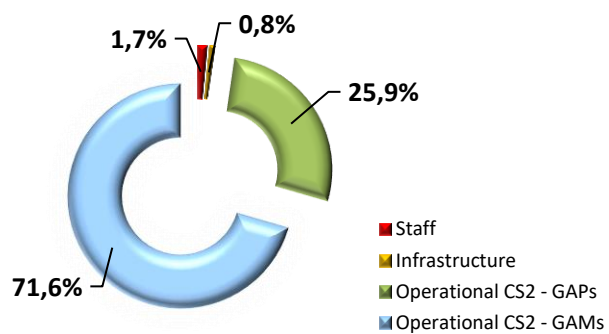
Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
PAYMENTS		
4.168.808,93	4.168.808,93	100,00%
490.000,00	475.577,07	97,06%
220.000,00	197.860,48	89,94%
47.000,00	32.247,36	68,61%
23.000,00	21.021,10	91,40%
4.948.808,93	4.895.514,94	98,92%
PAYMENTS		
552.511,43	552.511,43	100,00%
369.000,00	366.460,83	99,31%
1.030,46	1.030,46	100,00%
23.545,41	22.545,41	95,75%
21.000,00	20.643,39	98,30%
85.147,85	84.147,85	98,83%
567.031,55	565.751,08	99,77%
452.086,12	445.919,85	98,64%
0,00	0,00	-
2.071.352,82	2.059.010,30	99,40%
7.020.161,75	6.954.525,24	99,07%

Heading of the Budget 2019		Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
CH 3	CS OPERATIONAL EXPENDITURE	COMMITMENTS		
CH 30	SMART FIXED WING AIRCRAFT	0,00	0,00	-
CH 31	GREEN REGIONAL AIRCRAFT	0,00	0,00	-
CH 32	GREEN ROTORCRAFT	0,00	0,00	-
CH 33	SUSTAINABLE AND GREEN ENGINES	0,00	0,00	-
CH 34	SYSTEMS FOR GREEN OPERATIONS	0,00	0,00	-
CH 35	ECO-DESIGN	0,00	0,00	-
CH 36	TECHNOLOGY EVALUATOR	0,00	0,00	-
CH 37	CALLS FOR PROPOSALS	0,00	0,00	-
TITLE 3 - Commitment and Payment		0,00	0,00	-
CH 4	CS2 OPERATIONAL EXPENDITURE	COMMITMENTS		
CH 40	LARGE PASSANGER AIRCRAFT	66.580.000,00	66.580.000,00	100,00%
CH 41	REGIONAL ARCRAFT	20.829.000,03	20.829.000,03	100,00%
CH 42	FAST ROTORCRAFT	32.369.800,00	32.369.800,00	100,00%
CH 43	AIRFRAME	0,00	0,00	-
CH 44	ENGINES	39.743.375,00	39.743.375,00	100,00%
CH 45	SYSTEMS	48.790.865,00	48.790.865,00	100,00%
CH 46	TECHNOLOGY EVALUATOR	1.969.810,00	1.969.810,00	100,00%
CH 47	ECO-DESIGN TA	1.900.100,00	1.900.100,00	100,00%
CH 48	SMALL AIR TRANSPORT TA	1.744.340,00	1.744.339,38	100,00%
CH 49	CALLS FOR PROPOSALS	77.398.453,61	77.398.453,61	100,00%
TITLE 4 - Commitment and Payment		291.325.743,64	291.325.743,02	100,00%
CH5	UNUSED APPROPRIATIONS NOT REQUIRED IN CURRENT YEAR	COMMITMENTS		
CH 50	TITLE 5 - Commitment and Payment	5.943.944,62	0,00	0,00%
TOTAL BUDGET - Commitment and Payment		304.794.688,26	298.714.286,82	98,01%
TOTAL BUDGET excluding TITLE 5		298.850.743,64	298.714.286,82	99,95%

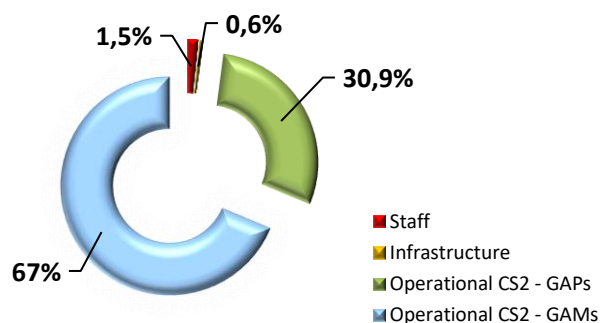
Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
PAYMENTS		
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
0,00	0,00	-
PAYMENTS		
82.432.560,55	82.432.560,55	100,00%
15.255.844,26	15.255.759,31	100,00%
26.873.089,91	26.872.988,55	100,00%
21.937.933,53	21.937.933,53	100,00%
36.027.854,88	36.027.781,20	100,00%
32.458.165,29	32.261.107,37	99,39%
1.100.562,25	1.100.443,13	99,99%
449.987,50	449.987,50	100,00%
210.821,24	210.656,18	99,92%
108.159.145,63	99.782.173,70	92,25%
324.905.965,04	316.331.391,02	97,36%
PAYMENTS		
8.490.374,11	0,00	0,00%
340.416.500,90	323.285.916,26	94,97%
331.926.126,79	323.285.916,26	97,40%

Budget title	COMMITMENTS			PAYMENTS		
	Expenditure	% implem.	% budget	Expenditure	% implem.	% budget
1 - Staff	4.982.664,44	99,88%	1,67%	4.895.514,94	98,92%	1,51%
2 - Infrastructure	2.405.879,36	94,86%	0,81%	2.059.010,30	99,40%	0,64%
3 - Operational CS1	0,00	-	0,00%	0,00	-	0,00%
4 - Operational CS2 - GAP	77.398.453,61	100,00%	25,91%	99.782.173,70	92,25%	30,86%
4 - Operational CS2 - GAM	213.927.289,41	100,00%	71,62%	216.549.217,32	99,91%	66,98%
Total budget (*excluding title 5)	298.714.286,82	99,95%	100,00%	323.285.916,26	97,40%	100,00%

**Breakdown by type of expenditure
(Commitments)**



**Breakdown by type of expenditure
(Payments)**



Main highlights of the 2019 budget execution

As shown in the introductory chapter of this report, the JU has had a 99,95% rate⁸ of implementation for the commitment appropriations in 2019. The payment appropriations were executed to 97,40% of the available funds⁹. For a comparison in 2018 the JU executed its commitment appropriations with a rate of 99,97% of the available funds and with 98,21% of payment appropriations.

Title 1 & 2: The running costs of the JU had a high rate of use in 2019 showing an efficient budget management for this part of the JU budget:

- For commitments, the execution rate was 98,19%, slightly lower than 99,92% in 2018.
- For payments, the rate achieved reached 99,07% in 2019 showing an increase compared to 79,23% in 2018.

Staff expenditure budget (Chapter 11) was mainly used for the statutory staff of the JU (40 posts filled in as of 31.12.2019), although other external support was also hired in by the JU to cope with the increased workload (Chapter 12 used). The other main budget items are allocated to IT expenditures (Chapter 21) and communication activities (Chapter 27).

Title 3: The CS1 programme was formally closed in 2017. In 2019 the CS2JU implemented a few remaining FP7 ex-post audits.

Title 4: The objective of reaching 100% of commitment appropriations consumption was achieved in 2019.

The execution rate for payment appropriations also reached 97,36% (compared to 98,77% in 2018) with 99,91% for GAMs and 92,25% for GAPs respectively.

The above payment execution rates resulted in 8,5 million € of unused funds (compared to 3,1 million € in 2018).

⁸ This rate is calculated excluding Title 5 which was foreseen not to be used in 2019 although within the overall budget available commitment appropriations of the year.

⁹ Excluding the unused appropriations 2019 of 8,5 million € (95% of execution rate if the unused appropriations are included as total payment budget).

5.6.2.2 Implementation of the statement of expenditure (fund sources C4)

Heading of the Budget 2019		Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
CH 1	STAFF EXPENDITURE	COMMITMENTS		
CH 12	MISCELLANEOUS EXPENDITURE ON STAFF	60,00	0,00	0,00%
CH 13	MISSIONS AND DUTY TRAVEL	1.580,00	0,00	0,00%
CH 17	RECEPTIONS AND EVENTS	3.168,50	0,00	0,00%
TITLE 1 - Commitment and Payment		4.808,50	0,00	0,00%

Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
PAYMENTS		
60,00	0,00	0,00%
1.580,00	0,00	0,00%
3.168,50	0,00	0,00%
4.808,50	0,00	0,00%

CH 2	INFRASTRUCTURE EXPENDITURE	COMMITMENTS		
CH 21	INFORMATION TECHNOLOGY PURCHASES	1.736,02	0,00	0,00%
CH 24	POSTAGE AND TELECOMMUNICATIONS	11.305,52	0,00	0,00%
CH 27	COMMUNICATION ACTIVITIES	1.856,25	0,00	0,00%
TITLE 2 - Commitment and Payment		14.897,79	0,00	0,00%

PAYMENTS		
1.736,02	0,00	0,00%
11.305,52	0,00	0,00%
1.856,25	0,00	0,00%
14.897,79	0,00	0,00%

Total TITLE 1 & 2 - Commitment and Payment	19.706,29	0,00	0,00%
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19.706,29	0,00	0,00%
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CH 3	CS OPERATIONAL EXPENDITURE	COMMITMENTS		
CH 30	SMART FIXED WING AIRCRAFT	133.689,82	0,00	0,00%
CH 31	GREEN REGIONAL AIRCRAFT	81.066,34	0,00	0,00%
CH 32	GREEN ROTORCRAFT	181.552,12	0,00	0,00%
CH 33	SUSTAINABLE AND GREEN ENGINES	69.380,67	0,00	0,00%
CH 34	SYSTEMS FOR GREEN OPERATIONS	0,00	0,00	-
CH 35	ECO-DESIGN	0,00	0,00	-
CH 36	TECHNOLOGY EVALUATOR	99.040,32	0,00	0,00%
CH 37	CALLS FOR PROPOSALS	0,00	0,00	-
TITLE 3 - Commitment and Payment		564.729,27	0,00	0,00%

PAYMENTS		
133.689,82	0,00	0,00%
81.066,34	0,00	0,00%
181.552,12	0,00	0,00%
69.380,67	0,00	0,00%
0,00	0,00	-
0,00	0,00	-
99.040,32	0,00	0,00%
0,00	0,00	-
564.729,27	0,00	0,00%

Heading of the Budget 2019		Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)	Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
CH 4	CS2 OPERATIONAL EXPENDITURE	COMMITMENTS			PAYMENTS		
CH 40	LARGE PASSENGER AIRCRAFT	41.548,42	0,00	0,00%	41.548,42	0,00	0,00%
CH 41	REGIONAL ARCRAFT	56.437,98	0,00	0,00%	56.437,98	0,00	0,00%
CH 42	FAST ROTORCRAFT	141.443,55	0,00	0,00%	141.443,55	0,00	0,00%
CH 43	AIRFRAME	28.590,41	0,00	0,00%	28.590,41	0,00	0,00%
CH 44	ENGINES	0,00	0,00	-	0,00	0,00	-
CH 45	SYSTEMS	39.358,54	0,00	0,00%	39.358,54	0,00	0,00%
CH 46	TECHNOLOGY EVALUATOR	0,00	0,00	-	0,00	0,00	-
CH 47	ECO-DESIGN TA	0,00	0,00	-	0,00	0,00	-
CH 48	SMALL AIR TRANSPORT TA	0,00	0,00	-	0,00	0,00	-
CH 49	CALLS FOR PROPOSALS	116.114,75	0,00	0,00%	116.114,75	0,00	0,00%
TITLE 4 - Commitment and Payment		423.493,65	0,00	0,00%	423.493,65	0,00	0,00%
CH5	UNUSED APPROPRIATIONS NOT REQUIRED IN CURRENT YEAR	COMMITMENTS			PAYMENTS		
CH 50	TITLE 5 - Commitment and Payment	0,00	0,00	-	0,00	0,00	-
TOTAL BUDGET - Commitment and Payment		1.007.929,21	0,00	0,00%	1.007.929,21	0,00	0,00%

This table shows a combination of two main factors for the funds which can be re-entered in the JU budget. First due to the aforementioned recovery of ex-post audit corrections, secondly due to the recovery of the overpaid pre-financing as a result of under execution. The JU also recovered miscellaneous small administrative expenses. The amounts entered on this funds source present the situation as ‘cashed’ by the JU at year end and will be incorporated into the 2020 JU budget as part of the re-entered appropriations.

5.6.2.3 Implementation of the statement of expenditure (fund sources C8)

Heading of the Budget 2019		Final Budget for implementation (1)	Final implementation (2)	% of implementation (3)=(2)/(1)
CH 1	STAFF EXPENDITURE	COMMITMENTS		
CH 11	STAFF IN ACTIVE EMPLOYMENT	0,00	0,00	-
CH 12	MISCELLANEOUS EXPENDITURE ON STAFF	217.243,55	137.862,12	63,46%
CH 13	MISSIONS AND DUTY TRAVEL	25.213,27	12.747,61	50,56%
CH 14	SOCIOMEDICAL INFRASTRUCTURE	42.283,05	10.089,48	23,86%
CH 17	RECEPTIONS AND EVENTS	7.670,00	3.707,98	0,00%
TITLE 1 - Commitment		292.409,87	164.407,19	56,22%
CH 2	INFRASTRUCTURE EXPENDITURE	COMMITMENTS		
CH 20	RENTAL OF BUILDINGS AND ASSOCIATED COSTS	8.849,27	0,00	0,00%
CH 21	INFORMATION TECHNOLOGY PURCHASES	353.923,13	283.773,13	80,18%
CH 22	MOVABLE PROPERTY AND ASSOCIATED COSTS	0,00	0,00	-
CH 23	CURRENT EXPENDITURE FOR RUNNING COSTS	38.787,02	7.574,90	19,53%
CH 24	POSTAGE AND TELECOMMUNICATIONS	28.881,80	16.831,02	58,28%
CH 25	EXPENDITURE ON FORMAL AND OTHER MEETINGS	14.072,73	6.236,43	44,32%
CH 27	COMMUNICATION ACTIVITIES	225.823,18	161.738,80	71,62%
CH 28	EXTERNAL SERVICES	975.366,56	972.611,75	99,72%
CH 29	COSTS ASSOCIATED WITH CALLS	0,00	0,00	-
TITLE 2 - Commitment		1.645.703,69	1.448.766,03	88,03%
Total TITLE 1 & 2- Commitment		1.938.113,56	1.613.173,22	83,23%
CH 3	CS OPERATIONAL EXPENDITURE	COMMITMENTS		
CH 30	SMART FIXED WING AIRCRAFT	0,00	0,00	-
CH 31	GREEN REGIONAL AIRCRAFT	0,00	0,00	-
CH 32	GREEN ROTORCRAFT	0,00	0,00	-
CH 33	SUSTAINABLE AND GREEN ENGINES	0,00	0,00	-
CH 34	SYSTEMS FOR GREEN OPERATIONS	0,00	0,00	-
CH 35	ECO-DESIGN	0,00	0,00	-
CH 36	TECHNOLOGY EVALUATOR	0,00	0,00	-
CH 37	CALLS FOR PROPOSALS	103.477,10	0,00	0,00%
TITLE 3 - Commitment		103.477,10	0,00	0,00%
CH 4	CS2 OPERATIONAL EXPENDITURE	COMMITMENTS		
CH 40	LARGE PASSANGER AIRCRAFT	28.763.348,32	28.763.348,32	100,00%
CH 41	REGIONAL ARCRAFT	11.151.901,94	11.151.901,94	100,00%
CH 42	FAST ROTORCRAFT	21.761.026,61	21.761.026,61	100,00%
CH 43	AIRFRAME	30.713.106,94	30.713.106,94	100,00%
CH 44	ENGINES	30.964.646,83	30.964.646,83	100,00%
CH 45	SYSTEMS	21.533.771,41	21.533.771,41	100,00%
CH 46	TECHNOLOGY EVALUATOR	575.417,15	575.417,15	100,00%
CH 47	ECO-DESIGN TA	629.982,50	629.982,50	100,00%
CH 48	SMALL AIR TRANSPORT TA	81.820,20	81.820,20	100,00%
CH 49	CALLS FOR PROPOSALS	184.367.607,47	183.649.255,68	99,61%
TITLE 4 - Commitment		330.542.629,37	329.824.277,58	99,78%
TOTAL BUDGET - Commitment		332.584.220,03	331.437.450,80	99,66%

The C8 funds source shows the open commitments in the JU for previously committed for administrative expenditure and for grant agreements to beneficiaries. The remaining commitment appropriations are needed to meet expected future payments for the administrative expenditure, for the interim and final reports of the projects. Once the project is closed, these funds can be de-committed and converted to C2 funds source for re-use up to the following 3 financial years (Art. 6 of CS 2 JU Financial rules).

5.7 Evolution of commitments outstanding

This tables show the evolution of past and current outstanding commitments (RAL: *Reste à liquider*).

Outstanding commitments from previous years				
Title	Initial amount outstanding from previous year(s)	Amounts paid	Amounts cancelled	Final Amount from previous year(s)
Title 1	292.409,87	164.407,19	128.002,68	-
Title 2	1.645.703,69	598.707,08	196.937,66	850.058,95
Title 3	103.477,10	-	103.477,10	-
Title 4	330.542.629,37	187.252.613,05	718.351,79	142.571.664,53
TOTAL	332.584.220,03	188.015.727,32	1.146.769,23	143.421.723,48

Current outstanding commitments				
Title	Initial amount from the current financial year	Amounts paid	Amounts cancelled	Amount of commitments outstanding from the current financial year
Title 1	5.016.083,34	4.731.107,75	33.418,90	251.556,69
Title 2	2.548.654,72	1.460.303,22	142.775,36	945.576,14
Title 3	-	-	-	-
Title 4	291.423.212,87	129.078.777,97	97.469,85	162.246.965,05
TOTAL	298.987.950,93	135.270.188,94	273.664,11	163.444.097,88

***RAL TOTAL at the end of the financial year* 306.865.821,36**

6 INDEX OF ABBREVIATIONS

ABAC	Accrual Based Accounting
AIR	ITD Airframe
BOA	Budgetary Outturn Account
BS	Balance Sheets
CA	Commitment Appropriations
CfP	Call for Proposals
CfT	Call for Tenders
CP	Core Partner
CS2GB	Clean Sky 2 Governing Board
CS2JU	Clean Sky 2 Joint Undertaking
EC	European Commission
ECO	ITD Eco-Design
ECO TA	Eco Design Transverse Activity
ENG	ITD Engines
EOA	Economic Outturn Account
EU	European Union
FA	Fixed Assets
FP7	7th Framework Programme for Research and Technological Development
FRC	IADP Fast rotorcraft
GAM	Grant Agreement for Members
GAP	Grant Agreement for Partners
GB	Governing Board
GMT	Grant Management Tool for grant agreements with members
GRA	ITD Green Regional Aircraft
GRC	ITD Green Rotorcraft
H2020	Horizon 2020 EU Framework Programme for Research and Innovation
IAPD	Innovative Aircraft Demonstrator Platform
IKAA	In-kind contribution from additional activities
IKC	In kind contributions
IKOP	In-kind contribution from operational activities
ITD	Integrative Technology Demonstrator
JU	Joint Undertaking
LPA	IADP Large passenger aircraft
PA	Payment Appropriations
REG	IADP Regional aircraft
SAGE	ITD Sustainable and Green Energy
SAT	Small Air Transport Transverse Activity
SFWA	ITD Smart Fixed Wing Aircraft
SGO	ITD Systems for Green Operation
SPD	System & Platform Demonstrator
SYS	ITD Systems
TA	Transversal Activity
TE	ITD Technology Evaluator

7 PRIVATE MEMBERS AND AFFILIATED ENTITIES

ACITURRI ASSEMBLY SA
ACITURRI ENGINEERING SL
ACUMEN DESIGN ASSOCIATES LIMITED
ADVANCED LABORATORY ON EMBEDDED SYSTEMS SRL
AERNNOVA AEROESTRUCTURAS ALAVA SA
Aernnova Aerospace S.A.U.
AERNNOVA COMPOSITES ILLESCAS SA
AERNNOVA COMPOSITES SA
AERNNOVA ENGINEERING DIVISION SAU
AERNNOVA ENGINEERING SOLUTIONS SA
AERO GEARBOX INTERNATIONAL
AEROMAC MECANIZADOS AERONAUTICOS SA
AERO-MAGNESIUM LIMITED (A.C.S)
AEROMETALLIC COMPONENTS SA
AEROSOFT SPA
AEROTEX UK LLP
AERTEC SOLUTIONS SL
AIRBUS
AIRBUS DEFENCE & SPACE GMBH
AIRBUS DEFENCE AND SPACE GMBH
AIRBUS DEFENCE AND SPACE SA
AIRBUS GROUP LIMITED
AIRBUS HELICOPTERS
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AIRBUS OPERATIONS GMBH
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AIRBUS OPERATIONS SL
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AIRTEL ATN LIMITED
AKIRA MECATURBINES
AKIRA TECHNOLOGIES SARL
AKZO NOBEL CAR REFINISHES BV
ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA
ALMADESIGN CONCEITO E DESENVOLVIMENTO DE DESIGN LDA
ALTRAN DEUTSCHLAND SAS & CO KG
ALTYS TECHNOLOGIES
ANSYS UK LIMITED
ARKEMA FRANCE SA
ARTUS SAS
ASCO INDUSTRIES N.V.
Avia Propeller s.r.o.
AVIO POLSKA SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA
BAE SYSTEMS (OPERATIONS) LIMITED
BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION
BRIGHTLOOP SAS
CAETANO AERONAUTIC SA
CEIIA - CENTRO DE ENGENHARIA E DESENVOLVIMENTO (ASSOCIACAO)
CENTRE DE RECHERCHE EN AERONAUTIQUE ASBL - CENAERO
CENTRE D'ETUDES ET DE RECHERCHES POUR LES TECHNIQUES INDUSTRIELLES APPLIQUEES SA
CENTRO ITALIANO RICERCA AEROSPAZIALI SCPA
COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
COMPANIA ESPANOLA DE SISTEMAS AERONAUTICOS SA
COMPONENTES AERONAUTICOS COASA SA
CORIOLIS COMPOSITES
COSTRUZIONI AERONAUTICHE TECNAM SPA
COVENTRY UNIVERSITY

CT INGENIEROS AERONAUTICOS DE AUTOMOCION E INDUSTRIALES SL
 DANOBAT
 DARIUSZ DABKOWSKI
 DASSAULT AVIATION
 DBWAVE.I ACOUSTIC ENGINEERING, SA
 DESIGN MANUFACTURING SPA
 DEUTSCHES ZENTRUM FÜR LUFT - UND RAUMFAHRT EV
 DIEHL AEROSPACE GMBH
 DIEHL AVIATION GILCHING GMBH
 DIEHL AVIATION LAUPHEIM GMBH
 DIEHL COMFORT MODULES GMBH
 DSPACE DIGITAL SIGNAL PROCESSING AND CONTROL ENGINEERING GMBH
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 EGILE CORPORATION XXI SL
 EGILE MECHANICS SL
 ELEMENT MATERIAL TECHNOLOGY SEVILLE SL
 EMS SATCOM UK LTD
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 ESI ITI GMBH
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 FIBERTECNIC SA
 FOKKER AEROSTRUCTURES BV
 FOKKER ELMO BV
 FOKKER ENGINEERING ROMANIA SRL
 FOKKER LANDING GEAR BV
 FOKKER TECHNOLOGIES HOLDING BV
 FRAUNHOFER GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
 FREQUENTIS AG
 FREQUENTIS FRANCE SARL
 FRIEDRICH-ALEXANDER-UNIVERSITÄT ERLANGEN NUERNBERG
 FUNDACION ANDALUZA PARA EL DESARROLLO AEROESPACIAL
 FUNDACION CENTRO DE TECNOLOGIAS AERONAUTICAS
 FUNDACION PARA LA INVESTIGACION, DESARROLLO Y APLICACION DE MATERIALES COMPUESTOS
 FUNDACION TECNALIA RESEARCH & INNOVATION
 GE AVIATION CZECH SRO
 GE AVIATION SYSTEMS LTD
 GE AVO SRL
 GE MARMARA TECHNOLOGY CENTER MUHENDISLIK HIZMETLERI LIMITED SIRKETI
 GENERAL ELECTRIC COMPANY POLSKA SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA
 GENERAL ELECTRIC DEUTSCHLAND HOLDING GMBH
 GEVEN SPA
 GKN AEROSPACE NORWAY AS
 GKN AEROSPACE SERVICES LIMITED
 GKN AEROSPACE SWEDEN AB
 GMIS SKYSOFT SA
 GOODRICH ACTUATION SYSTEMS LIMITED
 GOODRICH ACTUATION SYSTEMS SAS
 GOODRICH CONTROL SYSTEMS PRIVATE UNLIMITED COMPANY
 HELLENIC AEROSPACE INDUSTRY SA
 HONEYWELL AEROSPACE
 HONEYWELL INTERNATIONAL SRO
 IBK-INNOVATION GMBH & CO. KG
 IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE
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 INDUSTRIA DE TURBO PROPULSORES S.A.U.
 INEGI - INSTITUTO DE CIENCIA E INOVACAO EM ENGENHARIA MECANICA E ENGENHARIA INDUSTRIAL
 INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE TOULOUSE
 INSTITUTO DE SOLDADURA E QUALIDADE
 INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE AEROSPATIALA "ELIE CARAFOLI"- INCAS BUCURESTI

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 INTERFERENZ FWT AG
 INTERNACIONAL DE COMPOSITES SA
 INVENT INNOVATIVE VERBUNDWERKSTOFFEREALISATION UND VERMARKTUNG NEUER TECHNOLOGIEN GMBH
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 ITALSYSTEM S.R.L
 ITP EXTERNALS SOCIEDAD LIMITADA
 ITP NEXT GENERATION TURBINES SOCIEDAD LIMITADA
 KONGSBERG MARITIME CM AS
 LATECOERE SA
 LATELEC
 LEONARDO - SOCIETA PER AZIONI
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 LORTEK S COOP
 M&S ENGINEERING SK SRO
 MAGNAGHI AERONAUTICA SPA
 MANUFACTURE FRANCAISE DES PNEUMATIQUES MICHELIN
 MEGGITT AEROSPACE LIMITED
 MEGGITT AS
 MICHELIN ESPANA PORTUGAL S.A.
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 MTU AERO ENGINES POLSKA SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA
 NANO PRECISION IBS COATINGS GMBH
 NOESIS SOLUTIONS NV
 NORD-MICRO GMBH & CO OHG
 NOVOTECH AEROSPACE ADVANCED TECHNOLOGY SRL
 NUOVO PIGNONE SRL
 OCULAVIS GMBH
 OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES
 OFFICINE MECCANICHE IRPINE SRL
 Optimal Structural Solutions Lda
 P.G.A. ELECTRONIC
 PALL EUROPE LIMITED
 PANEPISTIMIO PATRON
 PIAGGIO AERO INDUSTRIES SPA
 POLITECHNIKA RZESZOWSKA IM IGNACEGO LUKASIEWICZA PRZ
 POLITECNICO DI MILANO
 POLITECNICO DI TORINO
 POLSKIE ZAKLADY LOTNICZE
 PREMIUM AEROTEC GmbH
 PROTOM GROUP SPA
 RAMAL SRL
 ROLLS-ROYCE DEUTSCHLAND LTD & CO KG
 ROLLS-ROYCE ELECTRICAL NORWAY AS
 ROLLS-ROYCE PLC
 ROMAERO SA
 SAAB AKTIEBOLAG
 SAFRAN AERO BOOSTERS
 SAFRAN AIRCRAFT ENGINES
 Safran Cabin Catering B.V.
 SAFRAN CABIN GERMANY GMBH
 SAFRAN ELECTRICAL & POWER
 SAFRAN ELECTRICAL & POWER UK LTD

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 SAFRAN ENGINEERING SERVICES
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 SAFRAN LANDING SYSTEMS
 SAFRAN NACELLES
 SAFRAN NACELLES LIMITED
 SAFRAN POWER UNITS
 SAFRAN SA
 SAFRAN SEATS
 SAFRAN TRANSMISSION SYSTEMS
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 SIA AVIATEST LTD
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 SIEMENS INDUSTRY SOFTWARE SAS
 SIEMENS INDUSTRY SOFTWARE SRL
 SO - INTERVENCAO EM SAUDE OCUPACIONAL, SA
 SOCIETE LORRAINE DE CONSTRUCTION AERONAUTIQUE
 SOCIETE NATIONALE DE CONSTRUCTION AEROSPATIALE SONACA SA
 STELIA-AEROSPACE
 STEP SUD MARE SRL
 STICHTING NATIONAAL LUCHT- EN RUIMTEVAARTLABORATORIUM
 STRATOSPHERE SA
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 TECHNI-MODUL ENGINEERING
 TECHNI-MODUL ENGINEERING SA
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 TECHNO SYSTEM DEVELOPMENT SRL
 TEKEVER TECNOLOGIAS DE INFORMACAO SA
 THALES AVONICS ELECTRICAL SYSTEMS SAS
 THALES AVS FRANCE SAS
 THALES UK LIMITED
 THE MANUFACTURING TECHNOLOGY CENTRE LIMITED
 THE UNIVERSITY OF NOTTINGHAM
 THE UNIVERSITY OF SHEFFIELD
 TriaGnoSys GmbH
 TRIUMPH AEROSPACE OPERATIONS UK, LTD
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 UNIVERSITY OF BRADFORD
 UTC AEROSPACE SYSTEMS WROCLAW SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA
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 ZODIAC GALLEYS EUROPE SRO

8 CERTIFICATE OF THE ACCOUNTING OFFICER

The Final Accounts of the Clean Sky 2 Joint Undertaking for the year 2019 have been prepared in accordance with the Chapter 8 of the Financial Rules¹⁰ of the Clean Sky 2 Joint Undertaking, the accounting rules adopted by the Commission's Accounting Officer and the accounting principles and methods adopted by myself.

I acknowledge my responsibility for the preparation and presentation of the annual accounts of the Clean Sky 2 Joint Undertaking in accordance with Article 25 of the Financial Rules of the Clean Sky 2 Joint Undertaking.

I have obtained from the authorising officer, who certified its reliability, all the information necessary for the production of the accounts that show the Clean Sky 2 Joint Undertaking's assets and liabilities and the budgetary implementation.

I hereby certify that based on this information, and on such checks as I deemed necessary to sign off the accounts, I have a reasonable assurance that the accounts present fairly, in all material aspects, the financial position, the results of the operations and the cash-flow of the Clean Sky 2 Joint Undertaking except for the following reservations:

- (a) The in-kind contributions for those cost claims not yet approved by the Governing Board are reflected in the liabilities of the Balance sheet as “contributions to be validated” (Euro 318,985,107.30). Following validation of the in-kind contribution declarations by management and approval by the Governing Board later in 2020, these in-kind contributions will be transferred to the Net Assets of the CS JU. Consequently the significant negative balance of the Net Assets does not indicate any risk of solvency but results from the coinciding deadlines of establishing the Final accounts and validating the cost claims and the related in-kind contribution declarations of beneficiaries for the reporting period.

My assurance statement related to the Final Accounts 2019 will be transmitted to the Accounting Officer of the Commission. The Management Representation Letter, signed by the Authorising Officer and myself, will be sent to the European Court of Auditors for the audit of the Final Accounts.



Andrea Tóth
Accounting Officer

¹⁰ Governing Board decision CS-GB-Writ proc 2019-07 (27/01/2020)

From: GARIGIOLI Livia (CLEAN SKY) **On Behalf Of** KREIN Axel (CLEAN SKY)

Sent: 25 June 2020 17:45

To: SASSOLI David Maria

Cc: HOHLMEIER Monika ; KREIN Axel (CLEAN SKY)

Subject: D(2020)AK296 - Transmission of Clean Sky 2 Joint Undertaking Final Accounts & Budgetary implementation report for the year 2019

Dear President Sassoli,

Please find attached an advanced copy of a letter and its Annexes, duly signed by Mr Axel Krein, Clean Sky 2 JU Executive Director, on the CS2JU Final Accounts and budgetary implementation report for the Year 2019.

An hard copy of the documents will be sent by separate mail.

With kind regards

Livia Garigioli
Assistant to the Executive Director

Clean Sky 2 Joint Undertaking

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