



Annual activity report 2022

annexes

EUROPEAN CLIMATE, INFRASTRUCTURE
AND ENVIRONMENT EXECUTIVE AGENCY

Table of Contents

ANNEX 1:	Statement of the Director in charge of Risk Management and Internal Control.....	3
ANNEX 2:	Performance tables.....	4
ANNEX 3:	Draft annual accounts and financial reports ().....	26
ANNEX 4:	Financial scorecard.....	66
ANNEX 5:	Materiality criteria.....	69
ANNEX 6:	Relevant Control System(s) for budget implementation (RCSs)	80
ANNEX 7:	Specific annexes related to "financial management".....	95
ANNEX 8:	Specific annexes related to "assessment of the effectiveness of the internal control systems"	114
ANNEX 9:	Specific annexes related to 'Control results' and 'Assurance: Reservations'	120
ANNEX 10:	Reporting – Human resources, digital transformation and information management and sound environmental management.....	123
ANNEX 11:	Implementation through national or international public-sector bodies and bodies governed by private law with a public sector mission – not applicable	128
ANNEX 12:	EAMR of the Union Delegations – not applicable	129
ANNEX 13:	Decentralised agencies and/or EU Trust Funds – not applicable.....	130

ANNEX 1: Statement of the Director in charge of Risk Management and Internal Control

I declare that in accordance with the Commission's communication on the internal control framework ⁽¹⁾, I have reported my advice and recommendations on the overall state of internal control in CINEA to the Agency's Steering Committee.

I hereby certify that the information provided in the present annual activity report and in its annexes is, to the best of my knowledge, accurate and complete.

Brussels, 28 March 2023

Paloma Aba Garrote

⁽¹⁾ C(2017)2373 of 19.04.2017.

ANNEX 2: Performance tables

Performance Table 1 – CEF Transport

Specific objective: 1. A sustainable transport area that reduces transport impact on the environment, provides healthier and cleaner alternatives to mobility and increases the uptake of sustainable and alternative transport fuels for land, waterborne and air.

Specific objective: 2. A smart and innovative transport sector that makes the most of digitalisation and automation, supported by adequate funding.

Specific objective: 3.1. A fully integrated and connected Trans-European Transport network with appropriate funding for a robust and modern European transport infrastructure with fully restored connectivity.

From 2020-2024 Strategic Plans

Parent DG: DG MOVE

Related to spending programme: CEF Transport

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number: 900	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 529 100% of beneficiaries informed on time
Timely reimbursement of external experts	Time to pay	>98% of external experts reimbursed within time to pay limit	100% of payments within time to pay
Preparation and signature of grant agreements – estimated number: 300	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 207 100% of grants signed on time
- pre-financing payments – estimated number: 300	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 205 100% of pre-financing requests paid within time to pay
Reports review, including Action Status Reports (ASRs), and execution of payments -estimated number: - ASRs: 580 - further pre-financings: 200 - interim payment requests: 180 - final payment requests: 90	Time to pay	>98% of payment requests (excluding the above pre-financing payment requests) paid within time to pay limit	ASRs: 533 Further pre-financing: 196 Interim payments: 134 Final payments: 111 99.8% within time to pay

Feedback to policy: - Short note on call 2021 lessons learned	Quality input provided on time	By July 2022	Done on 20/09/2022
- Note on ASRs submitted to DG MOVE	Quality input provided on time	By July 2022	Done on 29/07/2022
-Input on request by DG MOVE, e.g. to the revision process of the TEN-T Guidelines Regulation 1315/2013	Quality input provided on time	Throughout 2022	Done upon request
- Support to EU Coordinators and horizontal priorities (e.g. SESAR, ITS)	Quality input provided on time	Throughout 2022	Done upon request
-QlikSense dashboards with programme data and MAP-IT tool data (indicators)	New modules released and training to DG MOVE users provided	Throughout 2022	Support to DG MOVE for data requests was provided as well as maintenance of existing QlikSense dashboards. First Release of MAP-IT tool in September 2022.
Important communication outputs (list non-exhaustive) • Info day	Satisfaction rate of participants at info days	>90%	Overall satisfaction rate of 95.5% for 2 Info Days organised during the year (Military Mobility Info Day + CEF-T 2022 call Info Day)
• Support for TEN-T Days and Digital Transport Days • Support for World ATM Congress • Support for ITS European Congress	Convened events	Throughout 2022	Support was provided for Connecting Europe Days (former TEN-T Days) World ATM Congress and ITS Congress whereas Digital Transport Days did not take place.
• CEF Implementation Brochure • Project factsheets • ATM and ITS publication updates	Quality publications produced and disseminated	Throughout 2022	Publications produced including CBA guidance document, CEF Implementation Brochure, CEF transport call leaflet, ITS flyer Project factsheets produced and disseminated via CINEA website and Funding & Tenders portal.

Performance Table 2 – CEF Energy

Specific objective: 1. Energy is clean, affordable and secure.

From 2020-2024 Strategic Plans

Parent DG: DG ENER

Related to spending programme: CEF Energy

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number 70 (30 from PCI call, 20 from preparatory studies Cross-border Renewables (cb-res) and 20 from cb-res studies and works-this one depending on call planning)	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 33 proposals evaluated following Calls for Proposals and 7 proposals following the first CBRES Status Call 100% of beneficiaries informed on time
Timely reimbursement of external experts	Time to pay	>98% of external experts reimbursed within time to pay limit	100% of payments within time to pay
Preparation and signature of grant agreements – estimated number: 45 (10 from PCI call 2021, 20 from PCI call 2022, 5 from preparatory studies cb-res 2021, 10 from preparatory studies cb-res 2022)	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 7 85.7% of grant agreements signed on time (1 out of 7 was signed late)
- execution of pre-financings: 5	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 9 100% of pre-financing requests paid within time to pay
Reports review, including Action Status Reports (ASRs), and execution of payments -estimated number: - ASRs: approx.. 35 - further pre-financings: 8 - interim payments: 5 - final payments: 15	Time to pay	>98% of payment requests (excluding the above pre-financing payment requests) paid within time to pay limit	ASRs: 26 Further pre-financing: 14 Interim payments: 13 Final payments: 16 100% within time to pay

Feedback to policy: - Note on ASR to DG ENER	Quality input provided on time	By June 2022	The ASR note was submitted to DG ENER on 20 June
- Further update of the Transparency Platform	Quality input provided on time	By June 2022 and by December 2022 plus regular ad-hoc updates	Continuous update of the Transparency Platform with 5th Projects of Common Interest (PCI) list
- Provision of updated information on the status of the PCIs and the CEF Energy funded actions	Quality input provided on time	Regular updates to DG ENER	Ad-hoc feedback organised for several actions throughout 2022, support to preparation to High-Level Group meetings (CESEC, BEMIP, Iberian Peninsula)
Important communication outputs (list non-exhaustive) • Info days for 3 calls for proposals (PCI and cb RES) • Support for PCI Energy Days • CINEA workshop for cross border RES • Support for various conferences such as Energy Infrastructure Forum, Smart Grids Summit and EUSEW, and others linked to the Energy Union Committee • CEF ENERGY cross border RES leaflet • CEF Energy supported actions brochure update in a new format • CEF Implementation	Satisfaction rate of participants at info days	>90%	Overall satisfaction rate 90.3% 4 Info days: CB RES status call, PCIs call, CB RES Prep Studies, CB RES Works & Studies
	Convened events	Throughout 2022	Support provided for all planned events. CINEA supported DG ENER for the PCI Energy days, taking full responsibility for the PCI Garden (exhibition), whereas the CB RES workshop was cancelled.
	Quality publications produced and disseminated	Throughout 2022	All 3 publications produced in 2022

Performance Table 3 – Horizon Europe (HE) Cluster 5, including EU Missions

Specific objective DG R&I: 1.1. High-quality science, knowledge and innovative solutions support climate policies and help to preserve biodiversity, ecosystem and natural resources.

Specific objective DG R&I: 1.2. Mainstreaming of the public and private research and innovation investments for climate actions strengthens the European Green Deal's impact.

Specific objective DG R&I: 1.3. Co-creation of Horizon Europe and its missions and partnerships increases awareness of the key role of research and innovation for achieving climate neutrality.

Specific objective DG CLIMA: 1.3. Climate-related spending mainstreamed in the EU budget and in private funds to finance the green and just transition and invest in particular in low carbon and other climate innovations

Specific objective DG ENER: 3. Research is mobilised and innovation fostered

Specific objective DG MOVE: 2. A smart and innovative transport sector that makes the most of digitalisation and automation, supported by adequate funding

From 2020-2024 Strategic Plans

Parent DG: DG R&I and DG CLIMA, DG ENER, DG MOVE

Related to spending programmes: Horizon Europe, H2020

Main outputs in 2022- Climate:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number: 400	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 257 100% of beneficiaries informed on time
Number of procurements procedures to be carried out-estimated number: 3	Procurement procedures finalised	End of 2022	Number of procurement procedures finalised: 2
Preparation and signature of grant agreements – estimated number: 76	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 71 98% of grants signed on time
Number of contracts to be signed-estimated number: 1	Contracts signed	End of 2022	Contracts signed: 2

- pre-financings estimated number: 52	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 69 100% of pre-financing requests paid within time to pay
Reports review and execution of payments - estimated number: - interim payments requests: 15 (grants) - final payments requests: 10 (grants)	Time to pay	>98% of payment requests (excluding pre-financing payment requests) paid within time to pay limit	Interim payments: 23 Final payments: 8 100% within time to pay
Feedback to policy: - CORDIS Results Pack on Climate Adaptation	Produced pack	1	It is planned for 2023
- Cluster events (e.g. climate change adaptation and mitigation and Earth system science)	Convened events	3	Cluster events planned for 2023
-Dissemination and exploitation of results	Number of projects uploading results on Horizon Results Platform etc.	Throughout 2022	10 projects
-Other (project data for legislative initiatives, input to work programmes, flash notes from strategic initiatives etc.)	Number of policy feedback contributions	Throughout 2022	19
Important communication outputs (list non-exhaustive) • Horizon Europe cluster 5 Info Day	Satisfaction rate of participants	>90%	Event organised in December. Feedback from participants was insufficient to be representative

Support for Research and Innovation Days, EGU 2022, COP27, ESOF 2022.	Convened events	Throughout 2022	Promotion at European Geosciences Union (EGU) Assembly 2022 (Vienna) EuroScience Open Forum 2022, COP27 ² and R&I Days.
- eNewsletter to Horizon Climate community - Contribution to publications to communicate on/ disseminate the results of H2020/ Horizon Europe climate R&I projects	Quality publications produced and disseminated	Throughout 2022	CINEA contributed to 3 publications by DG RTD, including the EU research contribution to IPCC (Intergovernmental Panel on Climate Change) Working Groups I and II with the description of close to 50 CINEA managed projects Clean Energy newsletter – 11 editions in 2022

Main outputs in 2022- Energy³:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number: 1200	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 1007 100% of beneficiaries informed on time
Number of procurements procedures to be carried out: -estimated number: Up to 6	Procurement procedure finalised	End of 2022	Number of procurement finalised: 5
Preparation and signature of grant agreements – estimated number: 174	Time to grant	>98% of the grant agreements signed on time	Grant agreements signed: 184 99% of grants signed on time
Number of contracts to be signed: -estimated number: Up to 6	Contracts signed	End of 2022	Contacts signed: 4

⁽²⁾ The three H2020 projects Focus-Africa, Down2Earth and CONFER presented their activities and findings at the COP 27 EU side event : [Climate services for adaptation in Sub-Saharan Africa](#).

⁽³⁾ H2020 Energy CET legacy is included in Performance Table 7.

- pre-financing number: 165	Time to Pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 185 100% of pre-financing requests paid within time to pay
Reports review and execution of payment for projects, estimated number: - Reports review and execution of payment for projects, estimated number: - interim payment requests: 191 (grants) - final payments requests: 118 (grants) - interim/final payments: 5 (procurements)	Time to pay	>98% of payment requests (excluding pre-financing payment requests) paid within time to pay limit	Interim payments: 153 Final payments: 67 100% within time to pay
Feedback to policy: - CORDIS Results Packs (e.g. . deep renovation, digitalisation) - Cluster events (e.g. Africa, BioEnergy, Wind, Batteries, Smart Buildings, Ocean energy, geothermal energy clustering event) - Dissemination and exploitation of results - Other (project data for legislative initiatives, input to work programmes, flashnotes from strategic initiatives etc)	Produced pack	At least 2 packs produced/updated until the end 2022	Fully implemented
	Convened meetings	Up to 11 meetings	All planned meetings were convened with the exception of two.
	Number of projects benefitting from D&E support services (e.g. New Exploitation Booster, Innovation Radar)	Up to 15	278 results from 83 projects
	Number of policy feedback contributions	Throughout 2022	More than 20 actions among which cluster meetings, seminars and reports.
Important communication outputs (list non-exhaustive) Horizon Europe cluster 5 Info Day	Satisfaction rate of participants in info days	>90%	Two events organised in February and December. Feedback from participants was insufficient to be representative

Support for Research and Innovation Days, ENLIT2022, EUPVSEC-WCPEC, Wind Europe, Solar Paces and Ocean Energy Conferences, ICOE 2022	Convened events	Throughout 2022	CINEA took part in ENLIT2022, Research and Innovation days, European Photovoltaic Solar Energy Conference (EUPSEV)/ World Conference on Photovoltaic Energy Conversion (WCPEC) and the International Conference on Ocean Energy (ICOE)/ Ocean Energy Europe's (OEE) Conference.
- ENLIT 2022 project zone brochure - eNewsletters to Horizon Energy community	Quality publications produced and disseminated	Throughout 2022	Clean Energy Newsletters sent to HE Energy community (11 editions)

Main outputs in 2022- Mobility:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals estimated number:600	Time to inform	100 of the beneficiaries informed on time	Proposals evaluated: 576 99.8% of beneficiaries informed on time
Preparation and signature of grant agreements – estimated number: 90	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 144 93% of grants signed on time
pre-financing number: 80	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 127 100% of pre-financing requests paid within time to pay
Reports review and execution of payment for projects, estimated number: - interim payments requests: 94 (grants) - final payments requests: 78 (grants)	Time to pay	>98% of payment requests (excluding pre-financing payment requests) paid within time to pay limit	Interim payments: 83 Final payments: 49 100% within time to pay

Cluster events (e.g. ART, Urban Mobility, Waterborne transport and Green Deal ports - and airports)	Convened events	Throughout 2022	CINEA organised the cluster events planned with the exception of Green Deal Ports and Green Deal Airports cluster meetings which were cancelled.
Important communication outputs (list non-exhaustive) Horizon Europe cluster 5 Info Day	Satisfaction rate of participants in info days	>90%	Two events organised in February and December. Feedback from participants was insufficient to be representative
Support for Research and Innovation Days, Urban Mobility Days, TRA2022, ITS European Congress, Road Transport Research Conference, European Transport Conference	Convened events	Throughout 2022	CINEA participated at several events including Road Transport Research Conference, ITS European Congress, Connecting Europe Days (former TEN-T Days), SMM Maritime Trade Fair, Urban Mobility Days, Transport Research Arena as well as R&I Days

• ART (Automated Road Transport) and ITS (Intelligent Transport Systems) publication updates • H2020 Aviation Results overview brochure	Quality publications produced and disseminated	Throughout 2022	Six publications were produced describing close to 100 projects in total, including on Waterborne Transport brochure, Drones and Sustainable Urban Air Mobility brochure, Green Urban Mobility brochure, Road Safety brochure, Towards Quieter Aviation brochure and ITS leaflet
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Performance Table 4 – Innovation Fund

Specific objective DG CLIMA: 1.3 Climate-related spending mainstreamed in the EU budget and in private funds to finance the green and just transition and invest in particular in low carbon and other climate innovations.

Specific objective DG ENER: 3 Research is mobilised and innovation fostered.

From 2020-2024 Strategic Plans

Parent DG: DG CLIMA and DG ENER

Related to spending programme: Innovation Fund

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number: 560	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 174 100% of beneficiaries informed on time
Timely reimbursement of external experts	Time to pay	>98% of external experts reimbursed within time to pay limit	100% of payments within time to pay
Preparation and signature of grant agreements – estimated number: approx. 25	Time to grant	>98% of the grant agreements signed on time	Grant agreements signed: 22 100% of grants signed on time
Reports review and execution of payment for projects, estimated number: Interim payment requests: 5	Time to pay	100% of interim payment requests paid within the time to pay limit	Interim payments: 7 100% within time to pay
Feedback to policy: - Lessons learnt from the evaluations, including based on feedback from evaluators	Lessons learnt report	Improvement of evaluation quality (included quality of call documents and guidance)	- Large Scale 2021 lessons learnt event - Lessons learnt report prepared by external consultant
	Satisfaction rate of evaluators in surveys	Over 90% of evaluators satisfied	90% of experts gave very high ratings (either excellent or very good) to the organisation, timing, and quality of discussion calibration meetings
- Development of the knowledge-sharing framework for the IF	First knowledge sharing events organised	All beneficiaries embedded in the knowledge-sharing	Timely preparation of the knowledge sharing framework

		framework	2 updated versions of the knowledge sharing template delivered Organization of the first knowledge sharing workshop on the FC Co-organization of CCS stakeholder event with DG CLIMA
- Development of the policy feedback framework based on data processing and management and interpretation	Effective policy feedback framework based on data established	Feedback provided is timely, accurate and high quality	Timely delivery of quarterly reports to DG CLIMA Delivery of updated Part C Release of public KS dashboard
Important communication outputs (List non-exhaustive) : • Info days LSC and SSC • Coordinator events and beneficiary workshops	Satisfaction rate of participants in info days	90%	83.5% 2 info days 2 GAP coordinators events Participation at beneficiary workshops and cross-programme synergy events
• Financing Innovative Green tech conference – support for DG CLIMA • Support for external events such as EUSEW2022	Convened events	Throughout 2022	CINEA organised 11 internal events and participated at 50 external events, such as NCP events, EUSEW policy session, 4 signatory events
• IF Brochure • IF Annual Report 2021	Quality publications produced and disseminated	Throughout 2022	CINEA produced and disseminated material that included an Innovation Fund video, Innovation Fund social media flyer 7 Large Scale 2020 Project fiches, 15 Large Scale 2021 Project fiches Country fact-sheets and provided contribution to Annual report

Performance Table 5 –LIFE ⁽⁴⁾

Specific objective DG CLIMA: 1.3 Climate-related spending mainstreamed in the EU budget and in private funds to finance the green and just transition and invest in particular in low carbon and other climate innovations.

Specific objective DG ENER: 3. Energy is clean, affordable and secure.

Specific objective DG ENER: 3. Research is mobilised and innovation fostered.

Specific objective DG ENV: 1. Circular Economy: The EU economy is more circular and uses natural resources and products more sustainably Circular economy.

Specific objective DG ENV: 2. Biodiversity: Biodiversity and natural ecosystems in the EU are put on the path to recovery by stepping up the protection and restoration of nature.

Specific objective DG ENV: 3. Zero pollution: Citizens and natural ecosystems are better protected from environmental pressures and risks to health as a result of Europe's zero-pollution ambition and measures for a toxic-free environment

From 2020-2024 Strategic Plans

Parent DG: DG CLIMA, DG ENER and DG ENV

Related to spending programme: LIFE

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals – estimated number: 1150	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 893 100% of beneficiaries informed on time
- Timely reimbursement of external experts	Time to pay	>98% of external experts reimbursed within time to pay limit	100% of payments within time to pay
Number of procurement procedures to be carried out-estimated number: 7	Tender procedure finalised	End of 2022	Number of procurement finalised: 6 (Including procurement procedures for Green Assist)
Preparation and signature of grant agreements – estimated number: 220	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 270 99% of grants signed on time
Number of contracts to be signed-estimated	Contracts signed	End of 2022	Number of contracts signed: 12 (Including

⁽⁴⁾ The H2020 Energy CET legacy is included into this section as the continuation of the programme is ensured through the LIFE programme.

number: Up to 6			specific contracts)
- pre-financing number: 220	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 286 100% of pre-financing requests paid within time to pay
Reports review and execution of payment for projects, estimated number: - further pre-financings (LIFE): 150 - interim payments requests (LIFE): 10 - interim payment requests (H2020 CET): 45 - final payments requests: (LIFE):190 - final payments requests (H2020 CET): 37 - interim/final payments (LIFE procurements): 10	Time to pay	>98% of payment requests (excluding the above pre-financing payment requests) paid within time to pay limit	Further pre-financing: 136 Interim payments: 91 Final payments: 235 99.8% within time to pay
Feedback to policy: - Policy fiches for projects within the LIFE Environment and Resource efficiency priority area	Produced fiches	20	39 fiches produced (LIFE Circular Economy and Quality of Life -CEQL)
- LIFE Thematic/IP Platform Meetings/Contractor meetings	Convened events	1 platform meeting, for Marine Issues. up to 5 thematic Contractors' Meetings e.g. Cities & Region, Policy Support, Heating & Cooling, Energy Poverty, Home renovation (H2020 CET) 1 BUILD UP Skills 14th EU exchange meeting (H2020 CET) 1 Building sector's Platform Meeting (H2020 CET) LIFE Climate Action Welcome Meetings (LIFE CLIMA)	Platform meeting, for Marine Issues. Platform meeting on green mobility. 5 Contractors' Meetings, BUILD UP Skills 14th EU exchange meeting, Building sector's Platform Meeting, LIFE Climate Action Welcome Meetings, LIFE Workshop on Flourinated Gases

		LIFE Workshop on Fluorinated Gases (LIFE CLIMA)	
-Others meetings		2 Interlife meetings LIFE 8 Sustainable Energy Investment Form events or webinars (H2020 CET) 2 International Conferences (e.g. EUREFSO2022, ECCA 2022 (H2020 CET) 4th CF SEDSS ⁽⁵⁾ III conference, Grenoble under French Presidency of the Council (H2020 CET)	2 Interlife meetings (Nordic-Baltic platform and in France) 8 Sustainable Energy Investment Form events or webinars
- Dissemination and exploitation of results	Number of projects benefitting from D&E support services (e.g. New Exploitation Booster, Innovation Radar, Results Packs)	UP to 80 projects to receive support from LIFE specific Close to Market At least 2 CORDIS Publications type 'Results Packs' – (H2020 CET)	75 projects received support from LIFE specific Close to Market
-Other (project data for legislative initiatives, input to work programmes, documents extracting best practice from projects in a given policy field/aspect, different notes, including on strategic initiatives etc.)	Number of policy feedback contributions	Up to 40 for H2020 CET and LIFE	Contributions to briefings, examples of projects shared with DG ENV to support works on the Restoration Law, soil policy and forest policy etc.
Important communication outputs (list non-exhaustive) • Info days 2022 call for proposals • Covenant of Mayors Investment	Satisfaction rate of participants in info days	>90%	100% satisfaction rate Organisation of EU LIFE Info Sessions online on 18-20 May 2022 (with over 3500 unique viewers on livestream and 981 registrations on the first

⁽⁵⁾ Consultation Forum for Sustainable Energy in the Defence and Security Sector

Forum - Energy Efficiency Finance Market Place, Sustainable Energy Investment Forums			day, over 4 000 on the second day and 3 100 registered to Clean Energy transition and a total of 337 participated at the plenary).
- Participation and support for various events (for example EUSEW 2022, ICLEI World Congress, Ecomondo, Hannover Messe, seeSUSTAINtec, EU Green Week, EU Week of Regions and Cities and others) - LIFE 30th Anniversary including LIFE Awards Ceremony	Convened events	More than 10, including info days, conferences, EUSEW and COMIF ⁽⁶⁾ (H2020 CET)	Several events including European Sustainable Energy Week with 94% satisfaction rate and 8 100 participants, Covenant of Mayors Investment Forum with 400 participants. Participation at International Congress on Entomology, EU Week of Regions and Cities and Ecomondo. LIFE 30th anniversary campaign implemented with several events and LIFE Awards ceremony organised.
- Electronic LIFE and CET newsletters - CORDIS Packs on Public Authorities and Private Finance, EU Green Week	Quality publications produced and disseminated	Throughout 2022	Quality publications produced and disseminated such as Clean Energy Newsletter: - 11 editions in 2022 And 22 754 subscribers in 2022, LIFE newsletters published 11 times during the year.

⁽⁶⁾ Covenant of Mayors Investment Forum – Energy Efficiency Finance Market Place

Performance Table 6 – EMFAF

Specific objective DG MARE: 1. More sustainable and competitive fisheries and aquaculture by 2024.

Specific objective DG MARE: 2. A sustainable blue economy generating sustainable economic development, jobs and prosperity by 2024.

Specific objective DG MARE: 3. More sustainable fisheries worldwide and improved international ocean governance by 2024.

From 2020-2024 Strategic Plans

Parent DG: DG MARE

Related to spending programme: EMFAF and EMFF

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Evaluation of project proposals: – estimated number: 85	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 35 100% of beneficiaries informed on time
– timely reimbursement of external experts	Time to pay	>98% of external experts reimbursed within time to pay limit	Not applicable
Number of procurements to be carried out – estimated number: 10	Procurement procedures finalised	End of 2022	Number of procurements procedures finalised: 10
Preparation and signature of grant agreements – estimated number: 18	Time to grant	>98% of the Grant agreements signed on time	Grant agreements signed: 32 97% of grants signed on time
Number of contracts to be signed-estimated number: 65	Contracts signed	End of 2022	Contracts signed: 33 (including specific contracts, renewals of service contracts and contracts signed under Better Regulation FWC)
-pre-financing number: 18	Time to pay	100% of pre-financing requests paid within the time to pay limit	Pre-financing payments: 33 100% of pre-financing requests paid within time to pay

Reports review and execution of payment for projects, estimated number: - interim payment requests: 40 - final payment requests – estimated number: 55	Time to pay	>98% of payment requests (excluding pre-financing payment requests) paid within time to pay limit	Interim payments: 53 Final payments: 54 100% within time to pay
Feedback to policy: - produced project factsheets and publication, e.g. infographics	Policy feedback contributions	Up to 30	49 (including infographics, project and study factsheets)
- studies published		10	18
- DG MARE's events where CINEA will contribute with information from projects/contracts' results		5	11
Important communication outputs (list non-exhaustive) • Info days Blue Careers and regional flagships	Satisfaction rate of participants in info days	>90%	89% satisfaction rate

• Participation and support for various events (European Maritime Day, Ecomondo, EUSEW, EU Green Week and others) • CINEA workshops on blue careers, EMD, MSP in the Med, Maritime Surveillance	Convened events	Throughout 2022	All planned events/workshops carried out, with the exception of the Maritime Surveillance workshop that was replaced by a workshop on unexploded ordnances at sea at European Maritime Day. Organisation of the Stand and 3 sessions at European Maritime Day. Projects and EMFAF funding opportunities were featured in different sessions of ECOMONDO and at the stand. In addition, one project was featured at Hannover Messe and one at the NEB festival.
• Brochure on Scientific Advice and various infographics • EMFAF flyer	Quality publications produced and disseminated	Throughout 2022	5 infographics produced and disseminated (the EMFAF flyer was replaced by infographics on EMFAF), while the brochure on scientific advice was postponed.

Performance Table 7 – Renewable Energy Financing Mechanism

Specific objective: 1. Energy is clean, affordable and secure.

From 2020-2024 Strategic Plans

Parent DG: DG ENER

Related to spending programme: RENEWFM

Main outputs in 2022:

Source of data: CINEA internal

Output	Indicator	Target	Latest known result
Preparation of the call for proposals	Quality input provided on time	For launching the call as per the confirmed schedule	Work is ongoing to launch the first RENEWFM call at the beginning of 2023.
Evaluation of project proposals – estimated number: 20	Time to inform	100% of the beneficiaries informed on time	
Important communication outputs Info days	Satisfaction rate of participants at info days	>90%	No info days organised in 2022 as the first call was postponed to 2023
Support for various conferences such as Energy Infrastructure Forum and EUSEW, and others linked to the Energy Union Committee	Convened events	Throughout 2022	All the events and promotion activities of RENEWFM were postponed to 2023
RENEWFM brochure	Quality publications produced and disseminated	Throughout 2022	Postponed to 2023

Performance Table 8 – Just Transition Mechanism- Public Sector Loan Facility

Specific objective: 1.3 Just transition. From 2020-2024 Strategic Plans Parent DG: DG REGIO <i>Related to spending programme: JTM</i>			
Main outputs in 2022: Source of data: CINEA internal			
Output	Indicator	Target	Latest known result
Prepare call and launch call for proposals	Quality input provided on time	For launching the call at the beginning of the year	The call was launched in July.
Evaluation of project proposals – estimated number: 200	Time to inform	100% of the beneficiaries informed on time	Proposals evaluated: 1 100% of beneficiaries informed on time
Important communication outputs (subject to the timing of the first call) • Info days for 2022 calls • Support for EU Week of Regions • JTM-PSLF flyer	Satisfaction rate of participants at info days	>90%	100% satisfaction rate Info day organised
	Convened events	Date depending on the call launch	Active promotion of the programme at various external events such as at the EU Regions Week
	Quality publications produced and disseminated	Throughout 2022	Preparations started for production in early 2023

ANNEX 3: Draft annual accounts and financial reports ⁽⁷⁾

Annex 3 Financial Report Operating budget - CINEA - Financial Year 2022

Table 1 : Commitments

Table 2 : Payments

Table 3 : Commitments to be settled

Table 4 : Balance Sheet

Table 5 : Statement of Financial Performance

Table 5 Bis: Off Balance Sheet

Table 6 : Average Payment Times

Table 7 : Income

Table 8 : Recovery of undue Payments

Table 9 : Ageing Balance of Recovery Orders

Table 10 : Waivers of Recovery Orders

⁽⁷⁾ The figures are those related to the provisional accounts and not yet audited by the Court of Auditors.

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2022 (in Mio €) for CINEA					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
Title 1 STAFF EXPENDITURES					
1	1 1	Remuneration allowances charges	44.22	43.64	98.70 %
	1 2	Socio medical & training expenditure	3.33	2.50	75.08 %
Total Title 1			47.55	46.14	97.04 %
Title 2 INFRASTRUCTURE & OPERATING EXPENDITURE					
2	2 1	Building expenditure	3.60	3.60	100.00 %
	2 2	ICT expenditure	1.42	0.62	43.56 %
	2 3	Movable property & current operating expenditure	0.35	0.24	69.56 %
Total Title 2			5.38	4.47	83.08 %
Title 3 PROGRAMME SUPPORT EXPENDITURE					
3	3 1	Programme Support Expenditure	3.12	2.96	94.73 %
Total Title 3			3.12	2.96	94.73 %
Total CINEA			56.05	53.57	95.57 %

* Commitment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous commitment appropriations for the period (e.g. internal and external assigned revenue).

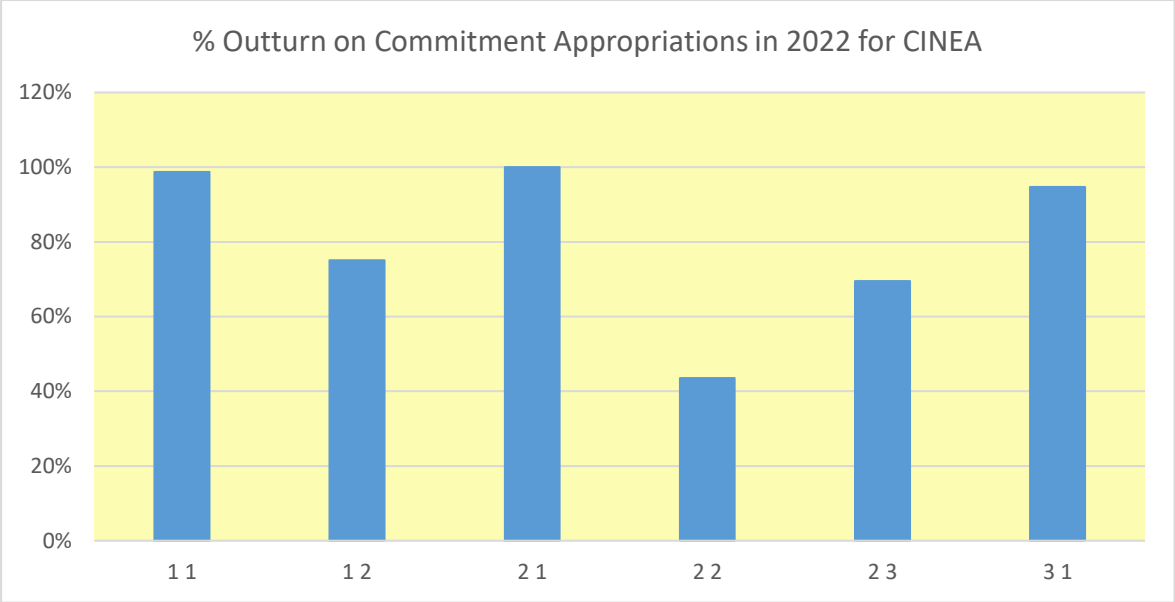


TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2022 (in Mio €) for CINEA					
			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 1 STAFF EXPENDITURES					
1	1 1	Remuneration allowances charges	44.46	43.58	98.02 %
	1 2	Socio medical & training expenditure	3.82	1.45	37.89 %
Total Title 1			48.29	45.03	93.26%
Title 2 INFRASTRUCTURE & OPERATING EXPENDITURE					
2	2 1	Building expenditure	4.00	3.44	85.88 %
	2 2	ICT expenditure	1.62	0.73	45.19 %
	2 3	Movable property & current operating expenditure	0.56	0.30	52.83 %
Total Title 2			6.19	4.47	72.21%
Title 3 PROGRAMME SUPPORT EXPENDITURE					
3	3 1	Programme Support Expenditure	4.26	2.31	54.10 %
Total Title 3			4.26	2.31	54.10%
Total CINEA			58.74	51.81	88.20 %

* Payment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous payment appropriations for the period (e.g. internal and external assigned revenue).

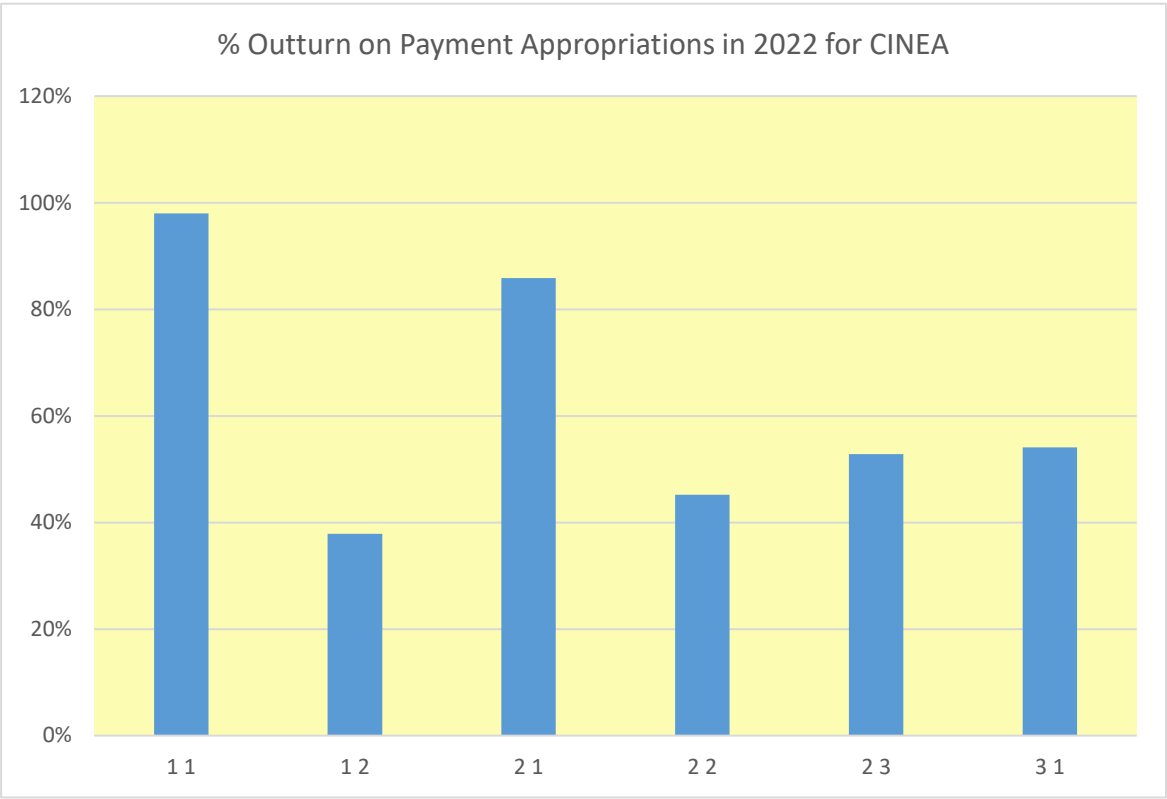


TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
1	1 1	Remuneration allowances charges	43.64	43.36	0.28	0.65%	0.00	0.28	0.24
	1 2	Socio medical & training expenditure	2.50	1.22	1.28	51.34%	0.00	1.28	0.49
Total Title 1			46.14	44.58	1.57	3.40%	0.00	1.57	0.73

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
2	2 1	Building expenditure	3.60	3.27	0.33	9.25%	0.00	0.33	0.40
	2 2	ICT expenditure	0.62	0.53	0.09	13.84%	0.00	0.09	0.20

	2 3	Movable property & current operating expenditure	0.24	0.16	0.08	33.19%	0.00	0.08	0.21
Total Title 2			4.47	3.97	0.50	11.19%	0.00	0.50	0.81

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
3	3 1	Programme Support Expenditure	2.96	1.27	1.69	57.22%	0.00	1.69	1.14
Total Title 3			2.96	1.27	1.69	57.22%	0.00	1.69	1.14
Total :			53.57	49.81	3.76	7.02 %	0.00	3.76	2.69

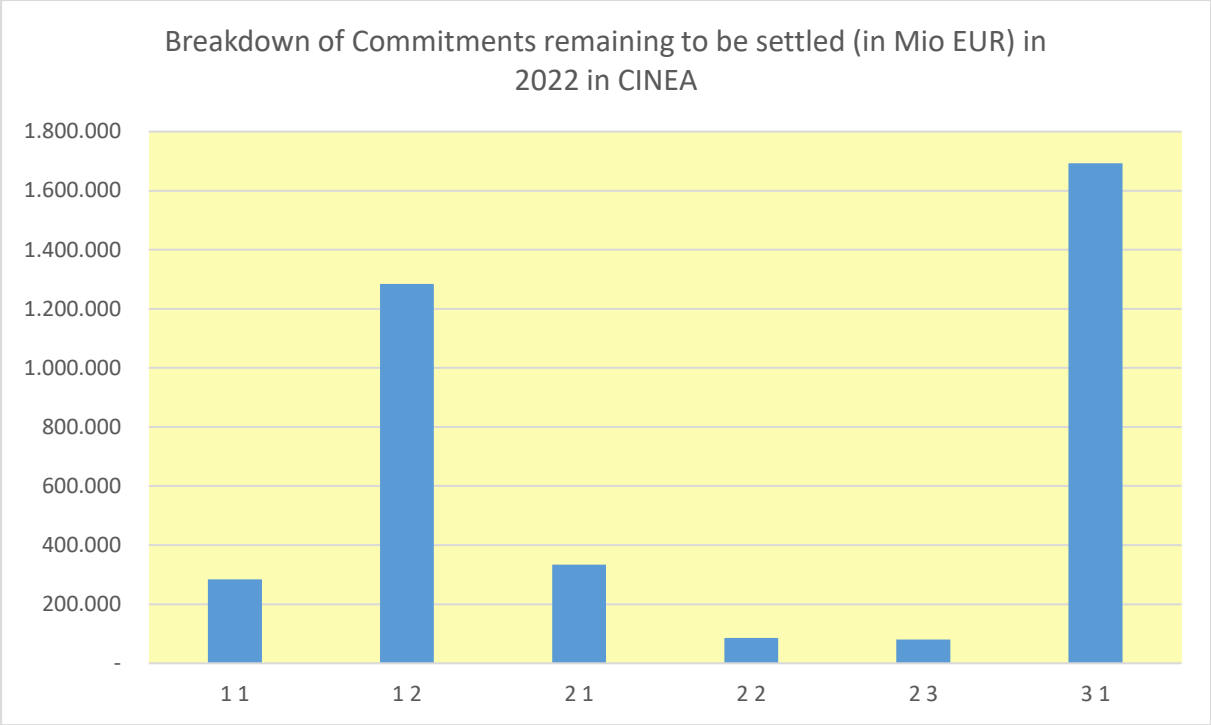


TABLE 4 : BALANCE SHEET for CINEA

BALANCE SHEET	2022	2021
A.I. NON CURRENT ASSETS	555,780.58	320,702.00
A.I.1. Intangible Assets	89,711.12	61,911.00
A.I.2. Property, Plant and Equipment	341,069.46	133,791.00
A.I.6. Non-Cur Exch Receiv & Non-Ex Recoverab	125,000.00	125,000.00
A.II. CURRENT ASSETS	7,167,837.67	5,204,423.93
A.II.2. Current Pre-Financing	0.00	356,500.00
A.II.3. Curr Exch Receiv &Non-Ex Recoverables	509,258.83	166,010.85
A.II.6. Cash and Cash Equivalents	6,658,578.84	4,681,913.08
ASSETS	7,723,618.25	5,525,125.93
P.II. CURRENT LIABILITIES	-6,083,129.18	-4,111,568.79
P.II.2. Current Provisions	0.00	0.00
P.II.3. Current Financial Liabilities	0.00	0.00
P.II.4. Current Payables	-3,256,689.90	-2,011,017.53
P.II.5. Current Accrued Charges &Defrd Income	-2,826,439.28	-2,100,551.26
LIABILITIES	-6,083,129.18	-4,111,568.79
NET ASSETS (ASSETS less LIABILITIES)	1,640,489.07	1,413,557.14
P.III.2. Accumulated Surplus/Deficit	-1,413,557.14	-644,521.49
Non-allocated central (surplus)/deficit*	-226,931.93	-769,035.65
TOTAL	0.00	0.00

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the

various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

TABLE 5 : STATEMENT OF FINANCIAL PERFORMANCE for CINEA

STATEMENT OF FINANCIAL PERFORMANCE	2022	2021
II.1 REVENUE	-52,879,215.67	-43,321,294.56
II.1.2. NON-EXCHANGE REVENUE	-52,850,688.71	-43,270,191.26
II.1.2.2. OTHER EXCHANGE REVENUE	-28,526.96	-51,103.30
II.2. EXPENSES	52,652,283.74	42,552,258.91
II.2. EXPENSES	52,652,283.74	42,552,258.91
II.2.10.OTHER EXPENSES	8,537,122.43	7,995,703.70
II.2.6. STAFF AND PENSION COSTS	44,115,161.28	34,556,555.17
II.2.8. FINANCE COSTS	0.03	0.04
STATEMENT OF FINANCIAL PERFORMANCE	-226,931.93	-769,035.65

Explanatory Notes (facultative):

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the

Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

TABLE 5bis : OFF BALANCE SHEET for CINEA

OFF BALANCE	2022	2021
OB.3. Other Significant Disclosures	-6,455,788.34	-7,739,770.76
OB.3.2. Comm against app. not yet consumed	-1,634,236.76	-1,195,081.86
OB.3.3.7. Other contractual commitments	-1,682.58	-9,596.66
OB.3.5. Operating lease commitments	-4,819,869.00	-6,535,092.24
OB.4. Balancing Accounts	6,455,788.34	7,739,770.76
OB.4. Balancing Accounts	6,455,788.34	7,739,770.76
OFF BALANCE	0.00	0.00

Explanatory Notes (facultative):

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

TABLE 6: AVERAGE PAYMENT TIMES FOR 2022 FOR CINEA

Legal Times									
Maximum Payment Time (Days)	Total Nbr of Payments	Nbr of Payments within Time Limit	Percentage	Average Payment Times (Days)	Nbr of Late Payments	Percentage	Average Payment Times (Days)	Late Payments Amount (EUR)	Percentage
30	889	807	90.8%	11.8	82	9.2%	21.8	2,931,359.69	13.9%
45	14	14	100.0%	9.4					
60	1	1	100.0%	17.0					
Total Number of Payments	904	822	90.9%		82	9.2%		2,931,359.69	13.9%
Average Net Payment Time				11.8			21.8		

Suspensions							
Average Report Approval Suspension Days	Average Payment Suspension Days	Number of Suspended Payments	% of Total Number	Total Number of Payments	Amount of Suspended Payments	% of Total Amount	Total Paid Amount
0	20	16	1.8%	904	245,615.64	1.2%	21,069,947.57

NB: Table 6 only contains payments relevant for the time statistics. Please consult its exact scope in the AAR Annex3 BO User Guide (https://myintracomm.ec.europa.eu/budgweb/EN/abac/dwh/Pages/its-030-10-20_documentation.aspx).

TABLE 7 : SITUATION ON REVENUE AND INCOME IN 2022 for CINEA								
Chapter		Revenue and income recognized			Revenue and income cashed from			Outstanding
		Current year RO	Carried over RO	Total	Current Year RO	Carried over RO	Total	balance
		1	2	3=1+2	4	5	6=4+5	7=3-6
2 0	EU Budget Contribution to the Executive Agency	56,050,000.00	0.00	56,050,000.00	56,050,000.00	0.00	56,050,000.00	0.00
9 0	Miscellaneous revenue	28,482.92	0.00	28,482.92	28,482.92	0.00	28,482.92	0.00
Total		56,078,482.92	0	56,078,482.92	56,078,482.92	0	56,078,482.92	0.00

TABLE 8 : FINANCIAL IMPACT OF EX-ANTE AND EX-POST CONTROLS in for CINEA

N/A

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 31/12/2022 for CINEA

	Number at 31/12/2022	Number at 1/1/2022	Evolution	Open Amount (Eur) at 31/12/2022	Open Amount (Eur) at 1/1/2022	Evolution
2022	2	0	100.00 %	247,825.45	0.00	100.00 %
	2	0	100.00 %	247,825.45	0.00	100.00 %

TABLE 10 :Recovery Order Waivers >= 60 000 € in 2022 for CINEA

	Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments
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Total DG	0.00
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Number of RO waivers	0
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There are no waivers below 60 000 €

**Annex 3 Financial Report Operational budget - CINEA -
Financial Year 2022**

Table 1: Commitments

Table 2: Payments

Table 3: Commitments to be settled

Table 4: Balance Sheet

Table 5: Statement of Financial Performance

Table 5 Bis: Off Balance Sheet

Table 6: Average Payment Times

Table 7: Income

Table 8: Recovery of undue Payments

Table 9: Ageing Balance of Recovery Orders

Table 10: Waivers of Recovery Orders

Table 11: Negotiated Procedures

Table 12: Summary of Procedures

Table 13: Building Contracts

Table 14 : Contracts declared Secret

Table 15 : FPA duration exceeds 4 years

Table 16 : Commitments co-delegation type 3 in 2022

Additional comments

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2022 (in Mio €) for CINEA					
			Commitment appropriations authorised*	Commitments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 02	Horizon Europe	1,491.85	1,490.36	99.90 %
Total Title 01			1,491.85	1,490.36	99.90 %
Title 02 European Strategic Investments					
02	02 03	Connecting Europe Facility (CEF)	2,574.86	2,550.59	99.06 %
Total Title 02			2,574.86	2,550.59	99.06 %
Title 05 Regional Development and Cohesion					
05	05 03	Cohesion Fund (CF)	1,492.35	1,492.33	100.00 %
Total Title 05			1,492.35	1,492.33	100.00 %
Title 08 Agriculture and Maritime Policy					
08	08 04	European Maritime, Fisheries and Aquaculture Fund (EMFAF)	35.05	34.67	98.92 %
	08 05	Sustainable Fisheries Partnership Agreements (SFPA) and Regional Fisheries Management Organisations (RFMO)	5.49	5.49	100.00 %
	08 20	Pilot projects, preparatory actions, prerogatives and other actions	1.49	1.49	100.00 %
Total Title 08			42.03	41.65	99.10 %
Title 09 Environment and Climate Action					
09	09 02	Programme for the Environment and Climate Action (LIFE)	639.66	633.82	99.09 %
Total Title 09			639.66	633.82	99.09 %
Title 13 Defence					

13	13 04	Military mobility	230.07	230.07	100.00 %
Total Title 13			230.07	230.07	100.00 %
Title 16 Expenditure outside the annual ceilings set out in the Multiannual Financial Framework					
16	16 03	Support innovation in low-carbon technologies and processes under the Emission Trading System (ETS)	2,990.22	2,843.62	95.10 %
Total Title 16			2,990.22	2,843.62	95.10 %
Total Excluding NGEU			9,461.03	9,282.45	98.11 %

Title 01 Research and Innovation					
01	01 02	Horizon Europe	440.11	440.11	100.00 %
Total Title 01			440.11	440.11	100.00 %
Total NGEU Only			440.11	440.11	100.00 %
Total CINEA			9,901.14	9,722.55	98.20 %

** Commitment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous commitment appropriations for the period (e.g. internal and external assigned revenue).*

% Outturn on Commitment Appropriations in 2022 for CINEA

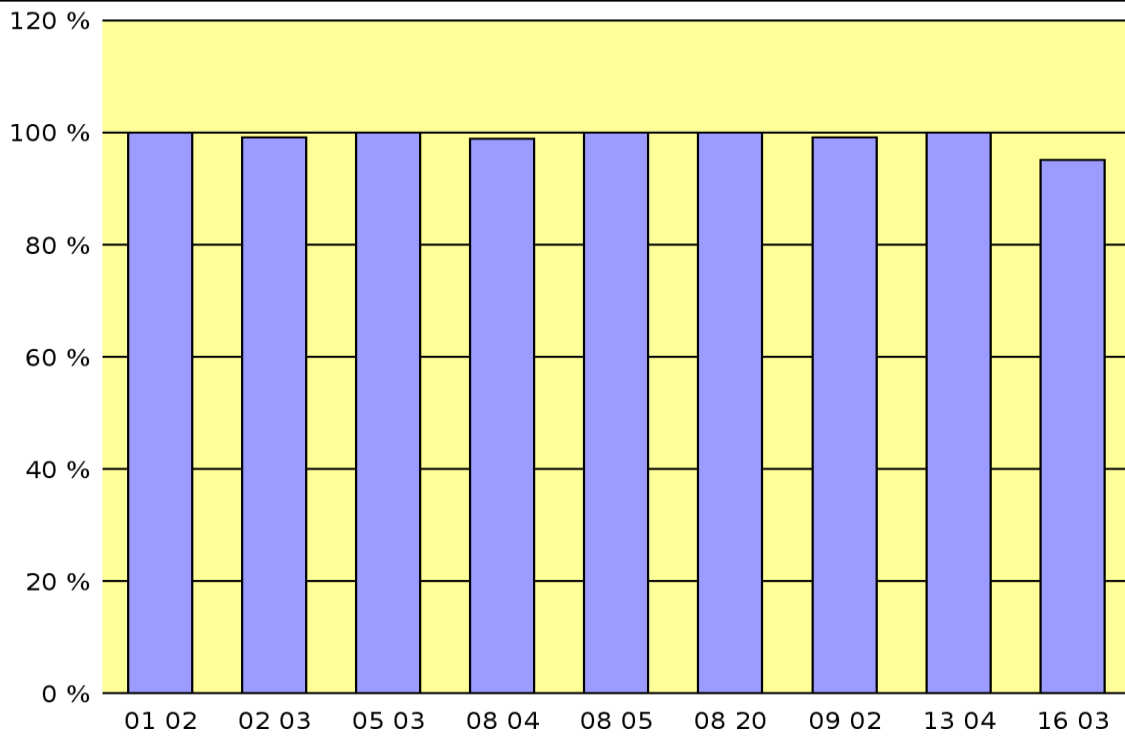


TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS in 2022 (in Mio €) for CINEA					
			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 02	Horizon Europe	1,499.84	1,127.69	75.19 %
Total Title 01			1,499.84	1,127.69	75.19%
Title 02 European Strategic Investments					
02	02 03	Connecting Europe Facility (CEF)	2,580.86	2,570.24	99.59 %
Total Title 02			2,580.86	2,570.24	99.59%
Title 05 Regional Development and Cohesion					
05	05 03	Cohesion Fund (CF)	1,839.66	1,839.66	100.00 %
Total Title 05			1,839.66	1,839.66	100.00%
Title 08 Agriculture and Maritime Policy					
08	08 04	European Maritime, Fisheries and Aquaculture Fund (EMFAF)	43.87	43.60	99.37 %
	08 05	Sustainable Fisheries Partnership Agreements (SFPAs) and Regional Fisheries Management Organisations (RFMO)	5.49	5.49	100.00 %
	08 20	Pilot projects, preparatory actions, prerogatives and other actions	0.00	0.00	0.00 %
Total Title 08			49.36	49.09	99.44%
Title 09 Environment and Climate Action					
09	09 02	Programme for the Environment and Climate Action (LIFE)	428.99	424.17	98.88 %
Total Title 09			428.99	424.17	98.88%
Title 13 Defence					
13	13 04	Military mobility	112.74	112.71	99.97 %
Total Title 13			112.74	112.71	99.97%
Title 16 Expenditure outside the annual ceilings set out in the Multiannual Financial Framework					
16	16 03	Support innovation in low-carbon technologies and processes under the Emission Trading System (ETS)	18.33	8.30	45.26 %
Total Title 16			18.33	8.30	45.26%
Total Excluding NGEU			6,529.78	6,131.85	93.91%

Title 01 Research and Innovation					
01	01 02	Horizon Europe	670.08	666.30	99.44 %
Total Title 01			670.08	666.30	99.44%
Total NGEU Only			670.08	666.30	99.44%
Total CNEA			7,199.86	6,798.15	94.42 %

** Payment appropriations authorised include, in addition to the budget voted by the legislative authority, appropriations carried over from the previous exercise, budget amendments as well as miscellaneous payment appropriations for the period (e.g. internal and external assigned revenue).*

% Outturn on Payment Appropriations in 2022 for CINEA

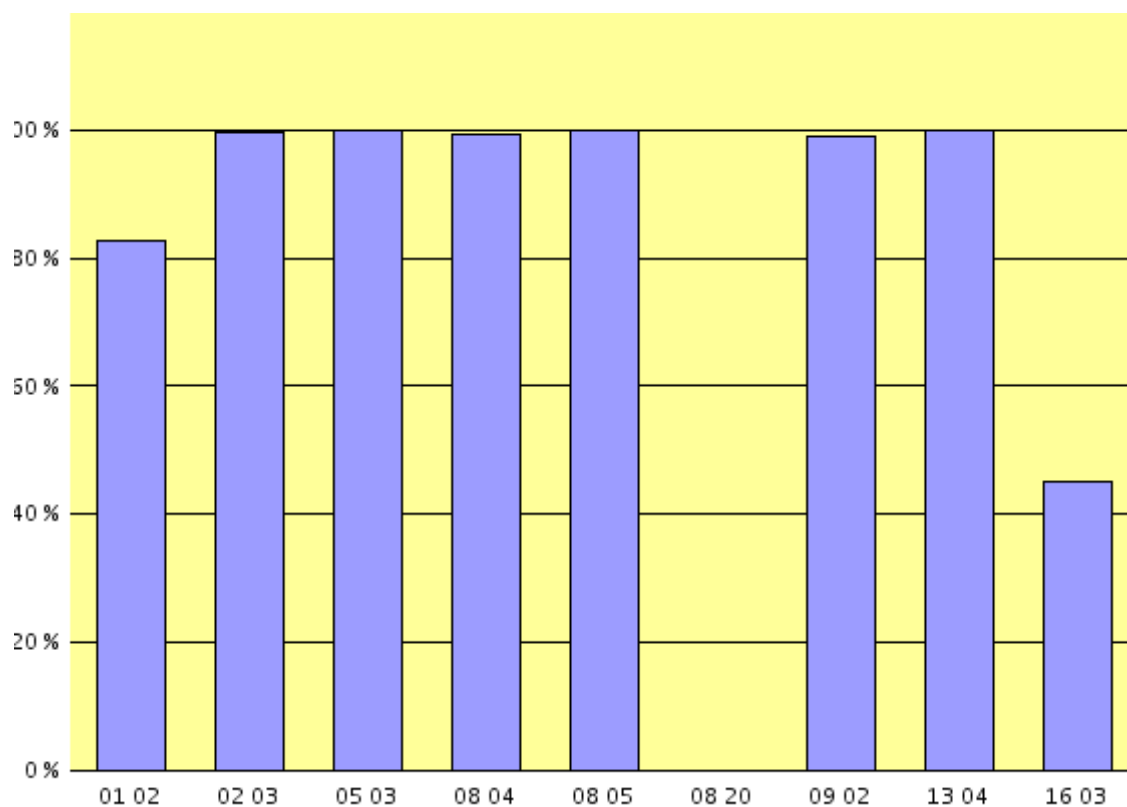


TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
01	01 02	Horizon Europe	1,490.36	138.21	1,352.15	90.73%	1,783.78	3,135.94	2,802.54
Total Title 01			1,490.36	138.21	1,352.15	90.73%	1,783.78	3,135.94	2,802.54
TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG INEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
02	02 03	Connecting Europe Facility (CEF)	2,550.59	2.20	2,548.39	99.91%	8,191.51	10,739.89	10,966.69
Total Title 02			2,550.59	2.20	2,548.39	99.91%	8,191.51	10,739.89	10,966.69
TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7

05	05 03	Cohesion Fund (CF)	1,492.33	0.00	1,492.33	100.00%	5,149.63	6,641.97	7,016.46
Total Title 05			1,492.33	0.00	1,492.33	100.00%	5,149.63	6,641.97	7,016.46
TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
08	08 04	European Maritime, Fisheries and Aquaculture Fund (EMFAF)	34.67	1.31	33.36	96.21%	71.16	104.51	116.71
	08 05	Sustainable Fisheries Partnership Agreements (SFPA) and Regional Fisheries Management Organisations (RFMO)	5.49	5.49	0.00	0.00%	0.00	0.00	0.00
	08 20	Pilot projects, preparatory actions, prerogatives and other actions	1.49	0.00	1.49	100.00%	0.00	1.49	0.00
Total Title 08			41.65	6.80	34.85	83.66%	71.16	106.00	116.71
TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									

			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
09	09 02	Programme for the Environment and Climate Action (LIFE)	633.82	7.09	626.74	98.88%	1,512.64	2,139.38	1,949.37
Total Title 09			633.82	7.09	626.74	98.88%	1,512.64	2,139.38	1,949.37

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
13	13 04	Military mobility	230.07	0.09	229.97	99.96%	112.78	342.75	225.40
Total Title 13			230.07	0.09	229.97	99.96%	112.78	342.75	225.40
TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
Chapter			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
16	16 03	Support innovation in low-carbon technologies and processes under the Emission Trading System (ETS)	2,843.62	2.30	2,841.32	99.92%	103.16	2,944.49	111.94
Total Title 16			2,843.62	2.30	2,841.32	99.92%	103.16	2,944.49	111.94
Total Excluding NGEU			9,282.45	156.69	9,125.75	98.31%	16,924.67	26,050.42	23,189.12

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for CINEA									
Chapter			Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021
			Commitments	Payments	RAL	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
01	01 02	Horizon Europe	440.11	228.93	211.18	47.98%	3.29	214.47	440.66
Total Title 01			440.11	228.93	211.18	47.98%	3.29	214.47	440.66
Total NGEU Only			440.11	228.93	211.18	47.98%	3.29	214.47	440.66
Total for CINEA			9,722.55	385.62	9,336.93	96.03 %	16,927.96	26,264.89	23,629.78

Breakdown of Commitments Remaining to be Settled (in Mio EUR) in 2022

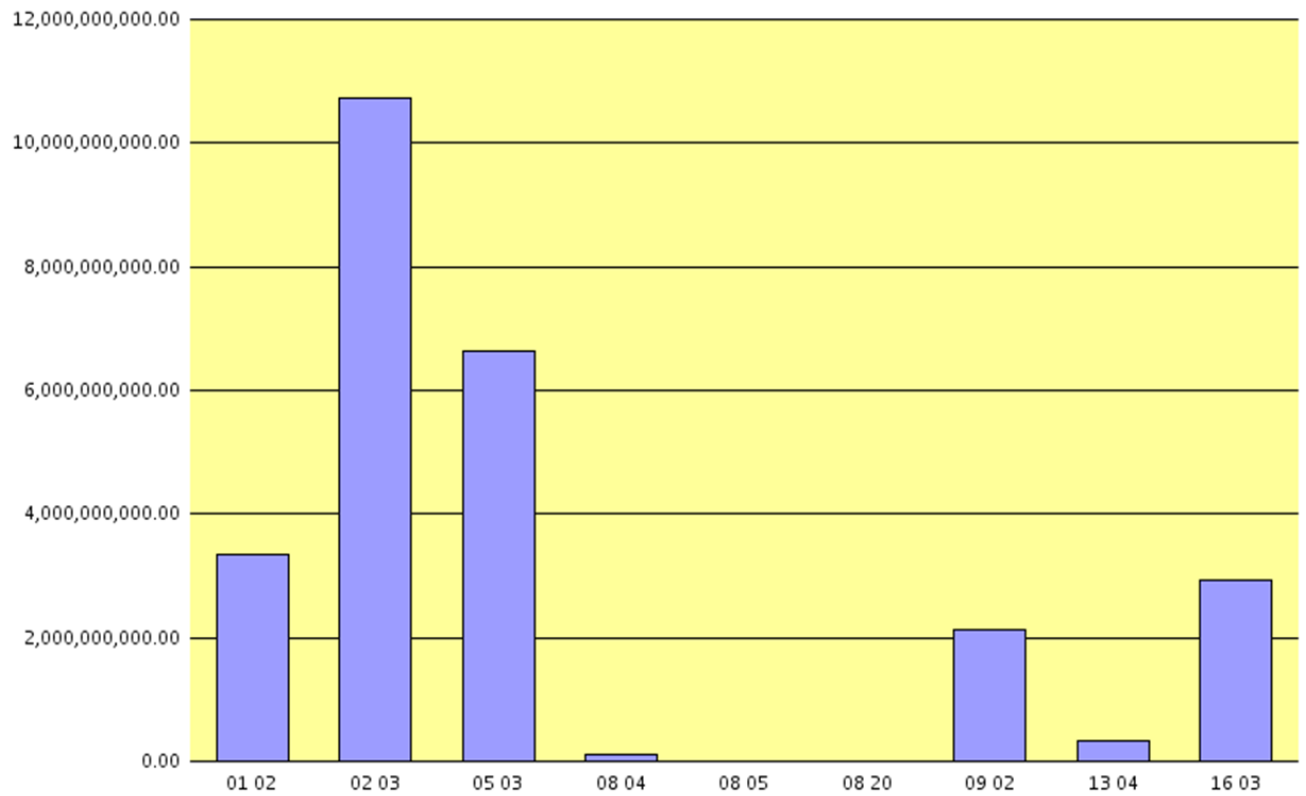


TABLE 4 : BALANCE SHEET for CINEA

BALANCE SHEET	2022	2021
A.I. NON CURRENT ASSETS	1,039,266,853.99	693,518,384.88
A.I.5. Non-Current Pre-Financing	1,039,266,853.99	693,518,384.88
A.II. CURRENT ASSETS	2,255,020,312.27	1,446,952,459.16
A.II.2. Current Pre-Financing	2,201,561,342.88	1,412,329,631.95
A.II.3. Curr Exch Receiv &Non-Ex Recoverables	53,458,969.39	34,622,827.21
ASSETS	3,294,287,166.26	2,140,470,844.04
P.III. NET ASSETS/LIABILITIES	0.00	0.00
P.III.1. Reserves	0.00	0.00
P.II. CURRENT LIABILITIES	-5,923,219,922.42	-4,620,770,420.41
P.II.4. Current Payables	-454,074,922.50	-222,214,992.83
P.II.5. Current Accrued Charges &Defrd Income	-5,469,144,999.92	-4,398,555,427.58
LIABILITIES	-5,923,219,922.42	-4,620,770,420.41
NET ASSETS (ASSETS less LIABILITIES)	-2,628,932,756.16	-2,480,299,576.37
Non-allocated central (surplus)/deficit*	-23,254,100,689.22	-17,952,162,776.09
P.III.2. Accumulated Surplus/Deficit	25,883,033,445.38	20,432,462,352.46
TOTAL CINEA	0.00	0.00

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

TABLE 5 : STATEMENT OF FINANCIAL PERFORMANCE for CINEA

STATEMENT OF FINANCIAL PERFORMANCE	2022	2021
II.1 REVENUES	-35,681,181.58	-10,349,343.97
II.1.1. NON-EXCHANGE REVENUES	-35,732,817.41	-10,557,164.33
II.1.1.6. RECOVERY OF EXPENSES	-35,732,817.41	-10,557,164.33
II.1.2. EXCHANGE REVENUES	51,635.83	207,820.36
II.1.2.2. OTHER EXCHANGE REVENUE	51,635.83	207,820.36
II.2. EXPENSES	6,944,381,713.27	5,460,920,436.89
II.2. EXPENSES	6,944,381,713.27	5,460,920,436.89
II.2.10. OTHER EXPENSES	2,695,057.08	1,006,510.49
II.2.2. EXP IMPLEM BY COMMISS&EX.AGENC	6,941,686,118.52	5,459,912,380.99
II.2.8. FINANCE COSTS	537.67	1,545.41
STATEMENT OF FINANCIAL PERFORMANCE	6,908,700,531.69	5,450,571,092.92

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

TABLE 5bis : OFF BALANCE SHEET for CINEA

OFF BALANCE	2022	2021
OB.1. Contingent Assets	148,127,099.90	72,816,369.84
GR for pre-financing	148,127,099.90	72,816,369.84
OB.3. Other Significant Disclosures	-22,152,851,650.76	-19,008,638,541.54
OB.3.2. Comm against app. not yet consumed	-20,341,671,336.17	-19,008,638,541.54
OB.3.3.6.TEN-T	-1,811,180,314.59	0.00
OB.4. Balancing Accounts	22,004,724,550.86	18,935,822,171.70
OB.4. Balancing Accounts	22,004,724,550.86	18,935,822,171.70
OFF BALANCE	0.00	0.00

It should be noted that the balance sheet and statement of financial performance presented in Annex 3 to this Annual Activity Report, represent only the assets, liabilities, expenses and revenues that are under the control of this Directorate General. Significant amounts such as own resource revenues and cash held in Commission bank accounts are not included in this Directorate General's accounts since they are managed centrally by DG Budget, on whose balance sheet and statement of financial performance they appear. Furthermore, since the accumulated result of the Commission is not split amongst the various Directorates General, it can be seen that the balance sheet presented here is not in equilibrium.

Additionally, the figures included in tables 4 and 5 are provisional since they are, at this date, still subject to audit by the Court of Auditors. It is thus possible that amounts included in these tables may have to be adjusted following this audit.

**TABLE 6: AVERAGE PAYMENT TIMES for
CINEA**

Legal Times									
Maximum Payment Time (Days)	Total Nbr of Payments	Nbr of Payments within Time Limit	Percentage	Average Payment Times (Days)	Nbr of Late Payments	Percentage	Average Payment Times (Days)	Late Payments Amount	Percentage
30	1,631	1,617	99.14 %	10.30	14	0.86 %	56.57	185,147.38	0 %
60	438	437	99.77 %	27.90	1	0.23 %	61.00	2,391,052.54	0 %
90	1,002	1,001	99.90 %	63.75	1	0.10 %	91.00	11,379,975.89	1 %

Total Number of Payments	3,071	3,055	99.48 %		16	0.52 %		13,956,175.81	0 %
Average Net Payment Time	30.48			30.33			59.00		
Average Gross Payment Time	44.35			44.25			63.25		

Suspensions							
Average Report Approval Suspension Days	Average Payment Suspension Days	Number of Suspended Payments	% of Total Number	Total Number of Payments	Amount of Suspended Payments	% of Total Amount	Total Paid Amount
0	43	1,002	32.63 %	3,071	2,216,304,617.58	33.21 %	6,672,982,165.42

Late Interest paid in 2022			
DG	GL Account	Description	Amount (Eur)
CINEA	65010100	Interest on late payment of charges New FR	537.67
			537.67

NB: Table 6 only contains payments relevant for the time statistics. Please consult its exact scope in the AAR Annex3 BO User Guide (https://myintracomm.ec.europa.eu/budgweb/EN/abac/dwh/Pages/its-030-10-20_documentation.aspx)

TABLE 7 : SITUATION ON REVENUE AND INCOME in 2022 for CINEA

Chapter		Revenue and income recognized			Revenue and income cashed from			Outstanding balance
		Current year RO	Carried over RO	Total	Current Year RO	Carried over RO	Total	
		1	2	3=1+2	4	5	6=4+5	
60	Single market, innovation and digital	32,730,339.77	2,802,460.06	35,532,799.83	30,472,922.41	1,450,332.71	31,923,255.12	3,609,544.71
61	Cohesion, resilience and values	710,716.45	0.00	710,716.45	20,980.98	0.00	20,980.98	689,735.47
62	Natural resources and environment	7,047,490.82	989,065.39	8,036,556.21	6,903,725.40	304,123.86	7,207,849.26	828,706.95
67	Completion for outstanding recovery orders prior to 2021	-2,099,639.58	32,470,685.95	30,371,046.37	-2,099,639.58	2,319,119.02	219,479.44	30,151,566.93
Total CINEA		38,388,907.46	36,262,211.40	74,651,118.86	35,297,989.21	4,073,575.59	39,371,564.80	35,279,554.06

TABLE 8 : FINANCIAL IMPACT OF EX-ANTE AND EX-POST CONTROLS in 2022 for DG INEA

EX-ANTE CONTROLS	Irregularity	OLAF notified	Total undue payments recovered
NON ELIGIBLE IN COST CLAIMS	84.628.249,01		84.628.249,01
CREDIT NOTES	305.950,00		305.950,00
RECOVERY ORDERS ON PRE-FINANCING	4.865.486,06		4.865.486,06
Sub-Total	89.799.685,07		89.799.685,07

EX-POST CONTROLS	Irregularity	OLAF notified	Total undue payments recovered
INCOME LINES IN INVOICES	2.699.972,56		2.699.972,56
RECOVERY ORDERS OTHER THAN ON PRE-FINANCING	5.825.279,61	57.025,72	5.882.305,33
Sub-Total	8.525.252,17	57.025,72	8.582.277,89
GRAND TOTAL (EX-ANTE + EX-POST)	98.324.937,24	57.025,72	98.381.962,96

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 12/31/2022 for CINEA

	Number at 1/1/2022 1	Number at 12/31/2022	Evolution	Open Amount (Eur) at 1/1/2022 1	Open Amount (Eur) at 12/31/2022	Evolution
2014	3	2	-33.33 %	112,841.17	47,303.74	-58.08 %
2015	5	3	-40.00 %	825,950.57	650,167.71	-21.28 %
2016	1		-100.00 %	45,713.70		-100.00 %
2017	3	2	-33.33 %	607,384.24	576,970.38	-5.01 %
2018	7	4	-42.86 %	2,976,288.20	2,098,640.07	-29.49 %
2019	5	4	-20.00 %	6,461,614.67	6,199,791.63	-4.05 %
2020	14	13	-7.14 %	21,550,493.40	20,578,693.40	-4.51 %
2021	35	7	-80.00 %	3,791,525.45	2,037,068.88	-46.27 %
2022		14			3,090,918.25	
	73	49	-32.88 %	36,371,811.40	35,279,554.06	-3.00 %

TABLE 10 :Recovery Order Waivers >= 60 000 € in 2022 for CINEA

Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments
3233220043	3241912250	-61,823.04	Private Companies		
3233220119	3241814211	-614,579.06	Private Companies		
3233220131	3241813682	-243,914.18	Private Companies		
3233220188	3241401570	-65,212.88	Private Companies		
3233220200	3241509774	-90,168.20	Private Companies		
3233220202	3241508770	-85,614.66	Private Companies		
3233220217	3242003157	-862,200.00	Private Companies		

Total DG INEA	-2,023,512.02
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Number of RO waivers	7
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There are 9 waivers below 60 000 € for a total amount of -85,181.56

Justifications:

W 1 (amount: € 61.823,04): Waiver of outstanding debt, following the bankruptcy of the Beneficiary and its consequent insolvency resulting in the impossibility of offsetting the debt

W 2 (amount: € 614.579,06): Waiver of outstanding debt, following the insolvency of the Sole Beneficiary and the absence of any amount due to the Beneficiary what would allow the offsetting of the debt.

W 3 (amount: €243.914,18): Waiver of outstanding debt, given the impossibility of having the claim against the Sole Beneficiary, admitted in the liquidation procedure, for being time-barred.

W 4 (amount: €65.212,88): Waiver of outstanding debt, following the bankruptcy of the Sole Beneficiary and the absence of a valid financial guarantee(the Guarantor of the Coordinator became bankrupted) resulting in the impossibility of offsetting the debt

W 5 (amount: €90.168,20): Waiver of outstanding debt, following the bankruptcy of the Coordinating Beneficiary, its consequent insolvency and the absence of a financial guarantee resulting in the impossibility of offsetting the debt

W 6 (amount: €86.614,66) :Waiver of outstanding debt, following the "non guilty" decision of the insolvency proceedings of the Coordinator. As there were no dividends and given that the Coordinator's administrators did not inter alia engage in any fraudulent negligent conduct that would have aggravated or led to the insolvency, with the consequence that no legal action can be filed against them.

W 7 (amount: €862.200,00): Waiver of outstanding debt, following the bankruptcy of the Beneficiary and its deletion from the national business register

**TABLE 11 : Negotiated Procedures in 2022
for CINEA**

Negotiated Procedure Legal base	Number of Procedures	Amount (€)
Total		

TABLE 12 : Summary of Procedures in 2022 for CINEA

Internal Procedures > € 60,000

Procedure Legal base	Number of Procedures	Amount (€)
Open procedure (FR 164 (1)(a))	16	88,240,206.50
Restricted procedure without Dynamic purchasing system (FR 164 (1)(b))	1	2,505,000.00
Total	17	90,745,206.50

TABLE 13 : BUILDING CONTRACTS in 2022 for CINEA

Legal Base	Procedure subject	Contract Number	Contractor Name	Contract Subject	Contracted Amount (€)

TABLE 14 : CONTRACTS DECLARED SECRET in 2022 for CINEA

Legal Base	LC Date	Contract Number	Contract Subject	Contracted Amount (€)

TABLE 15 : FPA duration exceeds 4 years - CINEA

One case concerning the Framework Partnership Agreement (FPA) for the Climate-Neutral and Smart Cities Mission Platform Scaling Netzerocities for which the duration of five years is clearly indicated in the Work Programme.

TABLE 16 : Commitments co-delegation type 3 in 2022 for CINEA

ANNEX 4: Financial scorecard

Operational Budget

The Annex 4 of each Commission service summarises the annual result of the standard financial indicators measurement. Annexed to the Annual Activity Report 2022, 10 standard financial indicators are presented below, each with its objective and result for the Commission service and for the EC as a whole (for benchmarking purposes):

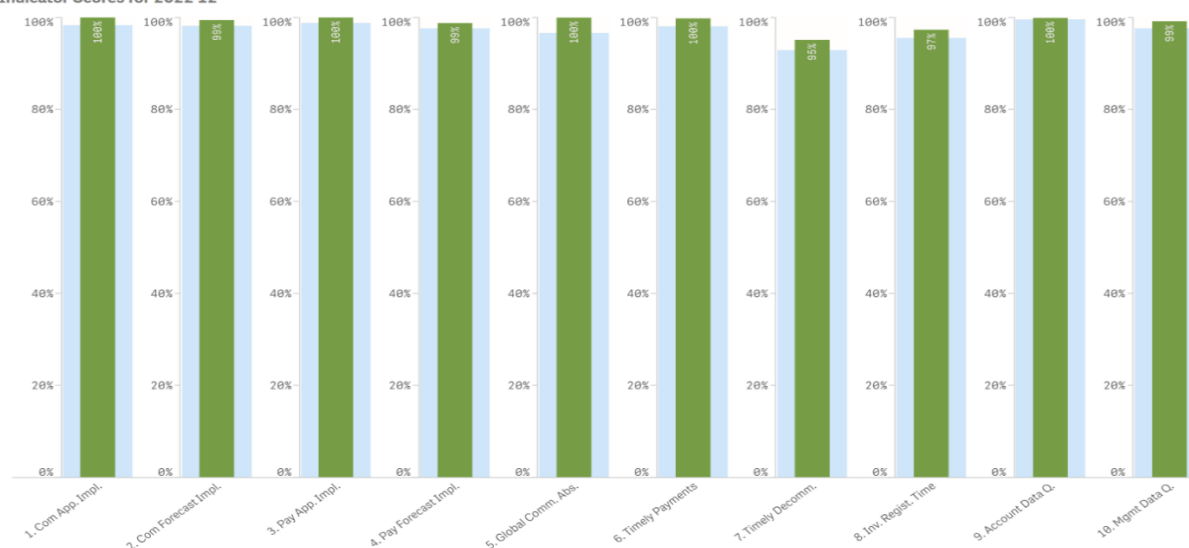
- Commitment Appropriations (CA) Implementation
- CA Forecast Implementation
- Payment Appropriations (PA) Implementation
- PA Forecast Implementation
- Global Commitment Absorption
- Timely Payments
- Timely Decommits
- Invoice Registration Time
- Accounting Data Quality
- Management Data Quality

For each indicator, its value (in %) for the Commission service is compared to the common target (in %). The difference between the indicator's value and the target is colour coded as follows:

- 100 – >95% of the target: dark green
- 95 – >90% of the target: light green
- 90 – >85% of the target: yellow
- 85 – >80% of the target: light red
- 80 – 0% of the target: dark red

The Commission services are invited to provide commentary for each indicator's result in the dedicated comment section below the indicators scores as this can help the reader to understand the Commission's service context. In cases when the indicator's value achieves 80% or less of the target, the comment becomes mandatory.

INEA Indicator Scores for 2022 12



For each indicator the light blue bar denotes the EC Score.

Indicator	Objective	Comment	CINEA Score	EC Score
1. Commitment Appropriations Implementation	Ensure efficient use of commitment appropriations expiring at the end of Financial Year		100%	98%
2. Commitment Forecast Implementation	Ensure the cumulative alignment of the commitment implementation with the commitment forecast in a financial year		99%	98%
3. Payment Appropriations Implementation	Ensure efficient use of payment appropriations expiring at the end of Financial Year		100%	99%
4. Payment Forecast Implementation	Ensure the cumulative alignment of the payment implementation with the payment forecast in a financial year		99%	98%
5. Global Commitment Absorption ⁸	Ensure efficient use of already earmarked commitment appropriations (at L1 level)		100%	97%
6. Timely Payments	Ensure efficient processing of payments within the legal deadlines	CINEA managed to pay on time 100% of its operational appropriations, which is higher than the EC average, demonstrating effective deadline monitoring and processing of payments.	100%	98%
7. Timely Decommittments	Ensure efficient decommitment of outstanding RAL at the end of commitment life cycle		95%	93%
8. Invoice	Monitor the accounting		97%	95%

(⁸) Due to technical limitation: 1. the indicator does not take into account the Com L1 Consumption between the FDC ILC date and the FA FDI allowed as an exception in the external actions for Com L1 of type GF, i.e. with Financing Agreement, under the FR2018 Article 114.2. 2. It is technically not possible to exclude the decommitment of RAL (C8) which is subsequently re-committed for a new purpose. As a result, the actual Indicator score may be slightly higher than the one reported for DGs using the GF commitments.

Registration Time	risk stemming from late registration of invoices in the central accounting system ABAC			
9. Accounting Data Quality	Ensure the good data quality of ABAC transactions with the focus on fields having a primary impact on the accounts		100%	100%
10. Management Data Quality	Ensure the good data quality of ABAC transactions with the focus on fields having a primary impact on the management decisions		99%	98%

ANNEX 5: Materiality criteria

As the implementation cycle for the programmes for the period 2021-2027 was in their early phase in 2022, with no interim or final payments subject to ex-post control, this annex concentrates on the materiality criteria and audit methodology for the legacy programmes, as explained below. To be noted that the Innovation Fund is not subject to ex post controls (lump sums). For CEF, LIFE and EMFF programmes, the Agency's quantitative materiality threshold is set at a residual error rate of 2%, in application of the Commission's standard practice. In qualitative terms, the following factors are considered: nature and scope of any significant weaknesses, duration, compensatory measures such as mitigating controls, and existence of corrective actions to correct any significant weaknesses.

In view of the multi-annual nature of these programmes, CINEA has developed multi-annual ex post audit strategies with the residual error rates calculated on a multi-annual basis.

The criteria for making a decision on whether there is material error in the expenditure of the Agency, and so on whether to make a reservation in the AAR, will be principally, though not exclusively, based on the level of residual error identified in ex post audits of CEF, LIFE and EMFF financial statements on a multi-annual basis.

Finally, as from 2019 ⁽⁹⁾, a 'de minimis' threshold for financial reservations has been introduced. Quantified AAR reservations related to residual error rates above the 2% materiality threshold are deemed not substantial for segments representing less than 5% of a DG/Agency's total payments and with a financial impact below EUR 5 million. In such cases, quantified reservations are no longer needed.

CEF Audit Methodology

The ex post controls (audits) are carried out on the declared costs to the Agency and consist of verifying the legality and regularity of the underlying transactions and consequently the final eligible EU contribution.

The approach for the CINEA ex post audit strategy is to treat each CEF sector as a separate population.

The audit sampling is non-representative as the sample size would exceed the available auditing capacity. Instead the CINEA ex post control strategy aims to audit specific financial

⁽⁹⁾ Agreement of the Corporate Management Board of 30/04/2019.

coverage targets for each CEF sector (% coverage of processed interim and final financial statements).

The targeted financial coverage, whilst not statistically representative, provides sufficient coverage of projects in financial and geographical terms and also in the blend of beneficiaries in order for CINEA to draw conclusions from the results obtained. The selection of audits is made with a mixture non-representative interval sampling and judgmental risk based sampling in order to reach a 15% target of financial coverage of the authorised interim and final payments of N-1 at CEF sector level.

Non representative Interval sample (first layer)

The non-representative Interval sample, as the first sample layer, delivers the detected error rate (DER). The DER, expressed as a percentage, is the ratio of the total amount unduly paid to the total EU contribution paid and audited.

For CEF, the DER is based solely on the audits selected using interval sampling and calculated by dividing the sum of all adjustments of the EU contribution for the financial statement audited, by the total value of EU contribution audited (i.e. the amount of contribution sampled during audits).

Judgemental selection (second layer)

Judgemental risk based sampling considers several factors relevant for the overall population for each CEF sector in order to provide additional elements of assurance. Its aim is to target the portions of the budget where corrections to the errors detected can be most effective.

Identifying areas with specific inherent or identified risks implies targeting areas for which error rates are expected to be higher than the DER from the non-representative interval sample. For this reason, audit results of judgemental samples are not used to calculate the detected error rate.

EMFF Audit Methodology

The sampling approach and audit methodology applied by CINEA for EMFF are the same as for CEF described in detail above.

LIFE Audit Methodology

The ex post controls (audits) are carried out on the declared costs to the Agency on interim and final financial statements. They consist of verifying the legality and regularity of the underlying transactions.

Non-representative Value based sample (first layer)

The audit sampling is non-representative as the sample size would exceed the available auditing capacity. The CINEA strategy aims to audit specific financial coverage targets for LIFE (15% coverage of processed interim and final financial statements).

The CINEA value based sample method ranks and selects the highest approved EU contribution per year on annual basis at coordinator level. In 2021 and 2022 the target was for 20 value based audits. Historically, LIFE audits have covered the entire consortium, at the premises of the coordinator. However in 2021, due to the large size of some consortia, CINEA decided that only part of the consortium may be audited.

This maintains the value based nature of the sample, while maximising the cost / benefit of the audit.

The two cumulative criteria applied by CINEA for the selection of the beneficiaries to be audited per selected transaction are: audits of a maximum five beneficiaries selected per consortium with an accepted individual EU contribution exceeding € 80, 000.

The targeted financial coverage, whilst not statistically representative, provides sufficient coverage of projects in financial and geographical terms and also in the blend of beneficiaries in order for CINEA to draw conclusions from the results obtained. The selection of audits is made with a mixture non-representative value based and judgmental risk based sampling in order to reach a 15% target of financial coverage of the authorised interim and final payments of N-1.

Judgemental selection (second layer)

In addition to the value based audits sampled, as described above risk-based audits are performed. These audits address specific concerns, risks or issues, detected and highlighted by operational services. Due to their specific nature, error rates of these 'risk-based' audits are not included in the detected error rate calculation.

Approach to calculation/determination of error rates/ financial corrections (CEF, EMFF and LIFE)

Detected Error

In the performance of an audit, the sampling approach (targeted minimum financial coverage of 50%) is to ascertain the risk of material error in the financial statement of the beneficiary. If errors are detected they are corrected.

The risk of the error being present in the non-audited declared costs is also considered. This requires an analysis of the nature of the error detected. If the error is considered potentially more widespread, the sample is extended in order to rule out the risk of further errors. The systematic nature of the error is also communicated to the CINEA AOSD's for follow up as regards non-audited projects, managed by CINEA, with the same beneficiary.

The detected error (in EUR) is calculated in terms of the impact on the audited accepted EU contribution. In some cases a detected error at cost level has no impact on the EU contribution due to costs declared being over and above the maximum EU contribution.

When errors affecting the EU contribution are identified, the ineligible amounts are notified to the AOSD for implementation of any required financial recovery or offsetting (against a following interim or final payment).

Residual Error

Residual error rates are calculated on a multi-annual basis to reflect the multi-annual nature of the CEF, LIFE and EMFF programmes and projects. The results of ex post controls carried out by the Agency from interval sampling/ value based audits (Layer 1) are calculated over the programme's lifetime to provide the multi-annual detected error rate. The detected error rate is extrapolated to the non-audited EU contribution paid to beneficiaries. The calculation also takes into account the 'cleaning' effect of the ex post controls by integrating the financial impact of the follow-up of all ex post controls performed – which correct the majority of detected errors. This provides the residual error.

Due to its multi-annual nature, the effectiveness of the ex post control strategy for all programmes managed by CINEA can only be measured and assessed at the final stages in the lifecycle of each sector and once it has been fully implemented. Notwithstanding the multiannual span of the ex post control strategy, the Director of CINEA is required to sign a declaration of assurance for each financial year. In order to determine whether or not to qualify this declaration of assurance with a reservation, the effectiveness of the control systems in place needs to be assessed not only for the year of reference but also with a

multiannual perspective, to determine whether it is possible to reasonably conclude that the control objectives will be met in the future as foreseen.

Although not derived by statistical parameters which can be extrapolated to the unaudited payment population with statistical confidence, the detected and residual error rates obtained from the ex post audits are a key building block in the assurance building process and provide the best available indicator of the level of error at sector level for CEF and at programme level for LIFE and EMFF in the unaudited population.

Horizon 2020

For H2020, ex-post controls are under the responsibility of the Common Audit Service (CAS). The CAS undertakes all (representative and complementary) Horizon 2020 audits, for all Horizon 2020 stakeholders, including CINEA, ensuring a harmonised approach and also that audit burden on beneficiaries is minimised.

Assessment of the effectiveness of controls

The assessment of the effectiveness of the different programmes' control system is based mainly, but not exclusively, on ex-post audits' results. The effectiveness is expressed in terms of detected and residual error rate, calculated on a representative sample on a multi-annual basis.

The starting point to determine the effectiveness of the controls in place is the cumulative level of error expressed as the percentage of errors in favour of the EC budget, detected by ex-post audits, measured with respect to the amounts accepted after ex-ante controls.

However, to take into account the impact of the ex-post controls, this error level is adjusted by subtracting:

- Errors detected and corrected as a result of the implementation of audit conclusions.
- Errors corrected as a result of the extension of audit results to non-audited contracts with the same beneficiary.

This results in a residual error rate, which is calculated as follows:

$$\text{Re sER}\% = \frac{(\text{Re pER}\% * (P - A)) - (\text{Re pERsys}\% * E)}{P}$$

where:

ResER% residual error rate, expressed as a percentage.

RepER%	representative error rate, or error rate detected in the common representative sample, expressed as a percentage. The RepER% is composed of complementary portions reflecting the proportion of negative systemic and non-systemic errors detected. This rate is the same for all implementing entities, without prejudice to possibly individual detected error rates.
RepERsys%	portion of the RepER% representing negative systemic errors, (expressed as a percentage). The RepERsys% is the same for all entities and it is calculated from the same set of results as the RepER%
P	total requested EC contribution (€) in the auditable population (i.e. all paid financial statements).
A	total requested EC contribution (€) as approved by financial officers of all audited financial statements. This will be collected from audit results.
E	total non-audited requested EC contribution (€) of all audited beneficiaries.

The Common Representative Sample (CRS) is the starting point for the calculation of the residual error rate. It is representative of the expenditure of each Framework Programme as a whole. Nevertheless, the Director of CINEA must also take into account other information when considering if the overall residual error rate is a sufficient basis on which to draw a conclusion on assurance (or make a reservation) for specific segment(s) of the Horizon 2020. This information may include the results of other ex-post audits, ex-ante controls, risk assessments, audit reports from external or internal auditors, etc. All this information may be used in assessing the overall impact of a weakness and considering whether to make a reservation or not.

If the CRS results are not used as the basis for calculating the residual error rate this must be clearly disclosed in the AAR, along with details of why and how the final judgement was made.

Should a calculation of the residual error rate based on a representative sample not be possible for a Framework Programme for reasons not involving control deficiencies,¹⁰ the consequences are to be assessed quantitatively by making a best estimate of the likely

¹⁰ Such as, for instance, when the number of results from a statistically-representative sample collected at a given point in time is not sufficient to calculate a reliable error rate.

exposure for the reporting year based on all available information. The relative impact on the Declaration of Assurance would then be considered by analysing the available information on qualitative grounds and considering evidence from other sources and areas. This should be clearly explained in the AAR.

Multiannual approach

The Commission's central services' guidance relating to the quantitative materiality threshold refers to a percentage of the authorised payments of the reporting year of the Activity Based Budgeting (ABB) expenditure. However, the Guidance on AARs also allows a multi-annual approach, especially for budget areas (e.g. programmes) for which a multi-annual control system is more effective. In such cases, the calculation of errors, corrections and materiality of the residual amount at risk should be done on a "cumulative basis" on the basis of the totals over the entire programme lifecycle.

Because of its multiannual nature, the effectiveness of the Research and Innovation family services' control strategy can only be fully measured and assessed at the final stages in the life of the framework programme, once the ex-post audit strategy has been fully implemented and systemic errors have been detected and corrected.

In addition, basing materiality solely on ABB expenditure for one year may not provide the most appropriate basis for judgements, as ABB expenditure often includes significant levels of pre-financing expenditure (e.g. due and of joining the initial years of a new generation of programmes), as well as reimbursements (interim and final payments) based on cost claims that 'clear' those pre-financings. Pre-financing expenditure is very low risk, being paid automatically after the signature of the contract.

Notwithstanding the multiannual span of their control strategy, the Director s-General (and the Directors of the Executive Agencies and Joint Undertakings) implementing Research and Innovation Framework Programmes are required to sign a statement of assurance for each financial reporting year. In order to determine whether to qualify this statement of assurance with a reservation, the effectiveness of the control systems in place needs to be assessed not only for the year of reference but also with a multiannual perspective, to determine whether it is possible to reasonably conclude that the control objectives will be met in the future as foreseen.

In view of the crucial role of ex-post audits defined in the respective common audit strategies, this assessment needs to check in particular whether the scope and results of the ex-post audits carried out until the end of the reporting period are sufficient and adequate to meet the multiannual control strategy goals.

The criteria for making a decision on whether there is material error in the expenditure of the DG or service, and thus, on whether to make a reservation in the AAR, will therefore be

principally, though not necessarily exclusively, based on the level of error identified in ex-post audits of cost claims on a multi-annual basis.

Adequacy of the audit scope

The quantity of the (cumulative) audit effort carried out until the end of each year is measured by the actual volume of audits completed. The data is to be shown per year and cumulated, in line with the current AAR presentation of error rates. The multiannual planning and results should be reported in sufficient detail to allow the reader to form an opinion on whether the strategy is on course as foreseen.

The Director of CINEA should form a qualitative opinion to determine whether deviations from the multiannual plan are of such significance that they seriously endanger the achievement of the internal control objective. In such a case, they would be expected to qualify their annual statement of assurance with a reservation.

2020 REVISED Methodology for the calculation of the error rate for Horizon 2020

European Court of Auditors observations

The European Court of Auditors observed in its 2018 and 2019 Annual Reports that the error rate of Horizon 2020 was understated due to the fact that the *“ex-post audits aim for maximum coverage of the accepted costs, but rarely cover all the costs. The error rate is calculated as a share of all the accepted costs, instead of the amount actually audited. This means that the denominator in the error calculation is higher, so the error rate is understated. In case the errors found are of a systemic nature, the error is extrapolated which partially compensates for the above-mentioned understatement. However, since extrapolation is not performed for non-systemic errors, the overall error rate is nevertheless understated. The understatement of the error rate cannot be quantified. It is, then, impossible to determine whether the impact of this understatement is significant”*.

In response to this observation, in 2020 the Commission re-defined its methodology for calculating the Horizon 2020 error rate. In order to quantify any potential understatement mentioned by the Court, the Commission applied a new methodology for all audits closed as from 01 January 2020. The main change in the methodology is that the denominator used in the error calculation is the sum of costs actually audited and not the sum of all accepted costs.

In this respect, an additional 0.38 % (calculated on 1 937 H2020 audit participations by difference with the previous methodology) has been used to top up the cumulative detected error rate for 2022.

IAS limited review on the 2020 error rate calculation for H2020

The IAS has carried out a limited review on the methodology for calculation of the error rates of Horizon 2020 in the year 2020. The findings of this limited review confirmed that there is no weakness in the calculation of the detected error rate and that the impact of these findings on the accuracy of the calculation of the residual error rate is minor. The IAS recommended that:

1. The CIC should:

1.1. Calculate the corporate H2020 residual error rate based on the actual level of implementation of audit results and extension of audit findings stemming from data encoded by the Authorising Officers;

1.2. Considering that there is no data on the sampled amounts for audits closed before 2020, estimate the amount actually audited by calculating the ratio of costs actually audited to the total amount of the related accepted cost claims for all the audits closed since 1 January 2020 ('A' parameter in the formula for calculating the residual error rate) and adapt parameter 'E' accordingly;

1.3. Formalise the changes in the residual error rate calculation (e.g. in a written CAS procedure).

2. The CAS should:

2.1. Change the audit report template to include a line in the table of Annex 1 with the audited amounts (sampled);

2.2. Include fields in AUDEX to encode the audited amounts per participation and cost category and any other IT tool used to register the ex post audits' data which feed the Microsoft Access database for the calculation of the representative detected error rate;

2.3. Calculate the top-up automatically in the Microsoft Access database. For Horizon Europe, the calculation will be in line with the new methodology and no top up calculation will be required.

The recommendations 1.1 to 2.2 above are fully implemented. The recommendation 2.3 which refers to Horizon Europe and will be completed once the audit campaign for Horizon Europe start. Nevertheless, the new methodology, without the need for a top up calculation, is already being implemented for H2020 audits.

Research Framework programmes – specific aspects

The control system of each framework programme is designed to achieve the operational and financial control objectives set in their respective legislative base and legal framework. If the effectiveness of those control systems does not reach the expected level, a reservation must be issued in the annual activity report and corrective measures should be taken.

As each programme has a different control system, the following section details the considerations leading to the establishment of their respective materiality threshold and the conclusions to draw with regard to the declaration of assurance.

Horizon 2020 Framework Programme

The control system established for Horizon 2020 is designed to achieve a control result in a range of 2-5% detected error rate, which should be as close as possible to 2%, after corrections. Consequently, this range has been considered in the legislation as the control objective set for the framework programme.

This is based on the provision of the Commission's proposal for the Regulation establishing the Horizon 2020 Framework Programme ⁽¹¹⁾ states that:

It remains the ultimate objective of the Commission to achieve a residual error rate of less than 2% of total expenditure over the lifetime of the programme, and to that end, it has introduced a number of simplification measures. However, other objectives such as the attractiveness and the success of the EU research policy, international competitiveness, scientific excellence and in particular, the costs of controls need to be considered.

Taking these elements in balance, it is proposed that the Directorates General charged with the implementation of the research and innovation budget will establish a cost-effective internal control system that will give reasonable assurance that the risk of error over the course of the multiannual expenditure period is, on an annual basis, within a range of 2-5 %, with the ultimate aim to achieve a residual level of error as close as possible to 2 % at the closure of the multi-annual programmes, once the financial impact of all audits, correction and recovery measures have been taken into account.

Horizon 2020 introduces a significant number of important simplification measures that will lower the error rate in all the categories of error. However, [...] the continuation of a funding model based on the reimbursement of actual costs is the favoured option. A systematic resort to output based funding, flat rates or lump sums appears premature at this stage [...]. Retaining a system based on the reimbursement of actual costs does however mean that errors will continue to occur.

¹¹ COM(2011) 809/3 Proposal for a Regulation of the European Parliament and of the Council establishing Horizon 2020 – the Framework programme for Research and Innovation (2014-2020), see point 2.2, pp 98-102.

The Commission considers therefore that, for research spending under Horizon 2020, a risk of error, on an annual basis, within a range between 2-5 % is a realistic objective taking into account the costs of controls, the simplification measures proposed to reduce the complexity of rules and the related inherent risk associated to the reimbursement of costs of the research project. The ultimate aim for the residual level of error at the closure of the programmes after the financial impact of all audits, correction and recovery measures will have been taken into account is to achieve a level as close as possible to 2 %.

Horizon Europe Framework Programme

For Horizon Europe Framework Programme¹², the general control objective, following the standard quantitative materiality threshold proposed in the standing instructions for Annual Activity Reports, is to ensure that the cumulative residual error rate, i.e. the level of errors which remain undetected and uncorrected, does not exceed 2% (¹³).

(¹²) Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe

(¹³) No representative error rate for Horizon Europe will be available in 2022 and 2023 as the ex-post audit campaign for the programme is planned to be launched by the end of 2023, at the earliest.

ANNEX 6: Relevant Control System(s) for budget implementation (RCSs)

Grants direct management (applicable to all programmes managed by the Agency)

Stage 1: Programming, evaluation and selection of proposals

Main internal control objective: Ensuring that projects meeting the policy objectives are among the proposals submitted (compliance; prevention of fraud)

Specific internal control objective A: Contributing to the (annual) work programmes under the programmes delegated to the Agency, including the preparation, adoption and publication of calls for proposals

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - Work programmes and the subsequent calls for proposals do not adequately reflect the policy objectives/ priorities; - Topics/ activities are incoherent; - Essential eligibility, selection and award criteria are not adequate to ensure effective, efficient and economic evaluations of the proposals.	The mitigating controls for these risks are mostly the ownership of the parent DGs. This said, in line with CINEA's mandate: - CINEA provides its contribution to the content of the work programmes, which are adopted by the Commission (as per the MoUs and agreed working arrangements) in line with the policy objectives and priorities. - While doing so, the Agency builds on its knowhow from managing the projects, to benefit the coherency of the topics. - The Agency prepares, adopts and publishes the calls, while ensuring that the work programmes are translated into eligibility, selection and	<u>Coverage/Frequency:</u> 100% of work programmes 100% of calls <u>Depth:</u> Work Programme contributions and call preparation, adoption and publication are thoroughly reviewed at all levels, including for operational and legal aspects. Under Horizon, all business processes follow a governance system under the due	<u>Effectiveness:</u> The work programmes are adopted by the Commission. Success rates in terms of "over-subscription": number of proposals retained for funding compared to number of eligible proposals received. Benefits (requested funding from proposals rejected by experts) outweigh the estimated costs of stage 1. Qualitative benefits: optimised procedures, common approach on

	award criteria that are adequate to ensure effective, efficient and economic evaluations of the proposals. Controls are implemented in collaboration with the relevant services, and foresee appropriate hierarchical validation (including consultation of parent DG). Under Horizon Europe, the work programmes proposed by the Directors' Groups according to the Commission decision C(2021)4472 are co-created with the work of the various entities and with the processes established in this decision. In particular, the Common Implementation Centre (CIC) in DG Research and Innovation provides all DGs involved in the implementation of Horizon 2020 and Horizon Europe research with harmonised procedures, guidance and IT tools. The Common Policy Centre (CPC) in DG Research and Innovation under Horizon Europe centralises the budget planning and the monitoring of the Horizon Europe and Horizon 2020's budget implementation. The CIC/CPC governance structure ensures that programme implementation experience gathered feeds back to the programme design.	supervision of instances like the Steering Board, the Executive Committee, the Directors Groups and key user groups.	multiple issues (audits, fraud, legal aspects, reporting...); better reporting on the whole programme – better management of the programme ⁽¹⁴⁾. <u>Efficiency:</u> Estimation of cost of staff involved in the preparation and validation of the contribution to the Work Programme and preparation, adoption and publication of Calls for Proposals / Value of Contracted Grants (%). <u>Economy:</u> A good work programme and well-publicised calls should generate a large number of good quality proposals, from which only the best ones, meeting the policy objectives, are selected. This results in a real competition for funds.
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⁽¹⁴⁾ The mutualisation of the support services represents a quantitative benefit which is certain but not accurately quantifiable in the context of reorganisations, new programme's setting up, general HR offsetting through the Commission

Specific internal control objective B: Contributing to evaluation and award procedures

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that the evaluation and selection of proposals: - Do not comply with the established procedures or time limits; - Fail to consider the essential admissibility and eligibility requirements; - Are not in line with the exclusion and selection criteria defined in the corresponding work programme(s); - Do not respond to the policy objectives/ priorities as per the award criteria; - Is affected by conflict of interest regarding the expert evaluators; - Results in a complaint requesting an evaluation review.	Detailed guidance and procedures are in place to address this objective (eGrants vademecum, LIFE wiki and CINEA's Manual of Procedures) and are adhered to at all times. This includes thorough admissibility and eligibility checks on proposals as well as checks on exclusion criteria based on guidelines developed internally. With regards to award criteria, CINEA selects and appoints qualified independent expert evaluators, in consultation with the parent DGs. For such, the Agency has developed: - Guidance on selection of experts; - Pool approval workflow for experts; - Contracting workflow for experts; - Guidelines for the reimbursement of external experts; - Conflict of Interest management procedures. Besides, CINEA also ensures appropriate briefing of experts, including on the evaluation of cost estimations in lump sum proposals. Additionally, CINEA makes use of independent external observer(s). For such, the Agency has developed: guidelines for independent observers. Finally, a comprehensive IT system supporting the evaluation of proposals and allowing better monitoring of the process is in place.	<u>Coverage/Frequency:</u> 100% of experts 100% of calls including proposals evaluated 100% of ranked list of proposals (if applicable) 100% of contested decisions are analysed by redress committee (if applicable) <u>Depth:</u> - Checks on proposals are documented and validated at adequate level. - Technical expertise and independence is checked at different levels and different stages (e.g. Col, nationality bias, ex-employer bias). - Continuous supervision of evaluation process and the work of experts, notably with the input of the independent observer.	<u>Effectiveness:</u> Number of proposals evaluated Average time to inform. Benefits (requested funding from proposals rejected by experts) outweigh the estimated costs of stage 1. <u>Efficiency:</u> Estimation of cost of all staff and other expenses (external experts, observers and logistics) involved in the evaluation and selection of proposals process / Value of Contracted Grants (%). If applicable: % of number of (successful) redress challenges upheld / total number of proposals evaluated <u>Economy:</u> The evaluation of proposals is objective and performed based on high independent technical expertise. Transparency, independence and objectivity of the evaluation process attested by independent observer(s). Policy objectives of the relevant programmes can be achieved in the

	Generally, fraud risk and legal checks are incorporated into the procedures or on ad hoc basis in case of doubt. If applicable, validation by the AOSD of ranked list of proposals. In addition: opinion of advisory bodies; comitology; inter-service consultation and adoption by the Commission; publication If applicable, redress procedure is triggered..		most economical way by selecting the best proposals, resulting in a real competition for funds.
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Stage 2: Grant agreement preparation (GAP)

Main internal control objectives: Ensuring that the actions and fund allocation is optimal (best value for public money; effectiveness; economy, efficiency; compliance; prevention of fraud)

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - The budget foreseen in the proposal overestimates the costs necessary to carry out the action; - The beneficiary lacks operational and/or financial capacity to carry out the actions; - A potential fraudulent proposal/ beneficiary has not been duly detected prior to the selection; - Procedures do not comply with	When applicable, the grant agreement preparation takes into consideration the recommendations/ observations of budgetary nature made by the evaluation panel. Furthermore, procedures and detailed guidance are in place to address this objective (eGrants vademecum, LIFE wiki and CINEA's Manual of Procedures) and are adhered to at all times. This includes: Procedures and guidelines for the validation of beneficiaries (operational and financial capacity) including ad hoc checks for high risk beneficiaries;	<u>Coverage/ Frequency:</u> 100% of selected proposals 100% of draft grant agreements 100% of calls <u>Depth:</u> May be differentiated and determined after considering the programme, the type or nature of the beneficiary (e.g. SME, Joint-ventures) and/or of the modality (e.g. substantial subcontracting or procurement-and/or the total value of the grant).	<u>Effectiveness:</u> Number of grants signed Average time to grant (FR 128.2); % of time to grant on time <u>Efficiency:</u> Estimated cost of staff involved in stage 2 / value of contracted grants (%) <u>Economy:</u> This stage should lead to a higher assurance on the achievement

regulatory framework; Grant Agreement is signed with a delay. Where applicable, the project implementation might not comply with Ethics requirements Where applicable, sensitive/classified information in future deliverables of a selected projects might not be handled with the adequate security measures	- Check of the Early Detection and Exclusion System (EDES) for all beneficiaries; - The use of corporate model grant agreement; - Guides for the preparation of grant agreement, including checklists and templates; - Quick guide on the examination of the CEF Grant Agreements; - Guidelines for the management of financial guarantees; - Risk assessment and risk based checks before the grant agreement signature and reinforced monitoring flagging if necessary; - If applicable, ad hoc anti-fraud checks for riskier beneficiaries; - Mutual Insurance Mechanism (MIM) (ex Horizon 2020 Participants Guarantee Fund (PGF)); - Double funding and plagiarism checks; - Monitoring and reporting of the time to grant indicator. Finally, the signature of the GA is done by the Authorising Officer. An ethics review is carried out systematically in all Horizon calls, starting with an ethics pre-screening, which results in detailed screening or assessment if necessary When applicable, ad hoc security checks and screenings Security review is carried out systematically in all Horizon calls, starting with pre-screening, which may result in detailed security scrutiny.	Controls implemented when justified by the call/ proposal content	of the projects and contribution to policy objectives. Economy can also be quantified by justified reduction of EU contribution during GA preparation.
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Stage 3: Monitoring the execution

Main control objectives: Ensuring that the operational results (deliverables) from the selected projects are of good value and meet the objectives and conditions (effectiveness & efficiency); ensuring that underlying transactions comply with regulatory and contractual provisions (legality & regularity); prevention of fraud (anti-fraud strategy) ensuring appropriate accounting of the operations (reliability of reporting, safeguarding of assets and information)

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: • Ineligible costs are reimbursed; • Irregularities or fraud are not detected; • Evidence of achievements is insufficient; • Paid amounts are wrong due to incorrect processing; • Activities performed deviate from the grant agreement; • Underperformance and lost opportunities as corrective actions are detected late; • There is a lack of harmonised approach with the consequence of unequal treatment of the beneficiaries; • Ethics requirements are not fulfilled, if applicable; • Late payments.	Procedures, detailed guidance as well as templates and checklists are in place to address this objective (Gofund, LIFE wiki and CINEA's Manual of Procedures) and are adhered to at all times. This includes, among other elements: • Quick Guides for kick-off meetings, missions and final meeting (communication with beneficiaries as a preventive/ control measure); • CEF Guidelines on the processing of ASR Instalments + further pre-financing payment flowchart; • Guidelines on the eligibility of costs under CEF. • Guidance on amendment of grant agreements (including checklists and templates); • Ex-ante control Guidelines; • Quick guide to analysing procurement procedures and checklist; • Guidance and templates for suspension & Termination of Grant agreement; • Guidance on reduction of the Grant amount for poor, partial or late implementation - technical degree of completion – budget transfers; • Guidance on the treatment of appeals; • Double funding and plagiarism checks;	<u>Coverage:</u> 100% of the projects are controlled through value-adding checks. High-Risk operations subject to more in-depth controls. <u>Depth:</u> Will depend on risk criteria. However, as a deliberate policy to reduce administrative burden, and to ensure a good balance between trust and control, the level of control at this stage has an efficiency focus. Priority is given to high risk operations identified by risk criteria (suspicions raised by staff, audit results, EDES, individual or 'population' risk assessment and procedure on audit certificates by beneficiaries linked to amounts claimed). Audit certificates required in accordance with the specific programmes' rules, except for	<u>Effectiveness:</u> Number of payments Time-to-pay % payments made on time Value of detected ineligible EU funding / submitted EU funding (%) <u>Efficiency:</u> Cost of all staff and non-staff expenses (e.g. external monitors) related to the monitoring of the execution of projects/ amount paid (%). <u>Economy:</u> Successful implementation of the actions, including building assurance on the achievement of the project and policy objectives. Benefits due to

	• Project monitoring visits (on-site or remote) including the support provided through the LIFE programme support framework contract; • Anti-fraud awareness raising training; • For the Research programme, corporate guidance is prepared by the CIC and is available on GoFund. Internal tools, checklists and instructions have been developed to streamline processes; • Enhanced Research family approach (anti-fraud cooperation; common legal and audit service; comprehensive and common IT system for all the family); • Selection and appointment of experts for scientific reviews of intermediate and/or final reporting if applicable. In addition to the above elements, communication and information actions are part of the preventive controls. This includes both internal targeted actions as well as actions towards the beneficiaries (kick-off meetings, launch events, trainings/ presentations/ workshops and awareness on different phases of the project). Furthermore, project progress is monitored through regular contacts with the beneficiaries. Operational and financial checks in accordance with the financial circuits. Operation authorisation by the AO. For riskier operations, reinforced monitoring. If applicable, monitoring of ethics obligations; in case of doubt, initiate checks, reviews, or audits as	lump sum grants (e.g. for H2020: any beneficiary/ affiliated entity claiming more than: EUR 325 000; for HE, the ceiling is EUR 430 000).	operational review of projects and consequent corrective actions imposed on projects.
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	planned in the grant agreement.		
	Monitoring and reporting of the time to pay indicator		

Stage 4: Ex-Post controls/Audits

A. Audits

Main control objectives: Measuring the effectiveness of ex-ante controls by ex-post controls and addressing systematic issues if and when they arise (effectiveness; economy, efficiency); detection and correction of errors or fraud remaining undetected during ex-ante controls (compliance; prevention of fraud)

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - Erroneous payment declarations are accepted; - Attempted Fraud is not prevented and/ or detected; - There is a lack of consistency in the audit strategy within the Research family; - There is a lack of efficiency for absence of coordination: multiple audits on the same beneficiary, same programme: reputational risk and high administrative burden on the beneficiaries' side.	CINEA's ex post controls are the object of documented audit strategies, which have been discussed at length and validated at high level. The strategies are then transposed into Ex-post Audit Work Programmes. Procedures and detailed guidance are in place to address this objective and are adhered to at all times. This includes internal guidelines for Sampling the ex-post controls. In addition, CINEA's external audit team is not involved in the operational or financial circuits. This is expected to increase the degree of independence and reliability of the ex-post controls. For the Research programme, ex-post controls are mainly performed by the Common Implementation Centre, in accordance with the common Ex-post	<u>Coverage, frequency and depth</u> are determined according to the ex-post control strategies for the programmes delegated to CINEA. These strategies also set indicators and targets. For the Research programme, the Common Implementation Centre is mainly responsible for ex-post controls: - Common Representative audit Sample (CRaS): MUS sample across the programme to draw valid management conclusions on the error rate in the population. - Research and Innovation risk-based sample, determined in accordance with	Effectiveness: Multi-annual residual error rates per programme (or sector when applicable). Number of audits finalised % of beneficiaries & value coverage Efficiency: Progress Against Annual Audit Plan; Multi-annual Audit coverage. Percentage of implementation of CAS audit plan Economy: Improvement in rules and guidance

Internal control weaknesses or errors are not detected and such no action is taken to improve such controls	control strategy for the entire Research and Innovation family (H2020 and HE), implemented by a central service ((Common Audit Service (CAS) part of the Common Implementation Centre, DG Research and Innovation): - At intervals carry out audits of a representative sample of operations to measure the level of error in the population after ex-ante controls have been performed; - Calculates the representative error rate for the R&I programme; - Additional sample to address specific risks; - When relevant, joint audits with the Court of Auditors; - Multi-annual basis (programme's lifecycle) and coordination with other AOs concerned; - Validate audit results with beneficiary; - In case of systemic error detected, extrapolation to all the ongoing projects run by the audited beneficiary (or closed within two years). If ex-post controls detect any weaknesses in internal controls, such findings may be exploited to improve the controls concerned, for example through updates of the guidance in the Manual of Procedures and the checklists.	the selected risk criteria aimed to maximise deterrent effect and prevention of fraud or serious error.	from feedback from audits. Deterrent effect. Learning effect for beneficiaries. Improvement of ex-ante controls or risk approach in ex-ante controls by feeding back findings from audit. Estimation of cost of staff involved in the coordination and execution of the ex post audit strategies. Costs of the appointment of audit firms and missions ⁽¹⁵⁾.
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B. Implementing results from ex-post audits/controls

Main control objectives: Ensuring that the (audit) results from the ex-post controls lead to effective recoveries (effectiveness; economy, efficiency; compliance; prevention of fraud); Ensuring appropriate accounting of the recoveries made (reliability of reporting)

⁽¹⁵⁾ For the R&I family, the estimation is established for the grant process which includes Horizon 2020 , Horizon Europe and Euratom.

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - Financial recommendations stemming from the ex-post audits are not implemented; - Errors, irregularities and causes of fraud are not addressed; - Errors, irregularities and causes of fraud are detected too late to take remedial measures.	Procedures and detailed guidance are in place to address this objective and are adhered to at all times. This includes: - The procedure for the implementation of ex-post audit findings; - The Audit follow-up sheet; - Validation of recovery in accordance with the financial circuits; - Authorisation by AOSD; - Coordination at the level of the Research family: FAIR committee; - If needed: reinforced monitoring implemented on ongoing projects. Furthermore, the Agency proceeds to the systematic registration of audit/ control results to be implemented and tracks its actual implementation in the relevant audit databases/ ex-post monitoring tools. Finally, if circumstances justify so, the Agency will notify suspicious cases to OLAF/ EPPO and ensure regular follow up of detected fraud.	<u>Coverage:</u> 100% of final audit results with a financial impact. <u>Depth:</u> All audit results are examined in-depth making the final recoveries.	Effectiveness: Multi - annual residual error per programme. Amounts being recovered and offset. Efficiency: Progress Against Annual Audit Plan; Multi-annual Audit coverage; Progress against reports received - under the Research programme: -Number/value/% of audit results pending implementation, -Number/value/% of audit results implemented Economy: Estimation of cost of staff involved in the implementation of audits.

Procurement (applicable to all programmes managed by the Agency, with the exception of CEF and Innovation Fund)

Stage 1: Planning; Needs assessment & definition of needs; Selection of the offer & evaluation

Main internal control objective: Ensuring that procurement procedures are regular and legal and that only goods, services or works meeting the policy objectives are among the tenders submitted and selected in respect of the relevant procedures (best value for public money; effectiveness; economy, efficiency; compliance; prevention of fraud).

Specific internal control objective A and B (Planning/ Needs assessment & definition of needs): Contributing to the objectives of the relevant programmes delegated to the Agency, including the preparation and publication of public procurement procedures (Effectiveness; economy, efficiency).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - Procurement procedures are poorly planned; - Procurement needs are not well defined (operationally and economically) and that the decision to procure is inappropriate to meet the policy objectives; - Contract with a similar scope exists; - Inappropriate choice of procedure or wrong calculation of the contract's value; - Inadequate tenders due to badly defined criteria and technical specifications; - Distorted competition by biased definition of certain selection/ award criteria; - Non-compliance with legal and regulatory requirements;	The mitigating controls for these risks are mostly but not exclusively: - Annual planning of procurement needs using PPMT, involving CINEA management and where necessary consulting parent DGs; - Extensive discussions and revisions regarding needs and procedures with an experienced horizontal Procurement team; - Use of DG BUDG's Vademecum on Public Procurement; - Procedure for public procurement published on CINEA's Manual of Procedures; - Formalised working arrangements between the operational/ financial/ procurement services (allocation of checks); - Formalised process of implementing procurement procedures: use of PPMT, eSubmission, and corporate templates; - For "high risk" procurements (above Directive threshold, middle value procedures and use of framework contracts with reopening of competition), procedural guidance and ex-ante verification by CINEA Procurement Team at	<u>Coverage/Frequency:</u> 100% of the forecasted procurements <u>Depth:</u> Contributions to the planning and the assessment needs are thoroughly reviewed at all levels, including for operational and legal aspects.	<u>Effectiveness:</u> Number of contracts discontinued due to lack of use; Number of 'open' or procedures where only one or no offers were received; Number of valid complaints or litigation cases filed. <u>Efficiency:</u> Estimated average cost of a tendering procedure <u>Economy:</u> Robust and well-publicised tendering procedures should result in sufficient number of quality tenders submitted.

• Delayed or lengthy preparation of call for tenders; • Issues with the goods/ services/ works provided due to problems with contracting (including with planning and organisation of the procurement process); • Conflict of interest.	every step of the procedure, from preparation of tender documents until contract signature; Controls are implemented in collaboration with the relevant services, and foresee appropriate hierarchical validation (including consultation of parent DG). Declaration of absence of conflict of interests is signed by the persons involved in tender opening.		
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Specific internal control objective C (Selection of the offer & evaluation): Contributing to the selection, evaluation and award stages, including the checks on the exclusion and selection criteria, as well as the assessment against the award criteria (best value for public money; effectiveness; economy, efficiency; compliance; prevention of fraud).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: • The evaluation procedure is delayed or lengthy; • The most appropriate offer (in accordance with the award criteria) is not selected, due to a biased, inaccurate or 'unfair' evaluation process; • Conflict of interest.	To mitigate these risks, detailed guidance and procedures are in place or being further developed (notably CINEA's Manual of Procedures) and are adhered to at all times. This includes, amongst others: • Definition of main steps, actors and IT tools; • Allocation of checks between the actors; • Internal guidelines and checklists (under further development); • Detailed and systematic briefing meetings between evaluation committees and the horizontal Procurement team. Generally, fraud risk and legal checks are incorporated into the procedures or on ad hoc basis	<u>Coverage/Frequency:</u> 100% of the forecasted procurements <u>Depth:</u> • Continuous supervision at adequate level of evaluation process and selection process. • Evaluation and selection of tenders are documented and validated at adequate level.	<u>Effectiveness:</u> Average length of procurement procedures; Number of contracts discontinued due to lack of use; Number of 'open' or procedures where only one or no offers were received; Number of valid complaints or litigation cases filed. <u>Efficiency:</u> Estimated average cost of a tendering

	in case of doubt. Declaration of absence of conflict of interests is signed by the persons involved in the evaluation.		procedure <u>Economy:</u> Robust tendering procedures should result that only the best tenders, meeting the policy objectives, are selected. This results in the selection of the best value for money offers.
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Stage 2: Financial transactions

Main internal control objective: Contributing to management and monitoring activities to guarantee that the implementation of the contract is in compliance with its clauses (effectiveness; economy, efficiency; compliance; prevention of fraud).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - The goods/ services/ works foreseen are not, totally or partially, provided in accordance with the technical description and requirements foreseen in the contract; - The amounts paid exceed that due in accordance with the applicable contractual and regulatory provisions; - Business discontinues because contractor fails to deliver.	- Procedures, detailed guidance as well as templates and checklists are in place to address this objective (notably CINEA's Manual of Procedures) and are adhered to at all times; - Regular contacts with service providers are part of the preventive controls, with a view to guaranteeing that the implementation of the contract is in compliance with the signed contract; - Application suspension/ interruption/ deduction of payments on a case-by-case basis, in case of bad faith or gross negligence, while respecting the principle of proportionality; - Referring justified cases to OLAF/EPPO; - Flagging the legal entity in EDES; - Recovery of paid amounts.	<u>Coverage:</u> 100% of the contracts are controlled based on value-adding checks. High-Risk operations subject to more in-depth controls. <u>Depth:</u> Will mostly depend on the amount and potential impact on the Agency's operations of late or no delivery.	<u>Effectiveness:</u> % payments on time Time-to-pay (broken by type of payment) <u>Efficiency:</u> Estimated cost of staff involved (payment included)/ amount paid (%). <u>Economy:</u> Successful implementation of the services, including building assurance on the achievement of the contract in support of the policy objectives. Benefits due to operational review of services and consequent corrective actions imposed on contracts.

Stage 3: Supervisory Measures

Main internal control objective: Ensuring that any weakness in the procedures (tender and financial transactions) is detected and corrected (compliance; prevention of fraud).

Main risks	Mitigating controls	Coverage, frequency and depth of controls	Cost-Effectiveness indicators (three E's)
There is a risk that: - An error or non-compliance with regulatory and contractual provisions, including technical specifications, is not detected; - Fraud is not prevented, detected or corrected by ex-ante control, prior to payment.	Procedures, detailed guidance as well as templates and checklists are in place to address this objective and are adhered to at all times. This notably refers to the Vademecum on Public Procurement, which is published on BUDGpedia. In addition, deviation reporting procedures are in place and the matter is supervised and monitored regularly by the CINEA's Internal Control Manager to foster compliance with regulatory and contractual provisions. Generally, fraud risk and legal checks are incorporated into the procedures or on ad hoc basis in case of doubt, issues. Ex-post publication (possible reaction from tenderer / potential tenderer such as whistle blowing);	<u>Coverage:</u> 100% of the procurement procedures and contracts are controlled based on value-adding checks. High-Risk operations subject to more in-depth controls. <u>Depth:</u> The depth of the checks implemented will depend on risk criteria. Priority is given to high risk operations identified by risk criteria, considering the amount and potential impact on the Agency's operations of late or no delivery.	<u>Effectiveness:</u> Estimated amounts associated with errors detected (related to fraud, irregularities and error). Number of non-compliance events. <u>Efficiency:</u> Estimated costs of staff (/non staff) involved/ amounts detected associated with fraud and error (%). <u>Economy:</u> Compliance of the tendering and financial transactions with regulatory provisions. Fraud prevention and reduced reputational damage. Revision of services and eventual corrective actions imposed on contracts.

ANNEX 7: Specific annexes related to "financial management"

Table: Overview of CINEA's estimated cost of controls at Commission (EC) level ⁽¹⁶⁾, grants under direct management

CINEA	Ex ante controls			Ex post controls			Total	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Relevant Control System (RCS) / Other as defined in Annex 6 of the AAR	EC total costs	related payments Made	Ratio (%)* (a)/(b)	EC total costs	total value verified and/or audited	Ratio (%) (d)/(e)	EC total estimated cost of controls (a)+(g)	Ratio (%)* (g)/(b)
Grants under direct Management - CEF	13.256.278,06 €	4.520.982.662,85 €	0,29%	553.314,82 €	410.810.145,55 €	0,13%	13.809.592,88 €	0,31%
Grants under direct Management - Horizon	12.986.383,28 €	1.790.229.503,56 €	0,73%	104.800,71 €		0,00%	13.091.183,99 €	0,73%
Grants under direct Management - Innovation Fund	5.891.843,30 €	6.000.132,00 €	–			–	5.891.843,30 €	–
Grants under direct Management - LIFE	20.349.907,10 €	408.235.946,39 €	4,98%	433.702,75 €	19.140.232,71 €	2,27%	20.783.609,85 €	5,09%
Grants under direct Management - EMFAF	1.256.966,92 €	24.612.984,04 €	5,11%	247.843,38 €	3.756.780,21 €	6,60%	1.504.810,30 €	6,11%
Grants under direct Management - RENEWFM	360.033,87 €		–			–	360.033,87 €	–
Grants under direct Management - JTM	590.738,45 €		–			–	590.738,45 €	–
OVERALL total estimated cost of control at EC level for expenditure	54.692.150,98 €	6.750.061.228,84 €	0,81%	1.339.661,66 €	433.707.158,48 €	0,31%	56.031.812,64 €	0,83%

* For the Innovation Fund, the ratio of cost of controls is not meaningful as the programme is not yet operating at cruising speed and thus limited amount of payments were made in 2022. Progressively, the amount of payments made under the Innovation Fund will increase, which will allow providing a meaningful ratio of cost of controls. In the case of RENEWFM and JTM, a ratio is not provided because payments were not made. However, the overall ratio includes costs of controls for all programmes.

⁽¹⁶⁾ The table reflects the costs of controls implemented by CINEA for these programmes. Details of the estimated cost of controls related to shared/pooled control activities carried out by REA and hosted by DG RTD (Common Implementation Centre; Common Audit Service; Common Policy Centre) for the Research and Innovation family are reported in the Annual Activity Reports of REA and RTD.

Stage 1 – Evaluation and selection of proposals

The qualitative benefits are:

- Maximizing impact: policy objectives of the relevant programmes can be achieved in the most efficient way by selecting the best proposals;
- Ensuring objectivity: through the use of external experts the evaluation of proposals is performed based on high technical expertise and independence of opinions;
- Transparency and independence of the evaluation process guaranteed by independent observers.

The quantitative benefits from this control stage are measured by the total of the requested funding in proposals which were not recommended by the external experts involved in the evaluation process.

Figure 1: Benefits of stage 1 – Evaluation ⁽¹⁷⁾

Programme	Amount of requested funding not recommended by experts
CEF	3,217,129,158
Horizon	3,916,609,640
Innovation Fund	6,342,060,016
LIFE	1,105,560,072
EMFAF	0
Total	14,581,358,887

Stage 2 – Grant Agreement Preparation (GAP)

The qualitative benefits are:

- Enhanced assurance on the achievement of the project and policy objectives;
- Prevention of errors at the subsequent stages;
- Mitigating the risks in case of weak beneficiaries;
- Accurate forecast of payment appropriations (especially for pre-financing).

As a result of the contracting process, some selected proposals were cancelled during the grant agreement preparation while for others the maximum funding was reduced. The

⁽¹⁷⁾ The information contained refers to calls concluded in 2022 when the applicants were officially informed. The proposals rejected by the experts refer to those proposals that did not pass the threshold following the consensus meeting and were not recommended for funding.

reduced amount of funding (including cancellations) can be considered the quantitative benefits of this stage.

Figure 2: Benefits of stage 2 – Grant Agreement Preparation

Programme	Number of cancelled GAPs	Funding reductions due to cancellations	Other funding reductions during Grant agreement preparation	Total funding reduction
CEF	1	1,007,000	124,804,238	125,811,238
Horizon			136,704,381	136,704,381
Innovation Fund	2	127,000,000		127,000,000
LIFE	2	474,923	4,483,012	4,957,935
EMFAF			3,225	3,225
Total	5	128,481,923	265,994,858	394,476,781

Stage 3 – Monitoring the execution

The qualitative benefits are:

- Successful implementation of the actions, including building assurance on the achievement of the project and policy objectives;
- Increased predictability of the foreseen baseline outcomes;
- Early detection of deviations and consequent undertaking of the respective mitigating measures;
- Lessons learnt from operational and financial review of projects and consequently improving the current processes and procedures for future projects.

The figure below summarises the quantitative benefits of the controls performed in this stage, notably the quantification of the ineligible amount in submitted cost claims:

Figure 3: Benefits of stage 3 – Monitoring the execution

Programme	Number of cost claims	Submitted amount	Ineligible amount (€) (recovery context Irregularity)	Rejection Rate (%)
CEF	342	3,415,490,066	71,649,025	2.10%
Horizon	527	969,331,960	7,688,157	0.79%
Innovation Fund	7	6,000,132	-	0.00%
LIFE	247	273,257,258	5,139,344	1.88%
EMFAF	57	24,850,032	151,723	0.61%
Total	1,180	4,688,929,449	84,628,249	1.81%

Additionally, €4.19 million was recovered linked to early termination of grant agreements (€3.1 million for CEF and €1.8 million for LIFE).

Stage 4 – Ex Post Controls

The qualitative benefits are:

- Preventive and deterrent effect in the fight against fraud;
- Raising the awareness of beneficiaries to respect the financial conditions of the grant agreements;
- Contributing to the learning effect for the beneficiaries on how to comply with the rules and requirements in current and future EU grants.

In addition, by providing feedback on audit findings to the CINEA management and advice and guidance to CINEA staff on eligibility issues, the internal controls can be improved to reduce future error rates.

The benefits of this stage can be quantified by the amount of ineligible EU contribution detected in ex post control activities. In 2022, this amount was estimated at €17.15 million for CEF, €0.148 million for LIFE and €0.181 million for EMFF.

Ex-Post Control Results

Figure 4: Multi-Annual Residual Error Rates by CEF sector, LIFE and EMFF programme

Multi-Annual Residual Error Rate	CEF Transport	CEF Energy	LIFE	EMFF
Total number of closed audits	108	41	54	50
1. Sampled EU Contribution Interval Sample	1.448.526.234	210.338.168	37.445.656	9.270.748
2. Sampled EU Contribution Risk sample	205.215.575	70.592.195	2.356.514	260.074
3. Total Audited EU Contribution =(1)+(2)	1.653.741.809	280.930.363	39.802.170	9.530.821
4. Detected Interval sample error	24.929.676	4.452.417	261.105	235.334
5. Detected Risk sample Error	6.764.213	135.931	29.903	35.624
6. Detected error rate = (4)/(1)	1,72%	2,12%	0,70%	2,54%
7. Total errors corrected for Interval sample and Risk Based audits				
a) Errors corrected by 31/12/2022	14.711.524	3.133.304	290.639	97.796
b) Errors corrected 1/1/2023 - 31/03/2023	0	0	0	0
8. Errors not corrected	16.982.365	1.455.044	369	173.163
9. Total EU Contribution	12.330.724.185	1.577.290.500	621.062.194	73.642.000
10. Audit coverage = (3)/(9)	13,41%	17,81%	6,41%	12,94%
11. Calculated residual error = (8) + [(9)-(3)]*(6)	200.737.208	28.896.261	4.053.437	1.800.601
12. Calculated residual error rate = (11)/(9)	1,63%	1,83%	0,65%	2,45%

CEF Transport and Energy

The audit findings with the largest financial impact for audits selected by Interval sampling for CEF Transport and Energy have been related to the claiming of costs not yet 'incurred' for works contracts (advance payments), or costs declared that are not linked to the grant agreement or non-respect of public procurement/best value for money requirements. However, the number of findings of this nature are limited due to the effectiveness of the ex ante controls. Audits continue to find recurrent errors in the 'personnel costs' category. However, as these costs tend to represent a low proportion of overall declared costs in large-scale infrastructure projects, the financial impact of these findings is not significant.

For CEF Transport, the 2022 residual error rate was 1.63% compared to 0.59% at the end of 2021. The increase is mainly due to one audit report with high detected error rate which was finalised in the last quarter of 2022 and for which the audit findings had not been implemented by the end of the year. However, the scale and extent of detected errors in both Interval and Risk based audit selections, as shown in the multi-annual error rate calculation, appear to be well contained within tolerable limits and below the target, confirming the effectiveness of the current ex ante control system.

For CEF Energy, the residual error rate was above 2% (2.52%) at the end of 2021, leading to a quantified reservation in the AAR 2021. In 2022, all open audits were closed, including all audits in the Annual Audit Plan for 2022. No major findings have arisen in these audits. As a result of this audit activity, and the other steps taken by CINEA as part of the CEF Energy Error Rate reduction Action Plan, the residual error rate fell to 1.83% at the end of 2022, thus under the materiality threshold (2%). Therefore, no quantified financial reservation is required for the current AAR.

LIFE

Since the beginning of the programming period (on cumulative basis), 54 final audit reports were issued, related to both Action and Operating grants. The residual error rate at the end of 2022 was 0.65%, which is at the same level as in 2021 (68%).

Given the fact that the main cost category for LIFE projects is staff costs, the audit findings with the largest financial impact for audits selected by value based sampling have been related to the incorrect calculation of staff costs, either in terms of inclusion of ineligible costs, or deviations of hours claimed compared to timesheets or missing supporting documentation.

The residual error rate calculation appears to be well contained under the materiality threshold of 2%. These results confirm the effectiveness of the current ex ante control system of LIFE programme as such.

EMFF

Since the beginning of the programming period (on cumulative basis), 50 final audit reports were issued.

The residual error rate at the end of 2022 was 2.45%, thus above the materiality threshold of 2%. This increase from end of 2021 (0.88%) to end of 2022 is attributable to a single audit leading to the full rejection of the EU contribution, rather than the incidence of widespread and systematic detected errors.

The single audit result with a 100% error rate is an anomaly. With the small population of EMFF grants (and the small population of audits) the error rate calculation is sensitive to large adjustments. As a result, CINEA does not consider that additional ex post audit measures are needed.

Furthermore, as the amounts at risk are within the 'de minimis' criteria ⁽¹⁸⁾ for reporting, there will be no need to make a reservation for EMFF in the current AAR.

We anticipate that with a 'normal' audit campaign for the audit plans 2022 and 2023, the residual error rate should decrease below 2% for the AAR 2024 and possibly for the AAR 2023. The Residual Error Rate will be monitored closely, in particular in case significant further audit adjustments occur.

The total financial adjustment recommended is divided by the number of closed audits to determine the 'impact per audit' per CEF sector, LIFE and EMFF programme.

The cost per audit and the impact per audit can be used to compare the relative economy of CINEA audits per CEF sector, LIFE and EMFF programme. This in turn can help shape future decisions on the costs and benefits on controls.

Figure 5: Cost and impact per audit per programme on an annual basis

Audit Plan	Recommended Financial Adjustment (EUR)				Number of Closed audits				Average Impact Per Audit (EUR)			
	Transport	Energy	LIFE	EMFF	Transport	Energy	LIFE	EMFF	Transport	Energy	LIFE	EMFF
2020	449.979	770.382	N/A	N/A	24	6	N/A	N/A	18.749	128.397	N/A	N/A
2021	115.887	1.840.618	147.714	180.615	19	8	15	26	6.099	230.077	9.848	6.947
2022	16.954.547	77.381	0,00	0,00	9	7	2	2	1.883.839	11.054	-	-
Total	17.520.413	2.688.381	147.714	180.615	52	21	17	28	1.908.687	369.529	9.848	6.947

⁽¹⁸⁾ The de minimis criteria are the budget line should be under 5% of CINEA expenditure and the amount at risk below EUR 5m

H2020

For H2020, ex-post controls are under the responsibility of the Common Audit Service (CAS). The CAS undertakes all (representative and complementary) Horizon 2020 audits, for all Horizon 2020 stakeholders, including CINEA, ensuring a harmonised approach and also in ensuring that audit burden on beneficiaries is minimised. Annex 5 provides further details regarding the methodology for ex-post controls for H2020.

By the end of 2022, the Research and Innovation Family audited 4 060 participations, covering 58.26% of total H2020 expenditure to date.

The percentage of H2020 expenditure covered by the audits (58.26%) refers to the value of the participations of the audited beneficiaries. It includes both fully audited participations (3.77%) (also referred to as the 'direct' coverage), and the non-audited participations (also referred to as the 'indirect' coverage), which after the full treatment of audit results, are clean from systemic errors (54.49%).

Since 2007, the R&I Family has adopted a common audit strategy intended to contribute to the legality and regularity of expenditure on a multi-annual basis, including detection and correction of non-systemic and systemic errors.

For Horizon 2020, the Common Audit Service (CAS) of the Common Implementation Centre carries out all audits, including those concerning grants concluded by the Executive Agencies and the Joint Undertakings. This is a major step towards ensuring a harmonised approach, legal certainty, equality of treatment of beneficiaries and minimising the audit burden on beneficiaries.

The Horizon Europe Audit Strategy will be based on the achievements and lessons learnt from H2020 and will be risk based. The strategy is currently under preparation.

The **main indicators** on legality and regularity⁽¹⁹⁾ of EU Framework Programmes for Research and Innovation are:

- **Cumulative representative detected error rate**, based on errors detected by ex-post audits on a Common Representative Sample of cost claims across the R&I Family.
- **Cumulative residual error rate**, which is the extrapolated level of error after corrective measures have been implemented by the Commission services, following the audits, accumulated on a multi-annual basis.

The **targets** set for this control system are respectively:

⁽¹⁹⁾ These indicators are described in Annex 5.

- for Horizon 2020, to ensure that the cumulative residual error rate remains within a range of 2-5 %, aiming to be as close as possible to 2%. Progress against Horizon 2020 targets is assessed annually based on the results of the implementation of the ex-post audit strategy and taking into account the frequency and importance of the detected errors along with cost-benefit considerations regarding the effort and resources needed to detect and correct the errors.
- for Horizon Europe, to ensure that cumulative detected and residual error rates do not exceed 2%²⁰.

It should be noted, however, that due to its multi-annual nature, the effectiveness of the control strategy of the R&I Family can only be measured and assessed fully in the final stages of the EU Framework Programme, once the ex-post audit strategy has been fully implemented, and errors, including those of a systemic nature, have been detected and corrected.

Despite objective challenges due to carry over from the COVID-19 pandemic, the foreseen audit target was achieved. The CAS managed to finalise audits on 633 participations corresponding to 103.6% of the planned most probable scenario for the 2022 target²¹.

The following table presents the error rates calculated for H2020 by the end of 2022.

	HORIZON 2020 EX-POST AUDITS
CUMULATIVE REPRESENTATIVE DETECTED ERROR RATE	2.71%
CUMULATIVE RESIDUAL ERROR RATE R&I Family	1.67%
CUMULATIVE RESIDUAL ERROR RATE CINEA	2.00%

Results of the Horizon 2020 ex-post audits

In 2020, the Commission refined its methodology for calculating the Horizon 2020 error rates in line with the European Court of Auditors' observations in its 2018 and 2019 Annual

⁽²⁰⁾ No representative error rate for Horizon Europe will be available in 2022 and 2023 as the ex-post audit campaign for the Programme is planned to be launched by the end of 2023, at the earliest.

⁽²¹⁾ Given the uncertainties related to the evolution of the COVID-19 pandemic and related carry over, the CAS developed two scenarios for the closure of audit targets.

Reports²². The methodology applied is described in Annex 5 'Materiality criteria'. As of January 2020, DG R&I applied the revised methodology on a sample of 1 937 audit conclusions. This results in the following error rates for Horizon 2020²³ on 31 December 2022:

- Cumulative representative detected error rate: **2.71%** ⁽²⁴⁾
- Cumulative residual error rate for the Research and Innovation Family DGs: **1.67%** (**2.00** % for CINEA).

In line with the Financial Statement²⁵ accompanying the Commission's proposal for the Horizon 2020 regulation, a reservation is not necessary for the related expenditure if the cumulative residual error rate for the programme falls within the target range of 2-5%. In 2022, and despite the above-mentioned caveats, CINEA's cumulative residual error rate for Horizon 2020, calculated at 2.00%, more than fulfils this condition and is below the materiality threshold. Despite the absence of reservation, the root causes of errors have been identified and targeted actions taken to address any identified weaknesses.

Since Horizon 2020 is a multi-annual programme, the error rates, and the residual error rate in particular, should be considered within a time perspective. Specifically, the cleaning effect of audits will tend to increase the difference between the representative detected error rate and the cumulative residual error rate, with the latter finishing at a lower value.

These error rates are calculated on the basis of the audit results available when drafting the Annual Activity Report. They should be treated with caution as they may change subject to the availability of additional data from audit results.

(²²) When calculating the multi-annual error rate, the Commission took into account the results of the audit re-performed by the ECA as part of Module 2 of the DAS 2018-2019.

(²³) The Horizon 2020 audit campaign started in 2016. At this stage, four Common Representative Samples with a total of 628 expected results have been selected. By the end of 2022, cost claims amounting to EUR 40,8 billion have been submitted by the beneficiaries to the services. The audit coverage for Horizon 2020 is presented in annex 7. In addition to the Common Representative Samples, Common Risk Samples and Additional Samples have also been selected. The audits of 4 060 participations were finalised by 31/12/2022 (of which 633 in 2022).

(²⁴) Based on the 479 representative results out of the 628 expected in the four Common Representative Samples.

(²⁵) The legislative financial statement accompanying the Commission's proposal for the Horizon 2020 regulation states: "The Commission considers therefore that, for research spending under Horizon 2020, a risk of error, on an annual basis, within a range between 2-5% is a realistic objective taking into account the costs of controls, the simplification measures proposed to reduce the complexity of rules and the related inherent risk associated to the reimbursement of costs of the research projects. The ultimate aim for the residual level of error at the closure of the programmes after the financial impact of all audits, corrections and recovery measures will have been taken into account is to achieve a level as close as possible to 2%."

Given the results of the audit campaign, and the observations made by the European Court of Auditors in its Annual Reports, the Common Implementation Centre, in close cooperation with central Commission services, defined actions aimed at significantly simplifying the rules, and paving the way for a significant reduction of the error rate in Horizon Europe. Apart from the use of a Corporate Model Grant Agreement and a common Annotated Grant Agreement for all programmes directly managed by the Commission, other actions include further simplification, such as the increased use of simplified forms of funding (including lump sums and unit costs), focused communication campaigns to more “error-prone” types of beneficiaries with higher than average error rates, such as SMEs and newcomers, and enhanced training to external audit firms performing audits on behalf of the Commission (the last three measures also target H2020 grants and beneficiaries). Focusing on the most common errors, these events will be straightforward, reaching more participants and achieving higher impact.

In addition, the ECA recommended certain improvements related to the quality of the audit process. Following the recommendation of the ECA the Commission reinforced or introduced a number of actions to remedy the risks identified by the ECA. The Court has acknowledged all these efforts to improve the quality of audits and considers its recommendation to be fully implemented.

Horizon Europe

2022 was the second year of implementation of the Horizon Europe framework programme. No representative error rate for Horizon Europe is available in 2022 as the ex-post audit campaign for the Programme is planned to be launched by the end of 2023 at the earliest, once a meaningful number of payments can be audited. Consequently, without elements allowing an assessment of the level of errors and taking into account the simplifications introduced for Horizon Europe that aim to reduce the error rate, the detected and residual error rate will be estimated to 2% ⁽²⁶⁾ for CINEA.

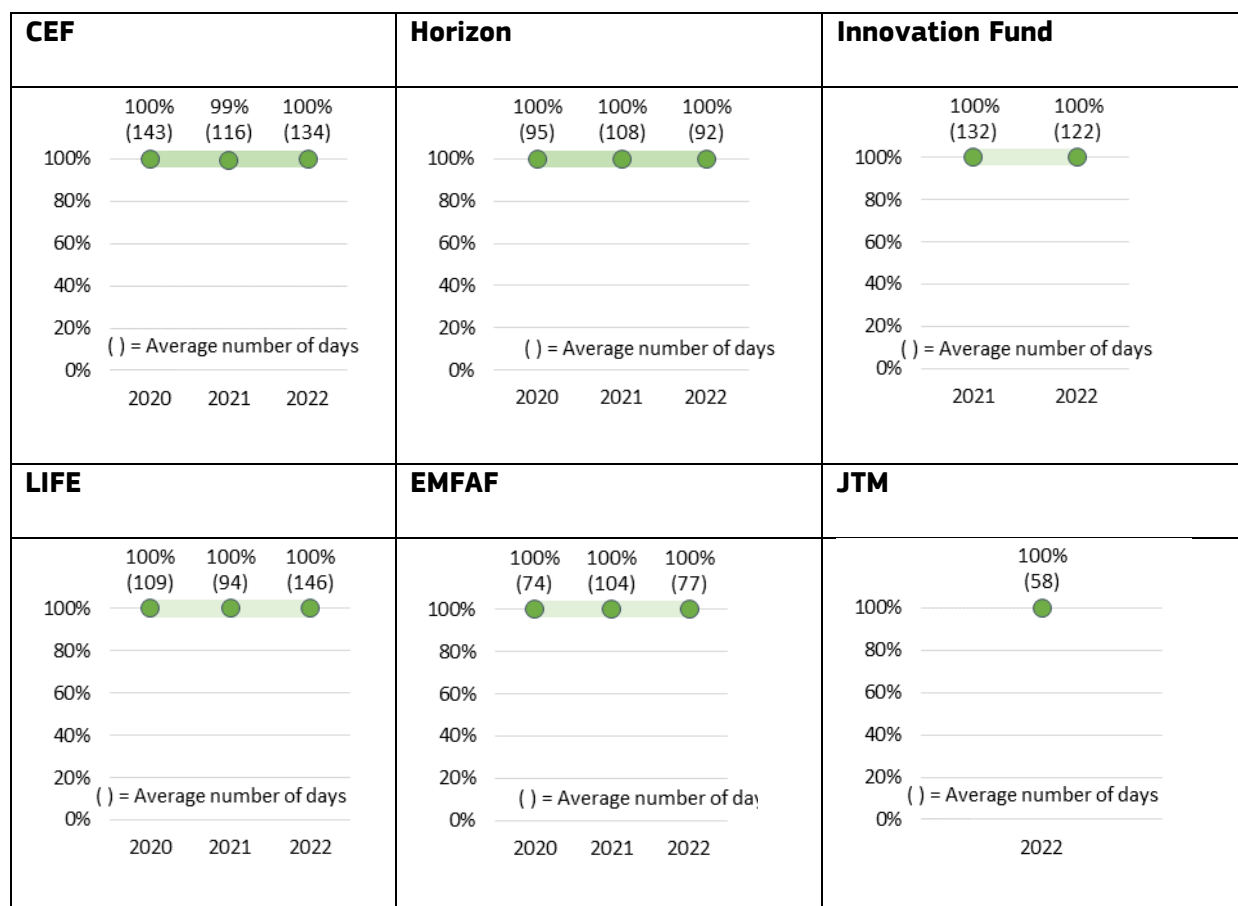
⁽²⁶⁾ These rates correspond to the objective set for Horizon Europe.

Efficiency of the implemented controls

Time-to-inform ⁽²⁷⁾

The time-to-inform limit of six months for all programmes with the exception of Horizon Europe (i.e. 5 months) was respected. The multi-annual evolution of the time-to-inform is presented in the following figure:

Figure 6: Development of the proposals informed on time per programme (in days)

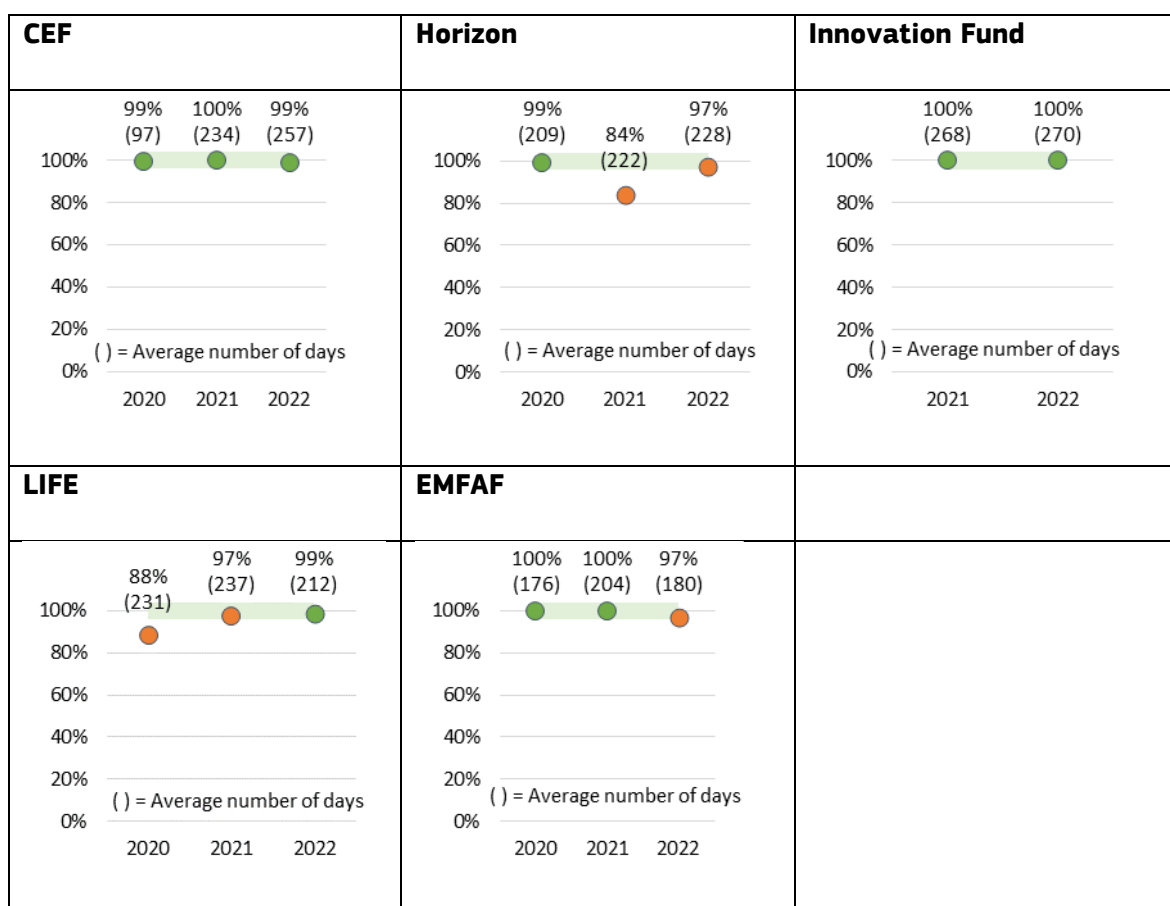


⁽²⁷⁾ Only calls for proposals which were concluded in 2022 have been taken into account.

Time-to-grant

The time-to-grant limit of nine months for all programmes with the exception of Horizon Europe (i.e. eight months) was respected in most cases. In 2022, CINEA signed 937 GAs, all on time with the exception of 17 GAs outside the time limits. Most of the cases referred to Horizon, but a limited number of cases were also observed for CEF, LIFE and EMFAF. The multi-annual evolution of the time-to-grant is presented in the following figure:

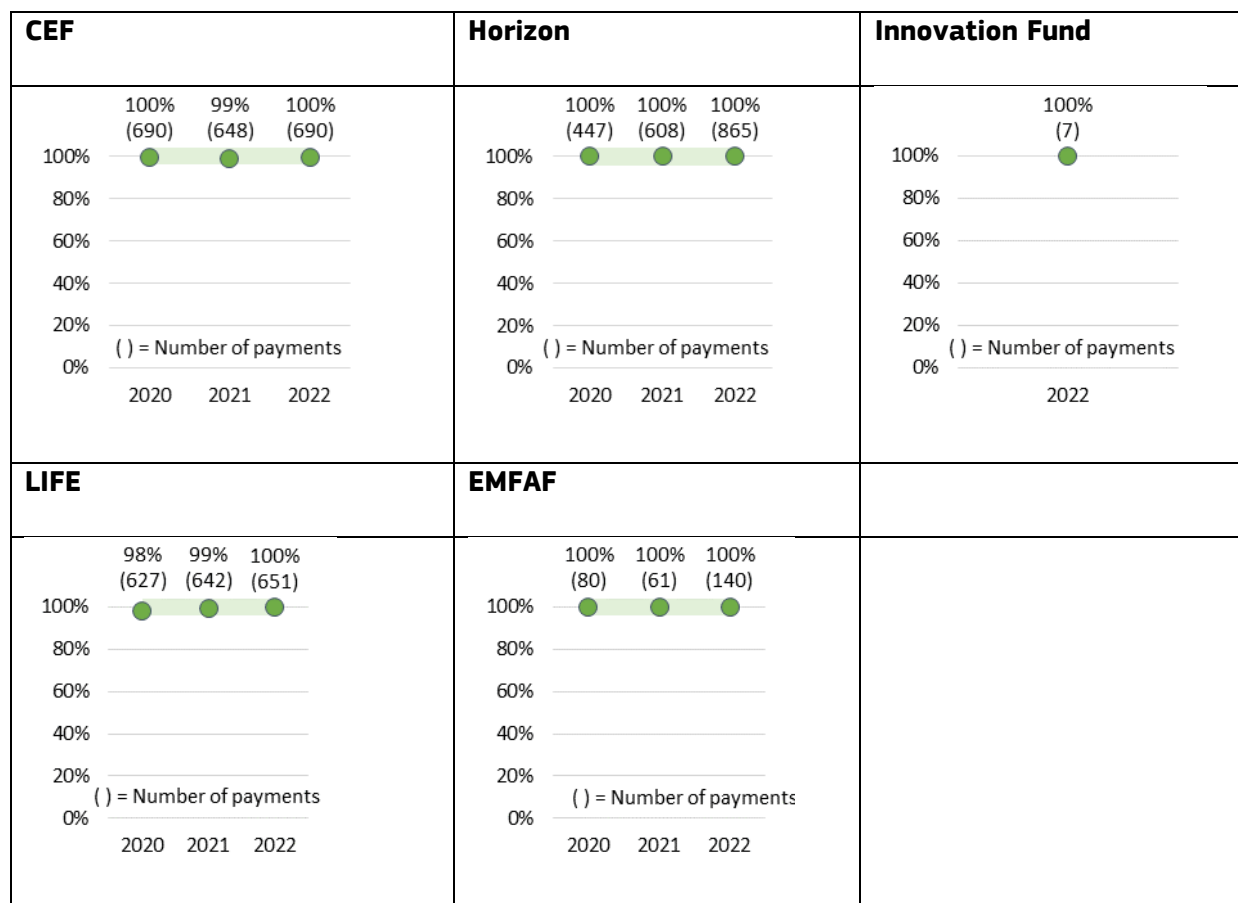
Figure 7: Development of grants signed on time per programme



Time-to-pay

The time-to-pay target of 98% for the different types of payments (pre-financing, further pre-financing and interim/final payment) was respected in all instances for all programmes. The multi-annual evolution of the number of payments on time is presented in the following figure:

Figure 8: Development of number of payments made on time per programme



Ex-post controls progress against the annual audit plan (CEF Audits²⁸)

Target: 50% of audits planned in year N with final report issued by end of year N.

Target: 100% final reports issued by N+1.5 (end June following year).

Audit Plan 2020	Completion Rate by End 2020	Completion Rate by Mid 2021	Completion Rate by end 2021
Transport	50%	79%	100%
Energy	50%	100%	100%
Total	-	-	100%

Audit Plan 2021	Completion Rate by End 2021	Completion Rate by Mid 2022	Completion Rate by end 2022
Transport	55%	80%	95%
Energy	75%	88%	100%
Total	-	-	96%

Audit Plan 2022	Completion Rate by End 2021
Transport	38%
Energy	100%
Total	52%

⁽²⁸⁾ This target is from the CEF Audit Strategy and only applies for CEF. There are no specific targets for audits transferred from the former EASME to CINEA (LIFE and EMFF).

Completion rate of Horizon 2020 ex post audits in 2022

The overall target (most probable scenario) in the Horizon 2020 Audit Strategy for 2022 was 611 audited participations. By 31 December 2022, the audits of 633 participations were closed, (completion rate 103.6%).

In addition, below is a summary of the implementation of the audit results and extensions.

Number of implemented AURI (cumulative from start of MFF & including ECA audits manually processed)

CINEA	Audit results processed	% Audit results processed	Audit results pending	% Audit results pending	Total
Audits	307	93%	24	7%	331
Extensions	322	97%	11	3%	333
Total	629	95%	35	5%	664

Time to implement closed AURI in 2022

CINEA	0-6 months	% within 6 months (0-6 months)	Above 6 months	% above 6 months	Total number
Closed projects	32	89%	4	11%	36
Negative adjustments with recovery	8	67%	4	33%	12
Negative adjustments without recovery	2	100%	0	0%	2
Positive or zero adjustment	22	100%	0	0%	22
On-going projects	9	90%	1	10%	10
Negative adjustments	0	0%	1	100%	1
Positive or zero adjustment	9	100%	0	0%	9
Total	41	89%	5	11%	46

Economy of the implemented controls

In 2022, CINEA's costs of controls for grants under direct management as well as the benefits of these controls have been estimated for each of the different control stages. The results are shown in the two tables below.

Figure 9: Costs of controls for each control stage (€ million)

Costs	CEF	Horizon	IF	LIFE	EMFAF	RenewFM	JTM	Total
Evaluation and selection	3.1	2.6	4.4	5.5	0.3	0.4	0.6	16.8
Grant Agreement Preparation	1.3	1.7	0.5	1.0	0.1	0.0	0.0	4.7
Monitoring the execution	8.8	8.7	0.9	13.9	0.8	0.0	0.0	33.2
Ex post controls	0.6	0.1	0.0	0.4	0.2	0.0	0.0	1.3
All stages included	13.8	13.1	5.9	20.8	1.5	0.4	0.6	56.0

For calculating the costs of controls, the following expenses were considered:

1. Costs of staff in control posts – The share of control posts (as identified in ATLAS and in line with the guidance provided by the General Secretariat) was calculated per programme and then multiplied with the total administrative expenditure on Title I and Title II of each programme. The ensuing costs were then distributed between the different control environments (procurement and grants) and stages by applying a share according to the estimated time of work spent for each of the control environment/stages in 2022.
2. Programme support expenditure – Additionally to staff expenditure, the different programmes and control environments/ stages are supported by expenditure on CINEA's administrative budget (Title III) and operational budget. The following payments are included:
 - a. Payments from CINEA's administrative budget for outsourced ex-post audits, for missions and for IT development costs attributable to control activities.
 - b. Payments from the operational budget related to control activities, e.g. evaluation experts and reimbursement of translation expenses of proposals, costs for the maintenance of in-house IT and data related tools and monitoring activities, including the cost of the LIFE programme support framework contract.

Figure 10: Benefits of controls for each control stage (€ million)

Benefits	CEF	Horizon	IF	LIFE	EMFAF	Total
Evaluation and selection	3,217.1	3,916.6	6,342.1	1,105.6	0.0	14,581.4
Grant Agreement Preparation	125.8	136.7	127.0	5.0	0.0	394.5
Monitoring the execution	74.7	7.7	0.0	6.9	0.2	89.5
Ex-post controls	17.2	0.4	0.0	0.1	0.2	17.8
All stages included	3,434.8	4,061.4	6,469.1	1,117.6	0.3	15,083.2

In light of the estimated costs and benefits of controls, it can be drawn that:

- The costs of the evaluation and selection of proposals (i.e. stage 1) correspond to 0.1% of the respective amount recommended for funding following the evaluation of the calls for proposals in 2022.
- The costs of grant agreement preparation (i.e. stage 2) correspond to 0.04% of the respective amount contracted in 2022.
- The costs of monitoring the execution of projects (i.e. stage 3) equals 0.5% of the operational payments for grants under direct management made in 2022.
- The audits finalised in 2022 for the CEF, LIFE and EMFF programmes covered a total amount of audited EU contribution of € 433.7 million. Hence, the cost of the ex-post controls for CEF, LIFE and EMFF programmes (i.e. stage 4) equals to 0.3% of this amount.

Figure 11: Costs of controls for each control stage per programme

Efficiency indicator	CEF	Horizon	IF	LIFE	EMFAF	RenewFM	JTM	Total
Stage 1 - % of costs in relation to amount recommended	0.0%	0.1%	0.2%	1.2%	2.0%	-	4.1%	0.1%
Stage 2 - % of costs in relation to amount contracted	0.0%	0.1%	0.0%	0.2%	0.6%	-	-	0.0%
Stage 3 - % of costs in relation to amount paid	0.2%	0.5%	-	3.4%	3.3%	-	-	0.5%
Stage 4 - % of costs in relation to amount audited	0.1%	N/A	-	2.3%	6.6%	-	-	0.3%

In conclusion, the total benefits of controls outweigh the overall costs of controls together. Furthermore, when comparing the costs of controls (€ 56 million) with the respective operational payments made in 2022 (€ 6,750 million), the ratio is set around 0.83%, demonstrating the cost-effectiveness of the controls.

Figure 12: Costs of controls for all stages per programme ⁽²⁹⁾

Efficiency indicator	CEF	Horizon	IF	LIFE	EMFAF	RENEWFM	JTM	Total
All stages - % of costs in relation to amount paid	0.31%	0.73%	-	5.09%	6.11%	-	-	0.83%

⁽²⁹⁾ For the Innovation Fund, the ratio of cost of controls is not meaningful as the programme is not yet operating at cruising speed and thus limited amount of payments were made in 2022. Progressively, the amount of payments made under the Innovation Fund will increase, which will allow providing a meaningful ratio of cost of controls. In the case of RENEWFM and JTM, a ratio is not provided because payments were not made. However, the overall ratio includes costs of controls for all programmes.

ANNEX 8: Specific annexes related to "assessment of the effectiveness of the internal control systems"

Assessment of the effectiveness of the internal control systems

The Agency's Internal Control Framework, similarly to the framework of the other Commission services, is composed of 17 Principles. The Agency's framework also includes a set of Internal Control Monitoring Criteria (ICMCs), which is revised every year to translate CINEA's own specificities.

CINEA's yearly assessment of the effectiveness of its internal control systems (self-assessment) was carried between December 2022 and February 2023, taking into account elements such as (but not exclusively) the risk management activities, deviation reporting activities, auditing activities concluded in 2022 (from the IAS and ECA) and the checks on the Internal Control Monitoring Criteria. The self-assessment identified areas that present a particularly robust system of controls. The analysis also highlighted some moderate or minor issues with manageable impact on the effectiveness of the overall control system of the Agency.

Out of the seventeen internal control principles, the self-assessment concluded that sixteen are present and functioning well. With regards principle one ('The Executive Agency demonstrates a commitment to integrity and ethical values'), some minor improvements are needed, in particular related to the attendance rate of staff in the compulsory training on ethics, which decreased to 92% in 2022, from 99% in 2021, and thus below the target of 100%. Several remedial measures with immediate positive effect have already been implemented. Regular monitoring of the participation rate will be ensured to determine if additional measures should be taken to improve the level of participation.

In terms of internal control components, four out of five are present and functioning well. The remaining component ('Control Environment') is present and functioning but some minor improvements are needed.

Based on the above, the Agency concluded that the control system as a whole is well suited, adequately in place and functioning as intended. The self-assessment did not result in the identification of major weaknesses, errors or gaps that could jeopardise the overall effectiveness of CINEA's internal control system.

Risk Management Activities

CINEA's risk management activities include the annual risk management exercise and a mid-term review. The latest version of CINEA's Risk Register for 2022 (mid-term review) included three non-critical risks related to: (1) difficulties in fulfilling the recruitment plan; (2) limited capacity for the management of the Horizon Europe Missions and (3) the possibility that the CEF Energy residual error rate might be above 2% again in the 2022 reporting year. With a view to reducing both the likelihood and impact of the documented risks, the Agency identified and implemented several mitigation measures. Monitoring and reporting activities have allowed the relevant services to continuously take stock of the

situation and reassess measures when needed.

Finally, prior to the publication of this report, the Agency conducted the 2023 risk management exercise. While results are not relevant here because they fall outside of the reporting period, it can be highlighted that the exercise showed a continuous integration of controls and mitigation measures in standard procedures. This has contributed to decreasing the likelihood and/ or impact of several risks, in particular of operational nature, and led to their acceptance. As a result, in the most recent years, the overall number of identified risks (all services comprised) has been constantly decreasing.

Exception and non-compliance events

In 2022, six deviations were documented. They referred to contractual procedures, as well as to issues of procedural nature related to the implementation of calls for proposals. Their significance was predominantly qualitative (i.e. legal considerations with limited or no financial impact). In spite of the reduced associated residual risks of each specific case, the deviations reported do not currently bear an effect on the effectiveness of the Agency's control system. With this said, the Agency will continue to monitor this matter closely, increase its awareness raising activities in this area, and introduce targeted measures, in view of lowering the number of deviations.

Internal Audit Service (IAS)

IAS audits in progress during 2022

Programme Implementation phase 1 (from work programme to call evaluation and grant preparation) – CEF Energy and Transport (2021-2027)

This multi-DG audit (ENER, MOVE and CINEA) assesses the design and implementation of CINEA's control strategy for CEF 2 in particular the processes put in place for the implementation of the delegated budget, as well as the supervision of the Agency by its parent DGs. At the end of 2022, the IAS had issued the Final Audit Report, which included two important recommendations, one specifically for CINEA, and another for DG ENER. The recommendations will be addressed by an action plan to be finalised as of the beginning of 2023, and subsequently implemented.

Implementation of the LIFE Programme (2021-2027)

This multi-DG audit (CLIMA, ENV, ENER and CINEA) was announced in July 2022, and focuses on the design and implementation of CINEA's control framework for implementing the LIFE programme, and the supervision of the parent DGs. At the end of the reporting year, the audit was in its fieldwork phase.

Implementation of the Innovation Fund

This multi-DG audit (CLIMA and CINEA) was announced in June 2022, and focuses on the design and implementation of CINEA's control framework for implementing the Innovation Fund, and the supervision of the parent DG. At the end of 2022, this audit was in its fieldwork phase.

[Performance framework for research](#)

This multi-DG audit (RTD, CNECT, JRC, CLIMA, MOVE, ENER as well as REA and CINEA) with a specific focus on Horizon Europe's Cluster 5 – Climate, Energy & Mobility, assesses the implementation of the performance framework for H2020 and the design of the new performance framework for Horizon Europe. At the end of 2022, the audit was in its final stages, notably the Draft Audit Report was issued to DG RTD.

[Horizon Europe Governance](#)

This multi-DG audit concerning DG RTD and several other Research family DGs and Executive Agencies (including CINEA), aims to determine if the implementation of the governance arrangements for Horizon Europe is effective. At the end of the reporting year, the audit was in its fieldwork phase.

[Reliability of performance information in EU programmes](#)

This multi-DG audit concerning DG BUDG and a sample of other DGs and Executive Agencies, assesses if the control system in place supports the Commission in building assurance on the reliability of performance information in its financial programmes. The Agency is not a main auditee but provided significant input, notably during the preliminary survey. At the end of 2022, the audit was entering its final stages.

[IAS closed audits with ongoing action plan implementation in 2022](#)

[Protection of personal data under the responsibility of the Executive Agencies and the Common Implementation Centre \(RTD\)](#)

This multi-DG audit assessed the processes in place (and their effectiveness) for the protection of personal data in all Executive Agencies as well as in the Common Implementation Centre (RTD). The Final Audit Report was issued in July 2022, and it included four recommendations for CINEA, none very important or critical. At the end of 2022, two recommendations were implemented, while the remaining two were still in progress, with implementation deadlines in 2023.

[Implementation of audit results in Horizon 2020](#)

This multi-DG audit (RTD, CNECT, ERCEA, REA, EISMEA and CINEA) examined the effectiveness of the implementation of ex-post audit results, with particular attention to sensitive and/ or contentious audits. Early in 2022, the IAS issued the Final Audit Report, which included four recommendations specifically for CINEA, notably a very important one related to staff awareness to the applicable Horizon guidance for the implementation of audits results and extensions. At the end of 2022, two out of the four recommendations were implemented, including the very important one. The remaining two were still in progress, with implementation deadlines in 2023.

[Management of experts in Horizon 2020 grants](#)

This multi-DG audit (RTD, CNECT, REA as well as former EASME and INEA) assessed if experts appointed under H2020 effectively supported the Commission in selecting the best proposals and monitoring project implementation. The action plan addressing the recommendations (including two specifically for the Agency) was implemented by CINEA

since the first half of 2021. The measures taken will be subject to a follow-up audit by the IAS to determine if the recommendations have been successfully addressed.

Implementation of anti-fraud actions in the research area

This multi-DG audit (RTD, CNECT, REA, ERCEA, as well as former EASME and INEA) assessed the effectiveness of the implementation of anti-fraud actions at the level of the Research Family and of the individual implementing bodies. The action plan addressing the recommendations (including one specifically for the Agency) was implemented by CINEA since the end of 2021. A future IAS follow-up audit should assess if the Agency has successfully addressed the recommendation.

European Court of Auditors (ECA)

Compliance audits

2021 Operating budget and the preparation of the annual accounts

The audit aimed to obtain reasonable assurance that the Agency's annual accounts were free of material misstatement, and that the underlying transactions are legal and regular. The ECA considered that the accounts presented fairly, in all material respects, the financial position of the Agency, the results of its operations, its cash flows, and the changes in net assets. The ECA also concluded that transactions underlying the accounts were legal and regular in all material respects for both revenue and payments.

2021 Operational budget

On the reliability of the 2021 operational accounts and the cut-off exercise, the auditors issued one observation related to the methodology for the calculation of the pre-financing for one Horizon 2020 project managed by the Agency, which resulted in a higher pre-financing. This finding does not carry a significant financial impact, given that the excessive amount is below the materiality level and will in any case be deducted when the final payment is submitted.

Statement of Assurance (SoA)

In the context of the 2021 Statement of Assurance, the ECA sampled 32 transactions, which represented a significant increase in relation the previous exercise, during which only 24 transactions had been sampled. By the end of 2022, the ECA had concluded all audits and issued all clearing letters. A number of clearing letters included findings of different nature and significance, most of which have been or will be the object of corrective measures. Finally, references to CEF were included in the 2021 Annual report of the ECA, including a case of irregularities in procurement procedures. This relates to an award decision by the contracting authority of a CEF project, which was not considered legal by the ECA. However, as the decision was not invalidated by the respective national Courts, the Commission considers the related costs eligible, and hence disagrees with the ECA.

For the 2022 SoA, 34 transactions were sampled, which represents again an increase in comparison with the previous exercise. Four clearing letters were issued by the end of the reporting period, two of them with no findings. The other two, related to Horizon 2020 projects, included a limited number of findings with low financial impact. Corrective measures will in any case be applied.

In relation to previous SoA exercises, there are no recommendations pending.

Special audits

ECA Special Audits in progress at the end of 2022

Intermodal Freight Transport

This audit, which in the Agency solely concerns CEF Transport, aims to determine if the EU's regulatory and financial support to intermodal freight transport have been effective so far. At the end of 2022, the Draft Special Report was issued, which included four recommendations (none critical), but only one more relevant to CINEA. In the beginning of 2023, the Agency will work with the parent DGs in the preparation of the official reply to the Draft Special Report.

Smart Cities

This audit assesses the effectiveness of EU-financed research projects and their impact in making cities smart(er). It also assesses if the design of Horizon Europe (including EU Missions) takes into account past lessons learnt. At the end of the reporting year, the audit was in its fieldwork phase, which highly focuses on the 18 Lighthouse projects managed by CINEA. The Special Report is expected in 2023.

Blue Energy & integrated maritime policy

This audit analyses if the EU's integrated maritime policy and EU-funded initiatives have contributed to sustainable growth in the marine renewable energy sector. At the end of 2022, the audit was in its fieldwork phase, and CINEA had been requested to provide details about several projects managed under Horizon, LIFE and EMF(A)F. The Special Report is expected in 2023.

Becoming the World's second biggest battery producer by 2024

This audit aims to determine if the Commission and Member States have been effective in developing a globally competitive and resource-efficient value chain for batteries in the EU. In CINEA, it mostly concerns Horizon 2020/ Europe. By the end of 2022, the ECA had issued a clearing letter, which was being assessed by the concerned DGs, as well as by the Agency. The Special Report is expected in 2023.

Fish Farming (Aquaculture)

This audit assesses the effectiveness of the European Maritime and Fisheries Fund (EMFF) support for aquaculture projects, identifying results, costs and environmental sustainability. At the end of 2022, the fieldwork was ongoing. The Special Report is expected in 2023.

Circular Economy

This audit examines the effectiveness of EU support to circular economy, focusing in particular in the design and production phases. In the Agency, this audit mostly concerns LIFE. The publication of the Special Report is expected in 2023.

ECA Special Audit closed with ongoing action plan implementation at the end 2022

Climate Mainstreaming

This audit assessed if the Commission reports relevant and reliable information on climate spending and on the progress towards the 20 % climate-mainstreaming target the 2014-2020 MFF. [Special Report 09/2022](#) was published in May 2022, highlighting some inconsistencies in applying the methodology for calculating climate spending. In 2022, the Agency has worked with the audited DGs for the follow-up actions related to this audit.

Innovation and Networks Executive Agency (INEA)

The ECA conducted this audit between 2018 and 2019, which assessed the performance of the former Innovation and Networks Executive Agency. [Special Report 19/2019](#) was published in November 2019. The Agency worked in cooperation with its parent DGs in the preparation of the action plan addressing the five recommendations issued in the context of this audit. Most actions have since then been implemented, with only one action still pending (with a deadline of December 2023). Implemented recommendations are currently under the scrutiny of the ECA, which is conducting a follow-up audit since July 2022.

ANNEX 9: Specific annexes related to 'Control results' and 'Assurance: Reservations'

1. Annex related to "Control results" - Table: Estimated risk at payment and at closure

EA CINEA	Payments made (2022;MEUR)	minus new prefinancing [plus retentions made] (in 2022;MEUR)	plus cleared prefinancing [minus retentions released and deductions of expenditure made by MS] (in 2022;MEUR)	Relevant expenditure (for 2022;MEUR)	Detected error rate or equivalent estimates	Estimated risk at payment (2022;MEUR)	Adjusted Average Recoveries and Corrections (adjusted ARC, %)	Estimated future corrections [and deductions] (for 2022;MEUR)	Estimated risk at Closure (2022;MEUR)
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10
Grants under direct Management (Financial Framework 2014-2020 - Programmes based on actual costs) - CEF Transport	1 972,26	- 804,98	1 125,54	2 292,81	1,72% - 1,72%	39,46 - 39,46	0,15% - 0,15%	3,36 - 3,36	36,10 - 36,10
Grants under direct Management (Financial Framework 2014-2020 - Programmes based on actual costs) - CEF Energy	392,08	- 60,31	156,74	488,51	2,12% - 2,12%	10,34 - 10,34	0,26% - 0,26%	1,25 - 1,25	9,09 - 9,09
Grants under direct Management (Financial Framework 2014-2020 - Programmes based on actual costs) - Horizon 2020	334,86	- 2,44	619,95	952,36	2,71% - 2,71%	25,81 - 25,81	0,71% - 0,71%	6,76 - 6,76	19,05 - 19,05
Grants under direct Management (Financial Framework 2014-2020 - Programmes based on actual costs) - LIFE	212,29	- 91,49	142,57	263,37	0,70% - 0,70%	1,84 - 1,84	0,08% - 0,08%	0,22 - 0,22	1,62 - 1,62
Grants under direct Management (Financial Framework 2014-2020 - Programmes based on actual costs) - EMFF	15,95	- 0,34	8,92	24,53	2,54% - 2,54%	0,62 - 0,62	0,20% - 0,20%	0,05 - 0,05	0,57 - 0,57
Grants under direct Management (Financial Framework 2021-2027 - Programmes based on actual costs) - CEF Transport	1 911,51	-1 911,51	0,00	0,00	0,00% - 0,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants under direct Management (Financial Framework 2021-2027 - Programmes based on actual costs) - CEF Energy	245,13	- 245,13	0,00	0,00	0,00% - 0,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants under direct Management (Financial Framework 2021-2027 - Programmes based on actual costs) - Horizon	1 455,37	-1 455,30	0,13	0,20	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants under direct Management (Financial Framework 2021-2027 - Programmes based on actual costs) - LIFE	195,95	- 195,90	0,08	0,13	1,00% - 2,00%	0,00 - 0,00	0,10% - 0,20%	0,00 - 0,00	0,00 - 0,00
Grants under direct Management (Financial Framework 2021-2027 - Programmes based on actual costs) - EMFAF	8,66	- 8,66	0,00	0,00	0,00% - 0,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants under direct Management (Programmes based on lump sums) - Innovation Fund	6,00	0,00	0,00	6,00	0,00% - 0,50%	0,00 - 0,03	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,03
Operational procurements - Horizon Europe / Horizon 2020	3,50	0,00	0,00	3,50	0,00% - 0,50%	0,00 - 0,02	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,02
Operational procurements - LIFE	1,78	- 0,41	0,00	1,37	0,00% - 0,50%	0,00 - 0,01	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,01
Operational procurements - EMFF/EMFAF	18,98	0,00	0,00	18,98	0,00% - 0,50%	0,00 - 0,09	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,09
Other (incl. Programme Support)	23,83	- 0,98	1,95	24,80	0,00% - 0,50%	0,00 - 0,12	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,12
Sub-total	6 798,15	-4 777,46	2 055,88	4 076,57		78,07 - 78,35	0,29% - 0,29%	11,64 - 11,64	66,44 - 66,71
operating budget	51,81	0,00	0,00	51,81	0,00% - 0,50%	0,00 - 0,26	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,26
total EA (operational + operating)	6 849,96	-4 777,46	2 055,88	4 128,37		78,07 - 78,61	0,28% - 0,28%	11,64 - 11,64	66,44 - 66,97
					Overall risk at payment in %	1,89% - 1,90% (7) / (5)		Overall risk at closure in %	1,61% - 1,62% (10) / (5)

Notes to the table (number of column concerned in brackets)

(6) In this column, we disclose the detected error rates calculated on a multi-annual basis. For H2020, in line with the Research and Innovation family (R&I Family), CINEA used as best estimation the expected representative detected error rate, based on errors detected by ex post audits on a Common Representative Sample of cost claims across the R&I Family (2.71%). For Horizon Europe in line with the R&I Family, the Agency has used detected and residual error rate of 2.00%. For LIFE 2021-2027, the Agency applied a range of 1%-2% detected error rate as a best estimation considering the detected error rate of the LIFE 2014-2020. For low-risk types of expenditure, where there are indications that the equivalent error rate might be close to 'zero' (e.g. administrative expenditure, operating subsidies to agencies), CINEA has used 0.5% following DG BUDG instructions.

(8) The historic average of recoveries and financial corrections (ARC) received from the central services is 0.19%. However, CINEA adjusted this value for grant management expenditure. The Average Recoveries and Corrections (ARC) are determined by comparing the auditable expenditure on a multi-annual basis with the total amount to be corrected. Audit results available for the AAR 2022 are the result of audits of relevant expenditure from 2021 or earlier. The amount of relevant expenditure available to be audited at the end of 2021 is compared to the audit corrections. The percentage of audit corrections compared to the auditable expenditure is the ARC. For Horizon Europe, the estimate Detected Error and Residual Error are 2%

For H2020, in line with the Research and Innovation family, CINEA adjusted this value for grant management expenditure and used as best estimation the difference between the R&I Family expected cumulative representative detected error rate (2.71%), and the CINEA residual error rate (2.00%). For Horizon Europe, the estimated detected error and residual error are 2%, with 0% ARC.

For other types of expenditures (procurement, experts, and operating budget), we assumed that the ex-post future corrections would be 0%.

The average amount of the implemented corrections over the past 3 years (2020-2022) is €5.6 million (0.15% of the average amount of relevant expenditure of that period), compared to an average amount of estimated future corrections during the same period of €12.3 million (0.32% of the average amount of relevant expenditure of that period). The deviation of 0.17% between the two averages is considered marginal and can be attributed to the detected errors identified. However, their implementation has not yet been issued as the relevant audit reports have been finalised towards the end of 2022.

2. Reservations issued in last year's annual activity report and lifted in 2022

N°	Country code	Ref	Title	Type	Reasons for Reservation	Financial impact (MEUR) in 2021	Reason for lifting the reservation
1	Not applicable	Not applicable	Connecting Europe Facility – Energy sector 2014-2020	Financial	Error rate > 2% due to occurrence of errors in the underlying transactions.	12,61	The residual error rate (RER) at the end of 2022 was 1.83%, thus below the materiality threshold of 2%. The reduction in the RER is due to the closure of all audits launched in 2022 with minimal audit findings. The increased audit coverage with limited errors detected reduced the RER under 2%. In addition, a number of awareness raising actions to improve ex ante controls and reduce the likelihood of ineligible expenditure being declared to and accepted by CINEA took place both within the Agency as well as with CEF Energy beneficiaries.

ANNEX 10: Reporting – Human resources, digital transformation and information management and sound environmental management

Human Resources

Objective: The European Climate, Infrastructure and Environment Executive Agency employs a competent and engaged workforce and contributes to gender equality at all levels of management to effectively deliver on the Agency's priorities and core business.

Indicator 1: ⁽³⁰⁾ Number and percentage of first female appointments to middle management positions ⁽³¹⁾

Source of data: CINEA organisational chart

Baseline (31/12/21)	Target ⁽³²⁾ (2022)	Latest known results (31/12/2022)
26% (5/19)	35%	37%(7/19)

Indicator 2: CINEA staff engagement index

Source of data: Commission staff survey

Baseline (pulse surveys 12/2020 & 1/2021)	Target (European Commission pulse survey 2022)	Latest known results (31/12/2022)
62% ⁽³³⁾	65%	72% (2021 EC Staff Survey)

⁽³⁰⁾ Seconded middle managers are part of the DGs' staff: The responsibility for achieving the targets is at DG level. The Agency is responsible for providing with a regular overview to its parent DGs of the gender representation in middle management within the Agency and coordinate between them.

⁽³¹⁾ The functions of head of unit and head of department are defined as middle management functions.

⁽³²⁾ 50% by 2024 in line with the Gender Equality Strategy 2020-2025.

⁽³³⁾ Former Agency INEA's result has been taken as a baseline.

Main outputs in 2022:

Description	Indicator	Target	Latest known results
Implementation of the actions foreseen for 2022 in the Multi-annual Human Resources strategy	Timely implementation of the actions foreseen for 2022	31 December 2022	A new multi-annual HR strategy common to all executive agencies (EAs) was elaborated in 2022. The consultation with the Common Staff Committee was launched in December 2022.
Implementation of the actions foreseen for 2022 in the Learning & Development Strategy 2021-2024	Timely implementation of the actions foreseen for 2022	31 December 2022	Learning and Development is included in the new multi-annual HR strategy common to all EAs, which was elaborated and sent for consultation to the Common Staff Committee in 2022.

Digital Transformation

Objective: The European Climate, Infrastructure and Environment Executive Agency is using innovative, trusted digital solutions for better policy-shaping, information management and administrative processes to become a truly digitally transformed, user-focused and data-driven Agency.

Indicator 1: Degree of implementation of the digital strategy principles by the most important IT solutions ⁽³⁴⁾

Source of data: CINEA

Baseline (2020)	Interim milestone (2022)	Target (2024)	Latest known results (31/12/2022)
59%	65%	65%	65%

Indicator 2: Percentage of implementation of the corporate principles for data governance for CINEA's key data assets

Source of data: CINEA

Baseline (2021)	Interim milestone (2022)	Target (2024)	Latest known results (31/12/2022)
50%	50%	80%	64%

Indicator 3: Percentage of staff attending awareness raising activities on data protection compliance

Source of data: CINEA

Baseline (2021)	Interim milestone (2022)	Target (2024)	Latest known results (31/12/2022)
62%	70%	100% of staff in posts for 6 months or longer	69 % of CINEA's staff in posts for 6 months or longer

⁽³⁴⁾ The European Commission Digital Strategy (C(2018)7118) calls on Commission services to digitally transform their business processes by developing new innovative digital solutions or make evolve the existing ones in line with the principles of the strategy. At the beginning of the year N+1, the Solution Owner and IT Investments Team will assess the progress made for the selected solutions. For each of the 3 solutions, a table will reflect – per principle - the progress achieved during the last year.

Main outputs in 2022:

Description	Indicator	Target	Latest known results
Delivery of data protection training	At least once per year	31 December 2022	Training sessions delivered on 20/9/2022 and on 15/11/2022

Sound Environmental management**Objective:**

The European Climate, Infrastructure and Environment Executive Agency takes account of its environmental impact in its actions and actively promotes measures to reduce the related day-to-day impact of the administration and its work and promotes climate and biodiversity mainstreaming, with the support of its respective EMAS Correspondents.

Main outputs in 2022:**I. More efficient use of resources (energy, water, paper):**

Output	Indicator	Target	Latest known result
Participation in the end of the year energy saving action, by closing down EA's buildings during the Christmas and New Year's holiday period.	1 building participating in the action	-1% in total energy consumption (compared with the previous year)	The Agency participated in the end of the year energy saving action. Temperatures were lowered to the minimum and therefore the target was met. In addition, CINEA's Building energy efficiency (PEB) progressed from "E-" in 2020 to "D+" in 2021.

II. Reducing CO₂, equivalent CO₂ and other atmospheric emissions

Output	Indicator	Target	Latest known result
Gradual increased use (and number of) VC ⁽³⁵⁾ meeting rooms for meetings with stakeholders (avoiding business trips) in the EA, in collaboration with DG SCIC, OIB and OIL	Number of VC meeting rooms: 2	Number of VC meeting rooms: at least 3 additional	VC equipment was installed in all HoU offices and in all meeting rooms.

⁽³⁵⁾ VC (Videoconferencing) room

III. Reducing and management of waste

Output	Indicator	Target	Latest known result
Implement the EC Guidelines for sustainable meetings and events , e.g. reduce/eliminate single use plastics, gadgets/gifts	All Agency meetings and events	100%	Guidelines were published and information sessions were promoted on CINEAnet.

IV. Promoting green public procurement (GPP)

Output	Indicator	Target	Latest known result
Staff awareness actions about GPP among EA's staff	100% of staff informed	Address all staff % and value (EUR) of "green" items ordered	All staff was addressed and 100% of green items were ordered via the Commission's office supply catalogue.

V. Supporting biodiversity

Output	Indicator	Target	Latest known result
Staff awareness actions on supporting biodiversity in urban sites (BXL) in collaboration with OIB	Ongoing action	Participate in staff awareness actions in collaboration with OIB (other sites)	Several awareness actions were promoted in coordination with the Green Team (e.g. 'Friday tip' and other news items on CINEAnet).

ANNEX 11: Implementation through national or international public-sector bodies and bodies governed by private law with a public sector mission – not applicable

ANNEX 12: EAMR of the Union Delegations – not applicable

ANNEX 13: Decentralised agencies and/or EU Trust Funds – not applicable

ANNEX 14: Reporting on the Recovery and Resilience Facility– not applicable