



Annual Activity Report 2022

annexes

Directorate-General for Communications
Networks, Content and Technology

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ANNEX 1: Statement of the Director(s) 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 CONNECT to the Director-General.

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, 31 March 2023.

Signed

MORTEN FJALLAND

⁽¹⁾ C(2017)2373 of 19.04.2017.

ANNEX 2: Performance tables

General objective: A Europe fit for the Digital Age

Impact indicator: Aggregate score in the Digital Economy and Society Index (DESI)

Source of the data: DESI (the baseline was recalculated, as the composition of the index changed in 2020)

Baseline (2019)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
43.1	Increase	Increase	52.3

Specific objective 1: Europe's strategic autonomy is ensured in critical technology areas

Related to spending programmes: Horizon 2020, Horizon Europe, Digital Europe, CEF - Digital

Result indicator 1.1: Number of EuroHPC systems installed in the EU ranking among the top 10 in the world

Source of the data: <https://www.top500.org>

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	3	4	2 HPC systems figure in the top 10 by the end of 2022 but the target for 2024 is likely to be reached. The interim milestone was not reached because the Barcelona pre-exascale supercomputer procurement procedure was finalised only mid-2022.

Result indicator 1.2: Number of quantum computers interconnected in the EuroHPC Joint Undertaking infrastructure

Source of the data: EuroHPC Joint Undertaking

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	1	5	2

Result indicator 1.3: Number of Member States having deployed QCI terrestrial networks**Source of the data:** Digital Europe Programme (DEP)

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	None	15 Member States	0 – 26 grants to deploy national projects were signed in Q4 2022 and will start in Q1 2023. The target is likely to be reached.


Result indicator 1.4: Value of production of electronic components, including microprocessors, by EU companies**Source of the data:** Financial reports and SIA (Semiconductor Industry Association)

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
EUR 40 billion	None	EUR 60 billion	EUR 50 billion (approximately)

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures**Source of the data:** CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective.

Main outputs in 2022:**New policy initiatives**

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
 European chips act	Adoption by the Commission	Q2 2022	Adopted in February COM(2022) 46 final

External communication actions

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Citizens having awareness of policy initiatives via CONNECT channels (main CONNECT policy website) *	Number of unique browsers (unique visitors) reading the main website	6000 unique browsers	6 930 unique browsers daily to the digital strategy website. A total of 2 348 248 visitors (unique browsers)

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Increase the followers and engagement rate of the main of the DigitalEU Twitter and Instagram channels, maintain the current baseline on Facebook*	<ul style="list-style-type: none"> • Number of followers • Engagement rate • Mentions • Clear branding through hashtags and visual identity • A coherent and visionary social media strategy, streamlined with the corporate approach 	<p>TWITTER: increase the current baseline (around 109 thousand) by 11% and have 120 thousand followers by the end of the year). Maintain the average of 6.000 interactions per month.</p> <p>INSTAGRAM: In 2022, the account should continue to be our main focus for growth and reach 15 thousand followers, while increasing the average interactions per post to 55.</p> <p>FACEBOOK: 2022 goals: A change in strategy to increase interactions (such as longer posts in blog-style and a change in posting rhythm). Maintain the current baseline (33.16) of followers.</p>	<p>TWITTER: Increase of 11.82% in followers to total of 124 536). Lower average interaction (around 4 000 per month), in part due to lowered communication around breakout of Russian war on Ukraine</p> <p>INSTAGRAM: More than 31% increase in followers, though, short of the targeted 15 thousand total. Higher than targeted average interaction around 62 per post</p> <p>FACEBOOK: A significant increase (almost 33%) in new fans, reaching 46,199, with an average of 400 interactions per month</p> <p>LINKEDIN: In this first year reaching 2,403 followers with an average of 173 interactions per month</p>

Web and social media indicators for external communication are cross-cutting through all specific objectives (marked with *)

Other important outputs

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
First work programme of the Smart Networks and Services Joint Undertaking	Adoption by the Commission	Q1 2022	The first Smart Networks and Services Joint Undertaking work programme WP was adopted by the Governing Board on 15 December 2021 and formally opened for submission on 18 January 2022.
First call for the Smart Networks and Services Joint Undertaking	Launch of the call under SNS JU under Horizon Europe (budget of EUR 240 million)	Q1 2022	Call opened on 18 January 2022 and closed on 27 April 2022, with a Commission budget of EUR 240 million.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Operational launch of the Smart Networks and Services Joint Undertaking	Recruitment of the Executive Director and staff, office selection, and signature of service agreements with horizontal Commission services (BUDG, HR, DIGIT, OIB)	Q3 2022	Service level agreements to recruit staff and equip them with necessary tools signed in Q3 2022. Nine staff were recruited in 2022 out of the planned 17. Executive Director recruitment process was launched in Q2 2022.
Launch of a first wave of Smart Networks and Services Joint Undertaking projects	<ul style="list-style-type: none"> - Launch minimum 30 projects addressing the performance and sustainability objectives of 6G - One flagship project representing a coordinated EU view of 6G and supporting standardisation - 1 large scale EU infrastructure for pilots and testbeds 	Q4 2022	<ul style="list-style-type: none"> - 35 projects have been launched, for a total amount of approximately EUR 250 million - one flagship project representing a coordinated EU view of 6G and supporting standardisation was implemented with contract starting on 1 January 2023. - 3 Infrastructure projects selected for EU validation. - Performance and sustainability are addressed through specific KPI's and KVI's (key value indicators).
Important project of common European interest on microelectronics	Completion of prenotification and preparation of projects under the IPCEI on microelectronics	Q1-3 2022	All projects were pre-notified by April 2022.
Launch of a first wave of the Key Digital Technologies Joint Undertaking projects for an operational EU budget of EUR 160 million	Launch minimum 15 projects addressing R&I in electronic components and systems	Q4 2022	15 projects were selected with a total EU budget of approximately EUR 180 million. These projects were launched between November 2022 and February 2023.
EuroQCI initiative	Launch of calls and signature of grants under Connecting Europe Facility (cross-border linking of national quantum communication infrastructures – budget of EUR 200 million)	Q3 2022	The call was launched in Q4 2022 and will be closed in Q1 2023. The decision to postpone the EuroQCI call follows the delay in the launch of the first EuroQCI satellite, taken together with DEFIS (and as requested by Member States).
Launch of the destination Earth initiative	Signature of the Contribution Agreements between CONNECT and the ESA, ECMWF and EUMETSAT and official launch of the initiative	Q1 2022	Contribution agreements signed in December 2021. The official launch of the initiative took place on 30 March 2022.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
European Blockchain Partnership (EBP) and the European Blockchain Services Infrastructure (EBSI)	Further joint development and support to deployment of EBSI and its use cases, as well as the launch of a regulatory sandbox, through procurement Launch of the call for proposals to support EBSI and use cases in MS, support to standardization activities.	All along 2022 Q1 2022	During 2022, the European Commission continued the deployment of EBSI. The users of its services increased via a dedicated early adopters' programme. The European blockchain regulatory sandbox was procured by 2022 and its first call was published at the beginning of 2023 (14 February 2023). The call for proposals to support further EBSI deployment was launched in Q2, coordinated with other topics, which required the timing to be delayed.
Startup Europe	A new wave of Startup Europe projects launched under horizon Europe in cooperation with the European innovation council and the European innovation ecosystem programme.	Q3 2022	3 new Startup Europe projects were launched in December 2022. The grant preparation process in EISMEA took longer than planned.
Horizon Europe	Signature of grant agreements under the horizon Europe programme in cluster 3 (civil security for society, call increased cybersecurity) – budget of EUR 67.5 million); 14 projects	Q2 2022	15 projects grant agreements were signed in June 2022.
Horizon Europe	Signature of grant agreements under the horizon Europe programme in cluster 4 (digital, industry and space, 4 calls) budget of EUR 658.9 million); around 124 projects	Q2 2022	135 projects grant agreements were signed between May and September 2022. Only 11 were signed after the time-to-grant limit due to additional delay in the time-to-inform because of the obligation to inform the Programme Committee in advance and the non-respect of deadlines by the consortia. Additionally, nine projects were signed out of the reserve list in Q4 2022.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Horizon Europe	Signature of grant agreements under the horizon Europe programme in cluster 4 (digital, industry and space, 1 call) budget of EUR 51 million); around 13 projects	Q3 2022	18 projects grant agreements were signed between August and November 2022. Five projects were signed after the time-to-grant deadline because of security issues. Two additional projects are still pending.
Horizon Europe	Signature of grant agreements under the horizon Europe programme in cluster 4 (digital, industry and space, 4 calls) budget of EUR 401 million); around 60 projects	Q4 2022	64 projects grant agreements were signed between September and December 2022. Only one was signed slightly after the time-to-grant deadline.
Horizon Europe	Launch of a call under the horizon Europe programme in cluster 3 (civil security for society, call increased cybersecurity) – budget of EUR 67.3 million)	Q2 2022	Calls launched as scheduled.
Horizon Europe	Launch of 2 calls under the horizon Europe programme in cluster 4 (digital, industry and space) budget of EUR 175.5 million)	Q2 2022	Calls launched as scheduled.
Digital Europe	Signature of grant agreements under the digital Europe programme (from the first set of launched calls, 6 calls) budget of EUR 548 million)	Q4 2022	180 projects grant agreements were signed as scheduled. 49 were after the time-to-grant deadline because of: non respect of deadlines by the consortia, need of IT intervention and late arrival of documents to check ownership control.
Digital Europe	Launch of the second set of calls under the digital Europe programme for a budget of EUR 313 million)	Q1 2022	Calls launched as scheduled.
Digital Europe	Signature of grant agreements under digital Europe for at least a budget of EUR 200 million of the second set of calls	Q4 2022	25 projects grant agreements were signed between November and December 2022. Two additional grant agreements are still pending, within the time-to-grant. The budget was EUR 222 million.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Digital Europe	Launch of calls under digital Europe programme for a budget of EUR 118 million)	Q3 2022	Most of the calls were launched as scheduled. One was delayed to modify the conditions of the call document. Additionally, 2 extra calls were launched.
Digital Europe	Signature of grant agreements under the Digital Europe (6 calls) budget of EUR 548 million)	Q4 2022	The Digital Europe grant agreements in this row are covered by the first Digital Europe output in this table.

Specific objective 2: A European single market for data where data can flow for the benefit of all and where rules for access and use of data are fair, practical and clear

Related to spending programmes: Horizon Europe, Digital Europe

Result indicator 2.1: Impact of the data economy on EU GDP

Source of the data: European data market monitoring tool

Baseline (2018)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
Estimated impact of the data economy on EU GDP: 2.4%	None	Estimated impact of the data economy on EU GDP to at least 3.6%	Estimated impact of the data economy on EU GDP was 3.9 % in 2022

Result indicator 2.2: Aggregated data volume flowing among EU Member States

Source of the data: IDC data in conjunction with JRC and Data Flow Mapping Study

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
10 Zettabytes	15% increase compared to the baseline	30% increase compared to the baseline	15 Zettabytes (increase of 50%)

Result indicator 2.3: Scale up cross-border exchange of health data; link and use, through secure, federated repositories, specific kinds of health information, such as EHRs and digital health images, in compliance with the GDPR

Source of the data: Reports of the eHealth Network

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
Some Member States exchange health data on e-prescriptions and patient summaries, however no exchange possible relating to laboratory tests, medical images and discharge letters	Common EU technical Specifications developed for the secure exchange of data in new health domains: laboratory tests, medical images and discharge letters	Start cross-border electronic exchanges through eHDSI of laboratory results, medical images, and discharge letters	The delivery of exchange format structure specifications in the two mainstream standards (CDA, FHIR) for the three Electronic Health Record data categories took place at the end of 2022. The subsequent work on technical specifications is dependent on eHealth Network and Member States: draft common technical specifications for medical images and discharge letters are in an advanced phase of development by Member States technical groups and will be presented to the eHealth Network for formal approval during 2023. For laboratory tests, these are still in preparation Member States by the technical teams.

Result indicator 2.4: Market share of European providers in the European cloud market

Source of the data: Synergy Research Group

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
1%	More than 3%	More than 5%	3.5%

Result indicator 2.5: Number of European Data Marketplaces**Source of the data:** European data market monitoring tool


Baseline (2019)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
12 European data marketplaces	17 European data marketplaces	30 European data marketplaces	14 European data marketplaces (in EU27) have been registered in the European Data Market landscaping database. The interim milestone was not reached and the target will no longer be reached based on the latest trends in the EU data economy. Namely, data sharing and data exchanges no longer happen in dedicated data marketplaces but at a massive scale via ad hoc 'marketplaces' of individual companies and organisations that hold datasets for further reuse. Basically, there are as many data marketplaces as there are companies offering datasets for reuse.

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures**Source of the data:** CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective.

Main outputs in 2022:

New policy initiatives

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
 Data act	Adoption by the Commission	Q1 2022	Adopted in February COM(2022) 68 final

External communication actions

Output	Indicator	Target	Latest known results (situation on 31/12/2022)

For the cross-cutting external communications actions see rows 1 and 2 of the table of outputs of specific objective 1 (marked with *)

Other important outputs

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
High value datasets Implementing Act	Adoption by the Commission	Q1 2022	Adopted in December because of because of waiting for the Court clarifying the accessibility regime of beneficial ownership data. Commission implementing Regulation (EU) 2023/128
Report on the evaluation of the Regulation on the free flow of non-personal data	Submission to the European Parliament, to the Council and to the European Economic and Social Committee	Q4 2022	The Commission's report on the evaluation of the implementation of the Free Flow of Non-Personal Data Regulation is still in preparation because of the need to identify precisely remaining data localisation requirements in the Member States, and further engagement with Member States on the implementation of some FFD provisions. It is, however, in its final stages

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Important project of common European interest on next generation cloud and edge	Start of activities	Q3 2022	In April 2022, the IPCEI-CIS was pre-notified by 12 Member States (BE, CZ, DE, ES, FR, IT, LV, LU, HU, LU, NL, PL, SI) to the European Commission. Its assessment is currently underway by the Commission's services.
European Alliance for Industrial Data, Edge and Cloud	First general assembly Submission of first deliverables	Q1 2022 Q3 2022	After a general kick-off meeting which took place later than planned, in December 2021, the First General Assembly happened on 1 December 2022 (it was impossible to meet physically before because of the COVID-19 pandemic). Alliance members needed more time to finish the first deliverables, but publication of these deliverables is now close.
EU Cloud Rulebook	Publication	Q4 2022	Publication of the EU Cloud Rulebook was pushed to 2023 so that it could build on the conclusions of the Member States cloud cooperation group of the Cloud Alliance. The final meeting of this working group took place in January 2023. Preparation of the Rulebook is now close to completion.

Specific objective 3: Artificial intelligence that is human-centric, ethical, sustainable and that respects EU values

Related to spending programmes: Horizon 2020, Horizon Europe, Digital Europe

Result indicator 3.1: The share of EU companies using AI

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
25% (new baseline (2021): 8%) ⁽²⁾	Increase	35% (new target: 30%) ⁽³⁾	Latest known figure is the reported new baseline (2021). The new measurement will be done in 2023

Result indicator 3.2: Number of EDIHs specialised in AI

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	20	40, with at least one in every Member State	127 EDIHs include AI among the services they provide. The number of AI-specialised hubs currently under discussion with Member States

⁽²⁾ As a result of the new methodology and the new source of the data, the baseline needed to be adapted.

⁽³⁾ As a result of the new methodology and the new source of the data, the target needed to be adapted.

Result indicator 3.3: Number of testing and experimentation facility sites in AI supported through Digital Europe Programme

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	None	15	At the end of 2022 contracts for five projects on testing and experimentation facilities sites in artificial intelligence (TEFs) were signed under the Digital Europe programme. The approach to support sites was modified. Instead of funding individual projects per site, which would have required a large budget, it was decided to fund larger projects supporting several sites/nodes. With this new approach, it is expected that by 2024, the sectorial TEFs will set up 23 nodes and 16 satellites/sub-nodes. As each node is in general linked to one site, the number of sites receiving support from Digital Europe programme would exceed 15 sites, which was a conservative estimate of the minimum number of sites.

Result indicator 3.4: Number of new installations of industrial robots in the EU

Source of the data: International Federation of Robotics (IFR)

Baseline (2018)	Interim Milestone (2022)	Target (2024)	Latest known results (2021)
64 000	None	75 000	67 000

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures


Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective.

Main outputs in 2022:

Other important outputs

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Launch of Member States' Group on Artificial Intelligence and Digitisation of Business	High-level meetings	Q1 and Q3 2022	The Member States' Group on Artificial Intelligence and Digitisation of Business was launched for organisational reasons in Q2 and convened again in Q4.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
 Proposal for a Regulation laying down requirements for artificial intelligence (AI act)	Agreement of the co-legislators	Estimated for Q4 2022	The Council has agreed a General approach on 6 December 2022, whilst the European Parliament is currently planning to reach a position by March 2023.
External communication actions			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
4 th European AI assembly	Number of participants	300-350 if in-situ 800-1000 if online or hybrid	Postponed to 2023 given the slow progress of the artificial intelligence act in the European Parliament.
For the cross-cutting external communications actions see rows 1 and 2 of the table of outputs of specific objective 1 (marked with *)			

Specific objective 4: A fair, competitive and resource efficient digital economy

Related to spending programmes: Horizon 2020, Horizon Europe, Digital Europe, CEF - Digital

Result indicator 4.1: Availability of 5G connectivity underpinning future Smart Network and Services platforms across Europe

Source of the data: European 5G Observatory

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
5G in at least one city per Member State	30%	85%	90%

Result indicator 4.2: Increase of the energy efficiency of European data centres

Source of the data: JRC/EU Code of Conduct on Data Centre Energy Efficiency (reporting requirements)

Baseline (2020)	Interim Milestone (2022)	Target (year)	Latest known results (2022)
PUE ⁽⁴⁾ 1.8	PUE 1.6	PUE 1.3	PUE 1.6

⁽⁴⁾ Power usage effectiveness.

Result indicator 4.3: Number of businesses and public sector entities which have used the European Digital Innovation Hub's services

Source of the data: CONNET

Baseline (2021)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
1 000	4 000	28 000	0 - most of EDIH started their operations on 1 January 2023

Result indicator 4.4: Number of persons who have received training to acquire advanced digital skills supported by the Digital Europe Programme

Source of the data: CONNECT

Baseline (2019)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
0	25 000	100 000	0 - projects started Q4 2022 and Q1 2023

Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

Source of the data: CONNECT


Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective

Main outputs in 2022:

Initiatives linked to regulatory simplification and burden reduction

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Review of the Broadband Cost Reduction Directive	Adoption by the Commission	Q2 2022 PLAN/2020/7443	Postponed to Q1 2023.

Public consultations			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Targeted consultation on the Delegated Act on effective access to emergency services ('112')	Closure of the targeted consultation	Q1 2022	The targeted consultations took place between January to March 2022. A survey was circulated, two workshops with 203 participants and bilateral meetings took place with selected stakeholders that represent telecom providers, consumer associations, standardisation bodies, and Member States authorities (ministries and public safety answering points).
External communication actions			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
For the cross-cutting external communications actions see rows 1 and 2 of the table of outputs of specific objective 1 (marked with *)			
Other important outputs			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Signature to the European Declaration on Digital rights and principles by the European Parliament and the Council	Signature	Q2 2022	The European Declaration on Digital rights and principles was signed by the European Parliament and the Council 15 December. The reason for the delay was because the examination of the text by the Council was only completed in June 2022 and they agreed their position in July, following which there were a number of technical meetings and 2 trilateral meetings that led to an agreement in November.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Launch of the 'early wave' of connecting Europe facility - digital projects in relation to 5G coverage of cross border corridors	<ul style="list-style-type: none"> - at least 3 projects launched with a budget of EUR 100 million - targeting in total 1000 km of deployment as final project outcome 	Q4 2022	<ul style="list-style-type: none"> - 15 projects grant agreements for CEF Digital deployment projects, works and inception studies, were signed in 2022, representing a combined amount of EUR 43.1 million - 2.500 km of corridors, road and rail, to be deployed as part of 7 CEF funded deployment projects signed in 2022 (the 8 other projects are inception studies preparing for deployment works projects in 2024) <p>A second call has been launched on 12 October.</p>
Set-up the Initial Network of European Digital Innovation Hubs (EDIH) from all designated candidate entities	Operation of the EDIHs under Digital Europe	Q4 2022	Grant agreements were signed with over 120 EDIHs. Most of them started operations on 1 January 2023.
Expansion of 5G coverage towards the digital decade objectives	5G coverage of EU population at least 22% (14% in 2021)	Q4 2022	5G coverage of EU-27 population reached 72% on 30 September 2022.
 Digital Services Act and Digital Markets Act	Agreement of the co-legislators	Q2 2022	<p>Digital Services Act: agreement of the co-legislators reached in April 2022.</p> <p>Regulation (EU) 2022/2065 of the European Parliament and the Council of 19 October 2022</p> <p>Digital Markets Act: agreement of the co-legislators reached in March 2022.</p> <p>Regulation (EU) 2022/1925 of the European Parliament and the Council of 14 September 2022</p>
Recommendation replacing the next generation access (NGA) and the non-discrimination and costing methodologies (NDCM) recommendations	Adoption by the Commission	Q2/3 2022	The Gigabit Recommendation was being finalised for internal consultations, prior to being sent to BEREC for its opinion. Adoption foreseen for Q2 2023.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Secured wi-fi authentication services	Launch of the operational service	Mid-2022	The test trial of the secure authentication service was finalised in 2022 and followed by a data protection impact assessment and IT security plan due to be completed by Q1 2023. The launch of the service is subject to the successful completion of those assessments.
Digital partnership with Japan	Signature	Q2/3 2022	Launched on 12 May 2022.
Digital partnership with Korea	Signature	Q4 2022	Launched on 28 November 2022.
Digital partnership with Singapore	Signature	Q4 2022	The substance of the partnership was concluded on 14 December 2022 and the signature is expected for early 2023.
Roaming guidelines at wholesale and retail level	Adoption	Q4 2022	Retail and wholesale guidelines adopted by December 2022.

Specific objective 5: A cyber resilient Europe, promoting digital identities for all Europeans, while protecting their e-privacy

Related to spending programmes: Horizon Europe, Digital Europe

Result indicator 5.1: Market uptake of the European security certification scheme

Source of the data: ENISA, national accreditation bodies, market studies

Baseline (2020)	Interim Milestone (2023)	Target (2024)	Latest known results (2022)
Number of certificates issued in the first year of the operation of European cybersecurity certification schemes (first schemes expected to be operational in 2021)	15% increase in the total number of valid certificates	25% increase in the total number of valid certificates	No EU cybersecurity certification scheme was yet adopted. The first draft Implementing Regulation establishing the Common Criteria-based European cybersecurity certification scheme (EUCC) has been prepared in 2022 and awaits launching of the Interservice Consultation.

Result indicator 5.2: Number of actions (5) launched under the Cybersecurity Competence Centre, including the deployment of common cyber infrastructures

Source of the data: Cyber competence centre reports

Baseline (2021)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
1 action launched	3 actions launched	7 actions launched	13 actions launched


Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective

Main outputs in 2022:

New policy initiatives

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
 European cyber resilience act	Adoption by the Commission	Q3 2022	Adopted in September COM(2022) 454 final

Public consultations




Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Open public consultation on European cyber resilience act	Close of public consultation	Q2 2022	The open public consultation took place from 16 March to 25 May 2022 on 'Have your say'. 109 contributions were received.

External communication actions

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
For the cross-cutting external communications actions see rows 1 and 2 of the table of outputs of specific objective 1 (marked with *)			

(⁵) The term 'actions' means here projects (supporting cybersecurity infrastructures, services, skills, etc), funded with budget from the EU and possibly also from Member States, managed by the Cybersecurity Competence Centre.

Other important outputs

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Commission implementing act for the adoption of the EU cybersecurity certification scheme for cloud services	Adoption by the Commission	Q2 2022	No adoption yet. Progress was made on the discussion regarding the inclusion of 'sovereignty criteria'.
 Amendment of Regulation (EU) 910/2014 as regards establishing a framework for a European digital identity	Agreement of the co-legislators	Q4 2022	The Council adopted its general approach in November 2022 and the vote in Parliament is expected in Q1 2023. It is expected that the agreement of the co-legislators should be found by Q4 2023.
 Proposal for a Directive on measures for a high common level of cybersecurity across the Union, repealing Directive (EU) 2016/1148 (NIS Directive)	Agreement of the co-legislators	Q2 2022	Political agreement was reached in May, formal adoption in November 2022. Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022
 Proposal for a Regulation concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on privacy and electronic communications)	Agreement of the co-legislators	Q3/Q4 2022	Progress was made in 2022. The Commission will continue to support the trilogue negotiations with the European Parliament and the Council of the European Union in 2023.

Specific objective 6: A modern, open and pluralistic society in the digital age where online disinformation is countered and diverse cultural content is available to all Europeans

Related to spending programmes: Horizon Europe, Creative Europe - Media, CEF – Digital, InvestEU

Result indicator 6.1: Share of European films in the catalogue of on-demand services

Source of the data: European Audiovisual Observatory

Baseline (2019)	Interim Milestone (2020)	Target (2024)	Latest known results (2022)
21% average share of non-national European works originating from ECTT countries, of which 11,7% average share of EU27 non-national European works	None	25% average share of non-national European works originating from ECTT countries, of which 14% average share of EU27 non-national European works	25% for European non-national works originating from ECTT countries of which 15% average share of EU27 non-national works.

Result indicator 6.2: Impact of measures tackling online disinformation, including the implementation of the Code of Practice

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2021)	Target (2024)	Latest known results (2022)
Establishment of European Digital Media Observatory (central platform) No national/regional hub in any Member State	Presence of national/regional hubs in 6-7 Member States	Presence of national/regional hubs in all Member States	There are 14 active EDMO's hubs which cover the whole EU.

Result indicator 6.3: Public Sector Bodies with accessible websites and mobile applications (allowing persons with disabilities to navigate, understand and interact with the content and services offered by such websites and apps, on an equal basis with other users)

Source of the data: CONNECT

Baseline (N/A)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
(N/A)	First set of Member States' monitoring reports by Dec 2021, and every 3 years thereafter; availability of indicator in 2022 after analysis of Member States' reports together with results of review of Web Accessibility Directive, due by June 2022	Positive trend, based on second set of Member States' monitoring reports, due in December 2024	Positive trend towards more accessible websites and mobile apps, based on the first review of the Web Accessibility Directive and the first set of MS reports


Result indicator: Proportion of proposed legislative revisions that include burden reduction measures

Source of the data: CONNECT

Baseline (2020)	Interim Milestone (2022)	Target (2024)	Latest known results (2022)
N/A	Positive trend	Positive trend	No legislative revisions were proposed under this specific objective.

Main outputs in 2022:

New policy initiatives

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
 European media freedom act (EMFA)	Adoption by the Commission	Q3 2022 PLAN/2021/11882	Adopted in September COM(2022) 457 final
Update of the better internet for children strategy (BIK strategy)	Adoption by the Commission	Q2 2022 PLAN/2021/11233	Adopted in May COM(2022) 212 final

Evaluations and fitness checks

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Web accessibility directive review	Adoption by the Commission	Q2 2022 PLAN/2020/8486	Adopted on December SWD(2022) 410 final

Public consultations

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Open public consultation on European media freedom act	Closure of the open public consultation	Q1 2022	Open public consultation published on 10 January 2022 was open until 25 March 2022 on 'Have your say'. 1470 contributions were received.

Enforcement actions			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Assessment of Member States' transposition of Directive on copyright in the digital single market	100% of the completeness checks	Q4 2022	By the end of 2022, 20 Member States notified complete transposition of the Directive on copyright in the DSM. CONNECT carried out the completeness checks for these Member States.
Assessment of Member States' transposition of the Directive on online television and radio programs	100% of the completeness checks	Q4 2022	By the end of 2022, 21 Member States notified complete transposition of the Directive on online TV and radio programmes. CONNECT carried out the completeness checks for all these Member States.
External communication actions			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Communication actions in the context of the European Year of Youth	Number of actions	At least 5 actions	Five external communication actions were taken in the context of the European Year of Youth.
For the cross-cutting external communications actions see rows 1 and 2 of the table of outputs of specific objective 1 (marked with *)			
Other important outputs			
Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Strengthen commitments under the EU code of practice on disinformation	Signature by the code signatories	Q1 2022	The new code of practice on disinformation was signed on the 16 June 2022 because of a prolonged drafting by the signatories of the Code.
AVMSD guidelines regarding the scope of Member States' reports on media literacy measures	Adoption by the Commission	Q3 2022	The interservice consultation on the guidelines closed in January 2023 because of delays in the implementation of the AVMSD and the earlier consultation and drafting process. They are ready for adoption at the beginning of 2023.
Rule of law report, media freedom and pluralism parts	Adoption by the Commission	Q3 2022	Adopted in July COM(2022) 500 final
European Student eCard core service platform (CEF project EDSSI managed by HADEA)	Core service platform functional	Q3 2022	Postponed to Q3 2023 because of a number of features in development of the CSP are not yet in production, and the assessment of the current project by HADEA is still ongoing. The project is running until end of August 2023.

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Report on the application of the Portability Regulation	Publication	Q2 2022	Report published in June 2022.
Report on the copyright and disabilities Directive	Publication	Q1 2022	Report published in April 2022.
Report on the application of the 2021 term of protection Directive	Publication	Q2 2022	The report has not been published yet.

ANNEX 3: Draft annual accounts and financial reports

Annex 3 Financial Reports - DG CNECT - 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
<p>1) <i>Difference in total amounts of Income - Table 7 and Ageing balance of RO's - Table 9. The difference in total amount of Ageing balance of RO's € 24 876 421,20 in table 9 and total amount of Income EUR 24 804 624,03 in table 7 is related to 15 RO local keys (partial waivers) with total amount of EUR -71 797,17 (not included in table 9). The reason for having this difference is explained on page 15 of the user's guide of Annex 3 of the AAR2021: "It is important to note that this report only refers to BGUE, budget regime 'I' (contrary to Table 9 which includes CGUE as well).</i></p> <p>2) <i>The FPA listed in Table 15 appears in Compass but did not appear in any BO report</i></p>

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2022 (in Mio €) for DG CNECT					
			Commitment appropriations authorised*	Commitments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	4.10	1.83	44.55 %
	01 02	Horizon Europe	1,250.95	1,247.25	99.70 %
	01 20	Pilot projects, preparatory actions, prerogatives and other actions	8.08	8.08	100.00 %
Total Title 01			1,263.13	1,257.15	99.53 %
Title 02 European Strategic Investments					
02	02 01	Support administrative expenditure of the "European Strategic Investments" cluster	7.02	6.75	96.17 %
	02 02	InvestEU Fund	0.00	0.00	0.00 %
	02 03	Connecting Europe Facility (CEF)	3.47	3.47	99.99 %
	02 04	Digital Europe programme	996.74	996.74	100.00 %
	02 10	Decentralised agencies	47.01	46.64	99.21 %
	02 20	Pilot projects, preparatory actions, prerogatives and other actions	2.72	2.72	99.88 %
Total Title 02			1,056.96	1,056.32	99.94 %
Title 03 Single Market					
03	03 02	Single Market Programme	0.00	0.00	0.00 %
	03 20	Pilot projects, preparatory actions, prerogatives and other actions	0.69	0.69	100.00 %
Total Title 03			0.69	0.69	100.00 %
Title 05 Regional Development and Cohesion					
05	05 02	European Regional Development Fund (ERDF)	0.47	0.47	100.00 %
	05 03	Cohesion Fund (CF)	0.08	0.08	100.00 %
Total Title 05			0.56	0.56	100.00 %
Title 06 Recovery and Resilience					
06	06 07	Emergency support within the Union	0.92	0.00	0.00 %
Total Title 06			0.92	0.00	0.00 %
Title 07 Investing in People, Social Cohesion and Values					
07	07 01	Support administrative expenditure of the "Investing in People, Social Cohesion and Values" cluster	1.24	1.21	98.11 %
	07 05	Creative Europe	6.03	3.29	54.60 %
	07 20	Pilot projects, preparatory actions, prerogatives and other actions	40.13	40.05	99.78 %
Total Title 07			47.40	44.55	93.99 %
Title 14 External Action					
14	14 20	Pilot projects, preparatory actions, prerogatives and other actions	2.06	2.06	100.00 %
Total Title 14			2.06	2.06	100.00 %
Title 20 Administrative expenditure of the European Commission					
20	20 02	Other staff and expenditure relating to persons	0.10	0.10	100.00 %
	20 04	Information and communication technology related expenditure	0.29	0.29	100.00 %
Total Title 20			0.39	0.39	100.00 %
Title 30 Reserves					
30	30 02	Reserves for operational expenditure	0.00	0.00	0.00 %
Total Title 30			0.00	0.00	0.00 %
Total Excluding NGEU			2,372.10	2,361.71	99.56 %
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.00	0.00	0.00 %
	01 02	Horizon Europe	68.62	68.62	100.00 %
Total Title 01			68.62	68.62	100.00 %
Total NGEU Only			68.62	68.62	100.00 %
Total DG CNECT			2,440.71	2,430.33	99.57 %

* 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

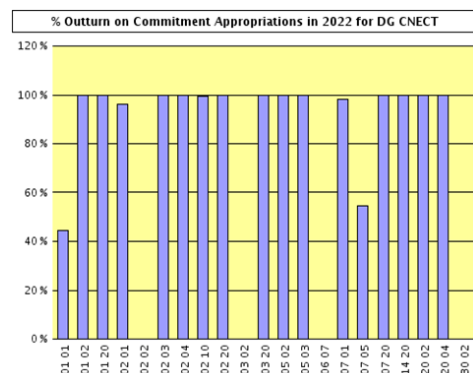


TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS in 2022 (in Mio €) for DG CNECT					
			Payment appropriations authorised	Payments made	%
			1	2	3=2/1
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	6.55	2.73	41.79 %
	01 02	Horizon Europe	1,625.50	1,380.45	84.92 %
	01 20	Pilot projects, preparatory actions, prerogatives and other actions	3.66	3.66	99.86 %
Total Title 01			1,635.71	1,386.84	84.79%
Title 02 European Strategic Investments					
02	02 01	Support administrative expenditure of the "European Strategic Investments" cluster	10.69	4.33	40.51 %
	02 02	InvestEU Fund	28.04	28.04	100.00 %
	02 03	Connecting Europe Facility (CEF)	42.33	42.32	100.00 %
	02 04	Digital Europe programme	673.07	673.07	100.00 %
	02 10	Decentralised agencies	32.01	31.64	98.84 %
	02 20	Pilot projects, preparatory actions, prerogatives and other actions	7.29	6.83	93.65 %
Total Title 02			793.43	786.24	99.09%
Title 03 Single Market					
03	03 02	Single Market Programme	0.00	0.00	0.00 %
	03 20	Pilot projects, preparatory actions, prerogatives and other actions	0.20	0.20	100.00 %
Total Title 03			0.20	0.20	100.00%
Title 05 Regional Development and Cohesion					
05	05 02	European Regional Development Fund (ERDF)	0.34	0.34	100.00 %
	05 03	Cohesion Fund (CF)	0.30	0.30	100.00 %
Total Title 05			0.64	0.64	100.00%
Title 06 Recovery and Resilience					
06	06 07	Emergency support within the Union	14.08	13.86	98.46 %
Total Title 06			14.08	13.86	98.46%
Title 07 Investing in People, Social Cohesion and Values					
07	07 01	Support administrative expenditure of the "Investing in People, Social Cohesion and Values" cluster	2.18	0.86	39.18 %
	07 05	Creative Europe	5.19	2.45	47.11 %
	07 20	Pilot projects, preparatory actions, prerogatives and other actions	36.70	36.61	99.74 %
Total Title 07			44.08	39.91	90.55%
Title 14 External Action					
14	14 20	Pilot projects, preparatory actions, prerogatives and other actions	2.75	2.75	100.00 %
Total Title 14			2.75	2.75	100.00%
Title 20 Administrative expenditure of the European Commission					
20	20 02	Other staff and expenditure relating to persons	0.10	0.01	12.79 %
	20 04	Information and communication technology related expenditure	0.61	0.38	61.87 %
Total Title 20			0.71	0.39	54.77%
Title 30 Reserves					
30	30 02	Reserves for operational expenditure	0.00	0.00	0.00 %
Total Title 30			0.00	0.00	0.00%
Total Excluding NGEU			2,491.60	2,230.82	89.53%
Title 01 Research and Innovation					
01	01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.00	0.00	0.00 %
	01 02	Horizon Europe	100.83	100.83	100.00 %
Total Title 01			100.83	100.83	100.00%
Total NGEU Only			100.83	100.83	100.00%
Total DG CNECT			2,592.42	2,331.65	89.94 %

* 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).

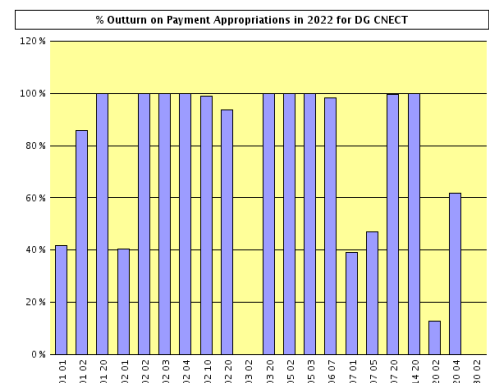


TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
Chapter	Commitments to be settled				Commitments to be settled from financial years previous to 2021	Total of commitments to be settled at end of financial year 2022	Total of commitments to be settled at end of financial year 2021	
	Commitments	Payments	RAL	% to be settled				
	1	2	3-1-2	4-1-2(1)				
01 01	Support administrative expenditure of the "Research and Innovation" cluster	1.83	0.42	1.40	76.89%	0.00	1.40	2.46
01 02	Horizon Europe	1,247.25	349.90	897.35	71.95%	960.94	1,858.28	1,998.10
01 20	Pilot projects, preparatory actions, prerogatives and other actions	8.08	0.00	8.08	100.00%	6.03	14.11	9.69
Total Title 01		1,257.15	350.33	906.83	72.13%	966.96	1,873.79	2,010.25

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
02 01	Support administrative expenditure of the "European Strategic Investments" cluster	6.75	0.88	5.87	87.02%	0.00	5.87	3.68
02 02	InvestEU Fund	0.00	0.00	0.00	0.00%	99.55	99.55	127.59
02 03	Connecting Europe Facility (CEF)	3.47	0.00	3.47	100.00%	80.31	83.78	122.64
02 04	Digital Europe programme	996.74	242.24	754.50	75.70%	508.35	1,262.85	939.23
02 10	Decentralised agencies	46.64	31.64	15.00	32.16%	0.00	15.00	0.00
02 20	Pilot projects, preparatory actions, prerogatives and other actions	2.72	0.19	2.53	92.93%	0.97	11.50	15.63
Total Title 02		1,056.32	274.94	781.37	73.97%	697.18	1,478.55	1,208.78

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
03 02	Single Market Programme	0.00	0.00	0.00	0.00%	0.20	0.20	0.20
03 20	Pilot projects, preparatory actions, prerogatives and other actions	0.69	0.00	0.69	100.00%	0.30	0.99	0.50
Total Title 03		0.69	0.00	0.69	100.00%	0.50	1.19	0.70

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
05 02	European Regional Development Fund (ERDF)	0.47	0.18	0.29	60.79%	0.00	0.29	0.15
05 03	Cohesion Fund (CF)	0.08	0.01	0.08	92.40%	0.02	0.09	0.32
Total Title 05		0.56	0.19	0.36	65.53%	0.02	0.38	0.47

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
06 07	Emergency support within the Union	0.00	0.00	0.00	0.00%	3.39	3.39	17.25
Total Title 06		0.00	0.00	0.00	0.00%	3.39	3.39	17.25

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
07 01	Support administrative expenditure of the "Investing in People, Social Cohesion and Values" cluster	1.21	0.12	1.09	89.78%	0.00	1.09	0.95
07 05	Creative Europe	3.29	1.01	2.28	69.42%	1.80	4.08	3.89
07 20	Pilot projects, preparatory actions, prerogatives and other actions	40.05	2.90	37.15	92.76%	19.52	56.67	53.33
Total Title 07		44.55	4.03	40.52	90.95%	21.32	61.84	58.17

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
14 20	Pilot projects, preparatory actions, prerogatives and other actions	2.06	0.00	2.06	100.00%	1.12	3.18	3.87
Total Title 14		2.06	0.00	2.06	100.00%	1.12	3.18	3.87

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
20 02	Other staff and expenditure relating to persons	0.10	0.01	0.09	87.54%	0.00	0.09	0.00
20 04	Information and communication technology related expenditure	0.29	0.06	0.23	79.50%	0.00	0.23	0.32
Total Title 20		0.39	0.07	0.32	81.57%	0.00	0.32	0.32

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
30 02	Reserves for operational expenditure	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Total Title 30		0.00	0.00	0.00	0.00%	0.00	0.00	0.00
Total Excluding NGEU		2,361.71	629.56	1,732.15	73.34%	1,690.50	3,422.65	3,299.80

TABLE 3: BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2022 (in Mio €) for DG CNECT								
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)				
01 01 01	Support administrative expenditure of the "Research and Innovation" cluster	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
01 01 02	Horizon Europe	68.62	39.13	29.48	42.97%	1.28	30.76	62.97
Total Title 01		68.62	39.13	29.48	42.97%	1.28	30.76	62.97
Total NGEU Only		68.62	39.13	29.48	42.97%	1.28	30.76	62.97
Total for DG CNECT		2,430.33	668.70	1,761.63	72.49%	1,691.78	3,453.42	3,362.77

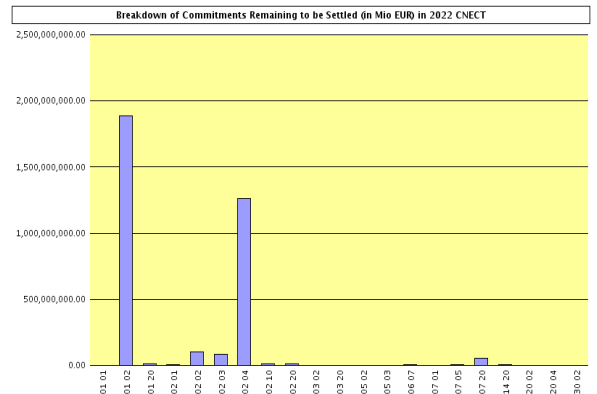


TABLE 4 : BALANCE SHEET for DG CNECT

BALANCE SHEET	2022	2021
A.I. NON CURRENT ASSETS	692,844,414.03	170,900,069.47
A.I.1. Intangible Assets	10,991,772.46	11,927,297.88
A.I.3. Invstmnts Acctnd For Using Equity Meth	0.00	0.00
A.I.4. Non-Current Financial Assets	34,361,375.32	37,133,998.29
A.I.5. Non-Current Pre-Financing	645,941,861.71	120,003,845.67
A.I.6. Non-Cur Exch Receiv & Non-Ex Recoverab	1,549,404.54	1,834,927.63
A.II. CURRENT ASSETS	1,397,490,254.18	616,962,839.93
A.II.1. Current Financial Assets	2,303,165.00	4,598,576.00
A.II.2. Current Pre-Financing	1,306,302,837.72	536,960,148.25
A.II.3. Curr Exch Receiv & Non-Ex Recoverables	26,326,360.46	27,916,053.52
A.II.6. Cash and Cash Equivalents	62,557,891.00	47,488,062.16
ASSETS	2,090,334,668.21	787,862,909.40
P.I. NON CURRENT LIABILITIES	0.00	0.00
P.I.2. Non-Current Provisions	0.00	0.00
P.III. NET ASSETS/LIABILITIES	0.00	0.00
P.III.1. Reserves	0.00	0.00
P.II. CURRENT LIABILITIES	-179,587,002.38	-228,936,742.59
P.II.2. Current Provisions	0.00	0.00
P.II.3. Current Financial Liabilities	-62,041,860.38	-112,191,727.14
P.II.4. Current Payables	-33,295,361.98	-24,716,660.73
P.II.5. Current Accrued Charges & Defrd Income	-84,249,780.02	-92,028,354.72
LIABILITIES	-179,587,002.38	-228,936,742.59
NET ASSETS (ASSETS less LIABILITIES)	1,910,747,665.83	558,926,166.81
P.III.2. Accumulated Surplus/Deficit		13,277,190,311.73
Non-allocated central (surplus)/deficit*	-15,187,937,977.56	-12,973,239,152.13
TOTAL DG CNECT	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 DG CNECT

STATEMENT OF FINANCIAL PERFORMANCE	2022	2021
II.1 REVENUES	-21,524,336.97	-48,903,847.22
II.1.1. NON-EXCHANGE REVENUES	-2,492,366.34	-585,782.86
II.1.1.6. RECOVERY OF EXPENSES	-2,157,812.29	-483,905.70
II.1.1.8. OTHER NON-EXCHANGE REVENUES	-334,554.05	-101,877.16
II.1.2. EXCHANGE REVENUES	-19,031,970.63	-48,318,064.36
II.1.2.1. FINANCIAL INCOME	-23,716,989.89	-47,804,334.41
II.1.2.2. OTHER EXCHANGE REVENUE	4,685,019.26	-513,729.95
II.2. EXPENSES	995,839,803.22	911,781,173.63
II.2. EXPENSES	995,839,803.22	911,781,173.63
II.2.10. OTHER EXPENSES	21,509,071.34	19,334,062.37
II.2.2. EXP IMPL BY COMMISS&EX.AGENC. (DM)	697,922,439.14	503,912,989.24
II.2.3. EXP IMPL BY OTH EU AGENC&BODIES (IM)	226,864,065.92	313,104,585.73
II.2.4. EXP IMPL BY 3RD CNTR & INT ORG (IM)	58,216,143.51	2,749,061.45
II.2.5. EXP IMPL BY OTHER ENTITIES (IM)	273,260.30	7,297,646.22
II.2.6. STAFF AND PENSION COSTS	-175,090.91	-832,527.27
II.2.8. FINANCE COSTS	-8,770,086.08	66,215,355.89
STATEMENT OF FINANCIAL PERFORMANCE	974,315,466.25	862,877,326.41

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 DG CNECT

OFF BALANCE	2022	2021
OB.1. Contingent Assets	457,206.13	545,102.36
GR for pre-financing	457,206.13	545,102.36
OB.2. Contingent Liabilities	-142,121,780.00	-146,965,746.66
OB.2.1. Guarantees given for EU FI	-142,121,780.00	-146,754,330.66
OB.2.7. CL Legal cases OTHER	0.00	-211,416.00
OB.3. Other Significant Disclosures	-3,337,445,348.54	-3,297,433,372.96
OB.3.2. Comm against app. not yet consumed	-3,337,445,348.54	-3,297,433,372.96
OB.4. Balancing Accounts	3,479,109,922.41	3,443,854,017.26
OB.4. Balancing Accounts	3,479,109,922.41	3,443,854,017.26
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: Payment Times

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
14	1	1	100.00 %	10.00				0.00	0.0 %
22	1	1	100.00 %	12.00				0.00	0.0 %
28	1	1	100.00 %	14.00				0.00	0.0 %
29	1	1	100.00 %	10.00				0.00	0.0 %
30	2,430	2,415	99.38 %	9.79	15	0.62 %	40.13	12,138.00	0.0 %
31	2	2	100.00 %	16.50				0.00	0.0 %
32	1	1	100.00 %	17.00				0.00	0.0 %
33	2	2	100.00 %	19.00				0.00	0.0 %
44	1	1	100.00 %	8.00				0.00	0.0 %
45	1	1	100.00 %	19.00				0.00	0.0 %
60	162	161	99.38 %	30.01	1	0.62 %	61.00	87,491.66	0.0 %
63	1	1	100.00 %	7.00				0.00	0.0 %
82	1	1	100.00 %	38.00				0.00	0.0 %
83	1	1	100.00 %	12.00				0.00	0.0 %
84	2	2	100.00 %	15.00				0.00	0.0 %
85	1	1	100.00 %	35.00				0.00	0.0 %
86	1	1	100.00 %	67.00				0.00	0.0 %
88	1	1	100.00 %	35.00				0.00	0.0 %
89	1	1	100.00 %	86.00				0.00	0.0 %
90	353	352	99.72 %	53.55	1	0.28 %	91.00	1,133,965.61	0.0 %
120	36	36	100.00 %	27.50				0.00	0.0 %
225	3	3	100.00 %	182.00				0.00	0.0 %
Total Number of Payments	3,004	2,987	99.43 %		17	0.57 %		1233595.27	0.0 %
Average Net Payment Time	16.67509987			16.52			44.35		
Average Gross Payment Time	22.86251664			22.66622			57.35294118		

Suspensions							
Average Report Approval Suspension	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	35	528	17.58 %	3,004	306,232,943.13	13.46 %	2,275,544,448.84

DG	GL Account	Description	Amount (Eur)

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 DG CNECT

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	7=3-6			
	1	2	3=1+2	4	5	6=4+5				
33	-117,494.59	1,586,186.12	1,468,691.53	-117,494.59	220,689.73	103,195.14	1,365,496.39			
60	4,686,149.52	1,778,559.77	6,464,709.29	4,204,085.65	586,702.68	4,790,788.33	1,673,920.96			
61	905,747.48	0.00	905,747.48	905,747.48	0.00	905,747.48	0.00			
66	517,958.24	0.00	517,958.24	517,958.24	0.00	517,958.24	0.00			
67	-1,732,701.27	23,861,022.40	22,128,321.13	-1,732,701.27	2,095,815.72	363,114.45	21,765,206.66			
Total DG CNECT	4,259,659.38	27,225,768.29	31,485,427.67	3,777,595.51	2,903,208.13	6,680,803.64	24,804,624.03			

TABLE 8 : FINANCIAL IMPACT OF EX-ANTE AND EX-POST CONTROLS in 2022 for DG CNECT			
EX-ANTE CONTROLS			
	Irregularity	OLAF Notified	Total undue payments recovered
	Amount	Amount	Amount
NON ELIGIBLE IN COST CLAIMS	833,338.44		833,338.44
CREDIT NOTES	550,167.03		550,167.03
RECOVERY ORDERS ON PRE-FINANCING			
Sub-Total	1,383,505.47		1,383,505.47
EX-POST CONTROLS			
	Irregularity	OLAF Notified	Total undue payments recovered
	Amount	Amount	Amount
INCOME LINES IN INVOICES	51,054.22		51,054.22
RECOVERY ORDERS OTHER THAN ON PRE-FINANCING	1,010,131.52	201,120.87	1,211,252.39
Sub-Total	1,061,185.74	201,120.87	1,262,306.61
GRAND TOTAL (EX-ANTE + EX-POST)	2,444,691.21	201,120.87	2,645,812.08

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 12/31/2022 for DG CNECT						
	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
2002	2	1	-50.00 %	737,418.19	379,788.00	-48.50 %
2003	1	1	0.00 %	350,703.53	350,703.53	0.00 %
2004	3		-100.00 %	375,231.45		-100.00 %
2006	1	1	0.00 %	20,470.26	20,470.26	0.00 %
2008	1	1	0.00 %	220,671.47	220,671.47	0.00 %
2009	22	22	0.00 %	3,671,547.45	3,671,547.45	0.00 %
2010	23	20	-13.04 %	2,538,292.49	2,418,342.58	-4.73 %
2011	41	38	-7.32 %	4,216,570.76	3,721,336.26	-11.74 %
2012	20	20	0.00 %	1,278,850.04	1,248,580.49	-2.37 %
2013	19	19	0.00 %	1,261,470.91	1,254,253.61	-0.57 %
2014	18	18	0.00 %	3,444,293.08	3,437,959.65	-0.18 %
2015	14	11	-21.43 %	390,047.32	353,716.00	-9.31 %
2016	12	11	-8.33 %	1,614,304.48	1,371,058.35	-15.07 %
2017	22	18	-18.18 %	1,872,859.16	1,685,923.79	-9.98 %
2018	9	4	-55.56 %	1,527,621.25	1,398,701.90	-8.44 %
2019	9	8	-11.11 %	1,600,934.61	1,592,453.50	-0.53 %
2020	5	2	-60.00 %	266,716.15	76,993.40	-71.13 %
2021	19	7	-63.16 %	1,938,852.16	1,191,857.09	-38.53 %
2022		7			482,063.87	
	241	209	-13.28 %	27,326,854.76	24,876,421.20	-8.97 %

TABLE 10 :Recovery Order Waivers >= 60 000 € in 2022 for DG CNECT					
Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments
3233220009	3240409095	-337,630.19			
3233220010	3242106762	-79,937.73			
3233220015	3242002472	-186,328.24			
3233220133	3242102267	-234,301.33			
3233220142	3241102521	-306,166.80			
3233220193	3240604109	-187,021.58			
3233220196	3240603279	-151,192.00			
3233220206	3241707193	-68,224.70			
3233220208	3241614035	-243,246.13			
Total DG CNECT		-1,794,048.70			
Number of RO waivers		9			

There are 24 waivers below 60 000 € for a total amount of -329,496.57

TABLE 11 : Negotiated Procedures in 2022 for DG CNECT

Internal Procedures > € 60,000

Negotiated Procedure Legal base	Number of Procedures	Amount (€)
Annex 1 - 11.1 (b) - Artistic/technical reasons or exclusive rights or technical monopoly/captive market	3	2,917,124.76
Annex 1 - 11.1 (c) - Extreme urgency caused by unforeseeable events not attributable to the contracting authority	1	1,199,706.00
Total	4	4,116,830.76

TABLE 12 : Summary of Procedures in 2022 for DG CNECT

Internal Procedures > € 60,000

Procedure Legal base	Number of Procedures	Amount (€)
Negotiated procedure middle value contract (Annex 1 - 14.2)	5	612,375.00
Negotiated procedure without prior publication (Annex 1 - 11.1)	4	4,116,830.76
Open procedure (FR 164 (1)(a))	22	108,120,131.81
Total	31	112,849,337.57

TABLE 13 : BUILDING CONTRACTS in 2022 for DG CNECT

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

TABLE 14 : CONTRACTS DECLARED SECRET in 2022 for DG CNECT

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

TABLE 15 : FPA duration exceeds 4 years - DG CNECT

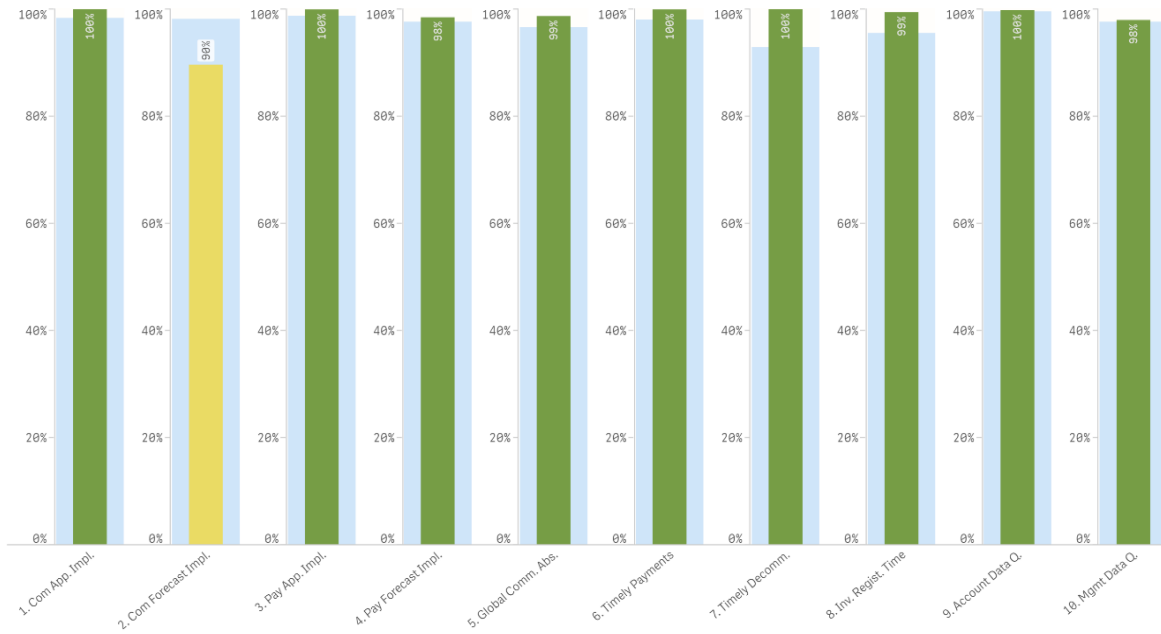
FPA Acronym	Contract Number	Signature Date	Duration
GN5-FPA	101055563	27/01/2022	72

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

ANNEX 4: Financial scorecard

The chart below presents the annual objective and result for CONNECT and for the Commission as a whole. For each standard financial indicator, its value (in %) for CONNECT is compared to the common target (in %).

CNECT Indicator Scores for 2022 12



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

Indicator	Objective	Comment ⁽⁶⁾	CNECT 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		90%	98%
3. Payment Appropriations Implementation	Ensure efficient use of payment appropriations expiring		100%	99%

⁽⁶⁾ An explanation behind the indicator result can be provided, e.g. the comment about the achievement itself, reference to the whole Commission performance (better or worse), reasons behind this achievement. The comment is mandatory for the 'Timely payments' indicator. For the rest of indicators the comment is mandatory only if the score is equal or below the target of 80%.

	at the end of Financial Year			
4. Payment Forecast Implementation	Ensure the cumulative alignment of the payment implementation with the payment forecast in a financial year		98%	98%
5. Global Commitment Absorption ⁽⁷⁾	Ensure efficient use of already earmarked commitment appropriations (at L1 level)		99%	97%
6. Timely Payments	Ensure efficient processing of payments within the legal deadlines	CONNET achieved 100% of implementation, which is better than the Commission's average.	100%	98%
7. Timely Decommittments	Ensure efficient decommitment of outstanding RAL at the end of commitment life cycle		100%	93%
8. Invoice Registration Time	Monitor the accounting risk stemming from late registration of invoices in the central accounting system ABAC		99%	95%
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		98%	98%

⁽⁷⁾ 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 (CB) 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.

ANNEX 5: Materiality criteria

This annex provides a detailed explanation on how the AOD defined the materiality threshold as a basis for determining whether significant weaknesses should be subject to a formal reservation to his/her declaration.

Introduction

Deciding whether a weakness is significant is a **matter of judgement** by the Authorising Officer by Delegation, who remains responsible for the declaration of assurance, including any reservations to it. In doing so, she should **identify the overall impact of a weakness** and **judge whether it is material** enough so that the non-disclosure of the weakness is likely to have an influence on the decisions or conclusions of the users of the declaration. The benchmark for this judgement is the materiality criteria which the AOD sets at the moment of designing the internal control system under his/her responsibility. For CONNECT, the materiality of residual weaknesses identified (i.e. after mitigating and corrective measures) is assessed on the basis of qualitative and/or quantitative criteria, in line with the instructions for the preparation of the Annual Activity Report.

The **qualitative assessment** includes an analysis of the causes and the types of error (including whether they are repetitive) to conclude on the nature, context and/or scope of the weaknesses identified. This may refer to significant control system weaknesses or critical issues reported by the Directors, the Authorising Officers by Sub-Delegation, the European Court of Auditors (ECA), the Internal Audit Service (IAS), DG BUDG or OLAF. Also, the duration and any mitigating controls or corrective actions are taken into consideration.

The **quantitative assessment** aims at estimating any financial impact ("amount at risk") resulting from the errors detected. CONNECT has set the materiality level for each distinct research framework programme with coherent risk characteristics for the amount at risk over the programming period. This analysis and the conclusions are presented concisely in the body of the Annual Activity report.

Chapter A – Qualitative criteria for defining significant weaknesses

For all methods of implementation under its operational budget, the different parameters relevant in DG R&I for determining significant weaknesses are the following ones:

- **Significant control system weaknesses**

Control system weaknesses (whether this is in a system operated by the Commission or by a third party) may be identified by management itself (for example through ex-post audits or through the assessment of the effectiveness of internal control systems), by internal or external auditors or by third party control instances. They may relate to the design or operational effectiveness of a control or of an entire system.

- **Critical issues outlined by the European Court of Auditors, the Internal Audit Service, DG BUDGET and OLAF.**

Any critical recommendations made by the European Court of Auditors, the IAS, DG BUDG or OLAF, which have not been effectively addressed should be assessed in terms of their significance. Here, the term "critical recommendation" is used in a wider sense; it includes those recommendations labelled by the auditor as "critical" as well as those not labelled at all which is assessed as having a critical impact on the assurance. The impact on assurance of recommendations labelled "very important" for which there is a significant delay in the implementation of the action plan will also be taken into account.

- **Significant reputational events**

Events or weaknesses which have a significant reputational impact on DG R&I, or indirectly on the Commission, will be reported irrespective of the amount of damage to CONNECT administrative and operational budget and will be considered for issuing a reservation on a reputational basis.

When assessing the significance of any weaknesses, the following factors are taken into account:

- the nature and scope of the weakness;
- the duration of the weakness;
- the existence of compensatory measures (mitigating controls which reduce the impact of the weakness)
- the existence of effective corrective actions to correct the weaknesses (action plans and financial corrections) which have had a measurable impact.

When significant weaknesses are identified, a quantification of the amount at risk should be carried out when possible (See Chapter B).

Chapter B – Quantitative criteria for defining reservations

This section provides the methodology for measuring the residual amount at risk and determining its materiality.

CONNECT's expenditure is composed of indirectly managed grants, directly managed grants, financial instruments, contribution to administrative expenditure of executive agencies and other direct spending mostly of an administrative nature. The error rate affecting payments is estimated yearly and per management system, following a methodology that takes into account the risk associated to the type of expenditure.

Considering the fact that the research framework programmes' implementing bodies ⁽⁸⁾ are sharing a common ex-post audit approach, and an important part of CONNECT's yearly expenditure is related to indirectly or directly managed research grants, the following section focusses on this specific management system.

Research framework programmes – common aspects

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.

Assessment of the effectiveness of controls

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:

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

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%

⁽⁸⁾ Directorates General, Executive Agencies and Joint Undertakings (also called Article 187 bodies) implementing grants of the Research Framework Programmes.

- 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 FP as a whole. Nevertheless, the Director-General 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 FP for reasons not involving control deficiencies ⁽⁹⁾, the consequences are to be assessed quantitatively by making a best estimate of the likely 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 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.

⁽⁹⁾ 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.

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 Activity Based Budgeting expenditure for one year may not provide the most appropriate basis for judgements, as ABB expenditure often includes significant levels of pre-financing expenditure, 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 Directors-General 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-General 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 ⁽¹⁰⁾ 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

⁽¹⁰⁾ 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.

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.

An analysis of errors identified during audits of the Seventh Framework Programme (FP7) suggests that around 25-35 % of them would be avoided by the simplification measures proposed. The error rate can then be expected to fall by 1.5 %, i.e. from close to 5 % to around 3.5 %, a figure that is referred to in the Commission Communication striking the right balance between the administrative costs of control and the risk of error.

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 Programme ⁽¹¹⁾, 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%.

Other programmes

For all other programmes implemented by CONNECT the general objective is to ensure that the residual error rate, i.e. the level of errors which remain undetected and uncorrected, does not exceed 2% by the end of the programmes' management cycle.

De minimis threshold for financial reservation

⁽¹¹⁾ Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe.

Since 2019 ⁽¹²⁾, a 'de minimis' threshold for financial reservations has been introduced. Quantified annual activity report reservations related to residual error rates above the 2% materiality threshold are deemed not substantial for segments representing less than 5% of a DG's total payments and with a financial impact below EUR 5 million. In such cases, quantified reservations are no longer needed.

⁽¹²⁾ Agreement of the Corporate Management Board of 30/4/2019.

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

RCS 1: Grants direct management – Horizon 2020 (H2020), Horizon Europe (HE) and Digital Europe Programme (DIGITAL) ⁽¹³⁾

CONNECT uses one Relevant Control System for the management of grants (Horizon 2020, Horizon Europe and Digital Europe, Creative Europe-Media (legacy), Creative Europe-Media, Emergency Support Instrument and Pilot Projects and Preparatory Actions) and different materiality criteria (see Annex 5).

The RCS for Horizon Europe, is similar to that of H2020. The main improvements for Horizon Europe are the co-creation of the work programme by the Directors' Groups according to the work of the various instances, and the simplification introduced with the single daily rate for personnel costs and the rollout of simplified cost forms, in particular lump sum funding and unit costs for personnel costs.

The Control Strategy for Horizon Europe grant management is under preparation and will be finalised by the first quarter of 2023. The ex-ante control guidance is already available, and the ex-post audit strategy is expected to be adopted by the HE steering board in January. However, the new controls already in place are reported in section 1 "Ex-ante controls" (sub-sections A, C and D) and highlighted in grey.

CONNECT's Control Strategy for the Digital Europe programme has been adopted in January 2021 and is accompanied by an action plan which is fully monitored for implementation. It has been shared with all services implementing the programme.

The error rates per programme are presented in Table X, Annex 9.

1. Ex-ante controls

Effectiveness, efficiency are detailed per stages A to D.

⁽¹³⁾ The reporting on the H2020 budget implemented by CONNECT includes the H2020 European Innovation Council (EIC) Pathfinder budget for which CONNECT is the Authorising Officer by Delegation and which CONNECT implements fully in-house, as foreseen by the EIC governance arrangements and using the same control systems in place for all other H2020 managed actions.

Economy is calculated overall for the ex-ante controls and detailed at the end of paragraph 1.

A - Preparation, adoption and publication of the Annual Work Programme and Calls for proposals

Main control objectives: Ensuring that the Commission selects the proposals that contribute the most towards the achievement of the policy or programme objectives (effectiveness); Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy); due consideration of other horizontal priorities (ethics, gender balance, security aspects).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The work programme and the subsequent calls for proposals do not adequately reflect the policy objectives, priorities, are incoherent and/or the essential eligibility, selection and award criteria are not adequate to ensure the evaluation of the proposals.</p> <p>The work programmes are not consistent within the Research and Innovation family and with the multi-annual financial framework.</p> <p>The implementation of the programmes Horizon 2020, Horizon Europe and Digital Europe (procedures, monitoring arrangements, communication with beneficiaries, budget planning, etc) is not consistent within the Research and Innovation family and/or with the multi-annual financial ' framework.</p> <p>The programme implementation (procedures, monitoring arrangements, communication with beneficiaries, budget planning, etc.) has serious</p>	<p>Hierarchical validation within the authorising department Inter-service consultation, including all relevant services Adoption by the Commission</p> <p>Explicit allocation of responsibility. 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 instances and with the processes established in this decision.</p> <p>The Common Implementation Centre in RTD provides with harmonised procedures, guidance and IT tools.</p> <p>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.</p> <p>The CIC/CPC governance structure ensures that programme implementation experience gathered feeds back to the programme design</p> <p>DG CONNECT centralises the budget planning and the</p>	<p>Coverage / Frequency: 100%</p> <p>Depth:</p> <p>All work programmes are thoroughly reviewed at all levels, including for operational and legal aspects and all underlying implementation tools are defined and developed according to common rules.</p> <p>Under Horizon Europe, all business processes follow a governance system under the due supervision of instances like the Steering Board, the Executive Committee, the Directors Groups and key user groups.</p>	<p>Effectiveness:</p> <p>The work programmes are adopted by the Commission.</p> <p>Success rates in terms of 'over-subscription': number of proposals retained for funding compared to number of eligible proposals received.</p> <p>Qualitative Benefits:</p> <p>A good Work Programme and well publicised calls should generate a large number of good quality projects, from which the most excellent can be chosen. There will therefore be real competition for funds.</p> <p>Optimised procedures, common approach on multiple issues (audits, fraud, legal aspects, reporting...); better reporting on the whole programme – better management of the programme. Programme ⁽¹⁴⁾.</p>

⁽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.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
shortcomings.	monitoring of the Digital Europe's budget implementation		

B - Selecting and awarding: Evaluation, ranking and selection of proposals

Main control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals selected; Compliance; Prevention of fraud and other horizontal priorities (ethics, gender balance, security aspects).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The evaluation, ranking and selection of proposals is not carried out in accordance with the established procedures, the policy objectives, priorities and/or the essential eligibility, or with the selection and award criteria defined in the annual work programme and subsequent calls for proposals.</p> <p>Conflict of interest regarding the expert evaluators</p>	<p>Selection and appointment of expert evaluators</p> <p>Conflict of interest checks</p> <p>Assessment by independent experts (for H2020 and HE) and/or assessment by Commission staff (DIGITAL)</p> <p>Appropriate briefing of experts, including on the evaluation of cost estimations in lump sum proposals</p> <p>Comprehensive IT system supporting the evaluation of proposals and allowing better monitoring of the process</p> <p>Validation by the AOSD of ranked list of proposals. In addition, if applicable: Opinion of advisory bodies; comitology and adoption by the Commission; publication</p> <p>Systematic checks on operational and legal aspects performed before signature of the</p>	<p>100% vetting (including selecting) of experts for technical expertise and independence (e.g. conflicts of interests, nationality bias, ex-employer bias, collusion).</p> <p>100% of proposals are evaluated.</p> <p>Coverage: 100% of ranked list of proposals. Supervision of work of evaluators.</p> <p>100% of contested decisions are analysed by redress committee</p>	<p>Effectiveness:</p> <p>Number of proposals evaluated</p> <p>Efficiency Indicators:</p> <p>% of Time-To-Inform on time.</p> <p>% of number of (successful) redress challenges upheld / total number of proposals evaluated</p> <p>Qualitative benefits:</p> <p>Expert evaluators from outside the Commission bring independence, state of the art knowledge in the field and a range of different opinions. This will have an impact on the whole project cycle: better planned, better implemented projects.</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
	Grant Agreement including ownership and control of legal entities, ethics and security review (if needed) Redress procedure		

C - Contracting

Main control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals contracted; Sound Financial Management (optimal allocation of the budget available); Compliance; Prevention of fraud and other horizontal priorities (ethics, gender balance, security aspects).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The beneficiary lacks operational and/or financial capacity to carry out the actions.</p> <p>Procedures do not comply with regulatory framework.</p> <p>The evaluation stage has not detected a potentially fraudulent proposal/beneficiary.</p> <p>The project implementation might not comply with Ethics requirements</p> <p>Sensitive/classified information in future deliverables of a selected projects might not be handled with the adequate Security measures</p>	<p>Project Officers implement evaluators' recommendations. Hierarchical validation of proposed adjustments.</p> <p>Validation of beneficiaries (financial capacity checks on demand). Prefinancing guarantees may be requested in DIGITAL (no Mutual Insurance Mechanism in DIGITAL)</p> <p>Systematic checks on operational and legal aspects performed before signature of the GA</p> <p>Risk assessment and risk based checks before the grant agreement signature and reinforced monitoring flagging if necessary</p> <p>Ad hoc anti-fraud checks for riskier beneficiaries</p>	<p>100% of the selected proposals and beneficiaries are scrutinised.</p> <p>Coverage: 100% of draft grant agreements.</p> <p>Depth will be differentiated following the conclusion of the risk assessment</p> <p>Controls implemented when justified by the call/proposal content</p>	<p>Effectiveness: Number of grants signed</p> <p>Efficiency Indicators:</p> <p>Average time to grant</p> <p>% of Time-to-grant on time</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
	<p>Signature of the grant agreement by the AO.</p> <p>Financial verification where necessary</p> <p>Mutual Insurance Mechanism (MIM) (ex Horizon 2020 Participants Guarantee Fund (PGF)). For programmes for which it is available</p> <p>An ethics review is carried out systematically in all HE calls, starting with an ethics pre-screening, which results in detailed screening or assessment if necessary</p> <p>Ad hoc security checks and screenings</p> <p>Security review is carried systematically in all HE calls, starting with pre-screening, which may result in detailed security scrutiny</p>		

D - Monitoring the implementation

Main control objectives: ensuring that the operational results (deliverables) from the projects are of good value and meet the objectives and conditions; ensuring that the related financial operations comply with regulatory and contractual provisions; prevention of fraud; ensuring appropriate accounting of the operations.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The actions foreseen are not, totally or partially, carried out in accordance with the technical description and requirements foreseen in the grant agreement (for examples deliverables, open access to results and publications).</p> <p>The amounts paid exceed what is due in accordance with the applicable</p>	<p>Kick-off meetings and 'launch events' involving the beneficiaries in order to avoid project management and reporting errors.</p> <p>Specialized webinars targeting reduction of errors</p> <p><u>Guidance on reporting for lump sum grants (notion of work package completion).</u></p> <p>Specialized aid with web-based tools to inform most error-prone beneficiaries (i.e SMEs who participate first</p>	<p>100% of the projects are controlled, including only value-adding checks.</p> <p>Riskier operations subject to more in-depth controls.</p> <p>The depth depends on risk criteria. However, as a deliberate policy to reduce administrative burden, and to ensure a good balance between trust and</p>	<p>Effectiveness: Number of payments (interim and final)</p> <p>Efficiency: Time-to-pay: % of payments (in value) made on time Time-to pay: Average number days net/gross + suspension days</p> <p>Qualitative Benefits:</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>contractual and regulatory provisions.</p> <p>The cost claims and deliverables are irregular or fraudulent.</p> <p>Lack of harmonised approach within the family with the consequence of unequal treatment of the beneficiaries</p> <p>Ethics requirements are not fulfilled.</p>	<p>time) about cost calculation practices</p> <p>Effective external communication about guidance to the beneficiaries (eg Funding and Tender portal, info days for the calls)</p> <p>Anti-fraud awareness raising training for the project officers.</p> <p>IT Plagiarism detection tool for deliverables</p> <p>Enhanced family approach (anti-fraud cooperation; common legal and audit service; comprehensive and common IT system for all the family).</p> <p>Operational and financial checks in accordance with the financial circuits.</p> <p>Operation authorisation by the AO For riskier operations, more in-depth ex-ante controls and reinforced monitoring</p> <p>Selection and appointment of expert for scientific reviews of intermediate and/or final reporting.</p> <p>If needed: application of Suspension/interruption of payments, Referring grant/beneficiary to OLAF/EPPO</p>	<p>control, the level of control at this stage is reduced to a minimum</p> <p>High risk operations identified by risk criteria.</p> <p>Red flags: suspicions raised by staff, audit results, EDES, individual or 'population' risk assessment.</p> <p>Audit certificates required for any beneficiary claiming more than EUR 375 000 (PF7), EUR 430 000 (HE) / EUR 325 000 (H 2020, DIGITAL) <u>except lump sum grants</u></p>	<p>Projects are executed and produce benefits for the community</p>

Overall economy for ex-ante control

			<p>Economy: a. Estimation of cost of staff involved in the ex-ante checks Programme management and monitoring Financial management</p>
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			<p>Budget and accounting General Coordination incl. Strategic Programming and Planning, internal control, assurance and quality management Anti-fraud Development and support of IT systems linked to managing funding programmes</p> <p><u>b. Estimation of other costs linked to ex-ante checks</u> Cost of experts and costs of experts' management Costs of IT external contracts of CIC</p> <p>Details of the estimated cost of controls related to shared/pooled control activities carried out by REA and hosted by DG R&I (Common Implementation Centre including Common Audit Service) for the Research and Innovation family are reported in the Annual activity reports of REA and RTD.</p>
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2: Ex-post controls

Effectiveness, efficiency and qualitative benefits are detailed per stages A to D.
Economy is calculated overall for the ex-post controls and detailed at the end of paragraph 2.

A - Reviews, audits and monitoring

Main control objectives: Measuring the level of error in the population after ex-ante controls have been undertaken; detect and correct any error or fraud remaining undetected after the implementation ex-ante controls; identifying possible systemic weaknesses in the ex-ante controls, or weaknesses in the rules.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
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Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The ex-ante controls (as such) do not prevent, detect and correct erroneous payments or attempted fraud to an extent going beyond a tolerable rate of error.</p> <p>Lack of consistency in the audit strategy within the family.</p> <p>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.</p>	<p>Common Ex-post control strategy centrally implemented by the Common Implementation Centre (in DG RTD) for H2020 and HE and by HaDEA for DIGITAL.:</p> <ul style="list-style-type: none"> 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 <p>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 projects run by the audited beneficiary.</p>	<ul style="list-style-type: none"> Common Representative audit Sample (CRaS): MUS sample across the programme to draw valid management conclusions on the error rate in the population. Risk-based sample, determined in accordance with the selected risk criteria, aimed to maximise deterrent effect and prevention of fraud or serious error 	<p>Effectiveness: Representative and residual error rate identified</p> <p>Number of audits finalised % of beneficiaries & value coverage</p> <p>Efficiency: Percentage of implementation of audit plan</p>

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; Ensuring appropriate accounting of the recoveries made.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The financial recommendations stemming from the ex-post audit are not implemented</p> <p>Cases of fraud detected are not</p>	<p>Systematic registration of audit / control results to be implemented and actual implementation.</p> <p>Validation of recovery in accordance with</p>	<p>Coverage: 100% of final audit results with a financial impact.</p> <p>Depth: All audit results are examined in-depth in making the final recoveries. Systemic errors are extended to all the</p>	<p>Effectiveness: Amounts being recovered and offset</p> <p>Efficiency: Number/value/% of audit results pending implementation,</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
addressed or not addressed in a timely manner	financial circuits. Authorisation by AO. Notification to OLAF and regular follow up of detected fraud. Coordination at the level of the R&I family : FAIR committee If needed: -Notification to OLAF and regular follow up of detected potential fraud. - Reinforced monitoring implemented on ongoing projects	non-audited projects of the same beneficiary (or closed within two years)	Number/value/% of audit results implemented

Overall economy for ex-post control

			Economy: Estimation of cost of staff involved in the coordination and execution of the ex-post audit strategy and in the implementation of audits. Costs of the appointment of audit firms and missions
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RCS2: Indirect entrusted management CONNECT

The RCS covers: (1) the executive agencies HaDEA, REA and EISMEA (the two latter for HE and H2020) ⁽¹⁵⁾, EACEA (2) cross delegations to other Commission services (3) the KDT, SNS ⁽¹⁶⁾ and EuroHPC Joint Undertakings (4) Ambient Assisted Living (AAL) Association, (5) the European Cyber Security Centre (ECCC) ⁽¹⁷⁾, (6) Decentralised Agencies (BEREC Office & ENISA).

⁽¹⁵⁾ The contribution of CONNECT to the administrative budget of the executive agencies is removed from the financial programming at the beginning of the Multi-annual Financial Framework. The operational budget is directly allocated to the Agency on a yearly basis – CONNECT does not strictly have a financial responsibility, but does still have a responsibility to supervise the agency in terms of the achievement of results.

Stage 1: Establishment (or prolongation) of the mandate to the entrusted entity ('delegation act' / 'contribution agreement' / etc).

Main internal control objectives: Ensuring that the legal framework is fully compliant and regular (legality & regularity), delegated to an appropriate entity (best value for public money, economy, efficiency), without any conflicts of interests (anti-fraud strategy), and gives all the references necessary for a smooth running of the new entity.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The establishment (or prolongation) act of the mandate of the entrusted entity lacks clear references regarding the responsibilities of each involved actor.</p> <p>For PPPs: the evaluation method of the in-kind contributions provided by the industry partners is not clear.</p>	<p>Ex-ante evaluation</p> <p>Widespread consultation, internally and with external stakeholders.</p> <p>Hierarchical validation within the authorising department</p> <p>Inter-service consultation, including all relevant DG.</p> <p>Adoption by the Commission.</p>	<p>Coverage/Frequency:</p> <p>100%/once for the establishment and partial for amendments or extensions.</p>	<p>Effectiveness:</p> <p>Quality of the legal work (basic act, delegation act/contribution agreement)</p> <p>Efficiency:</p> <p>Average cost of preparation, adoption and selection work done for the entrusted entities. Overall supervision cost per (type of) entrusted entity (%)</p> <p>Economy:</p> <p>Estimation of costs of staff involved in monitoring the entrusted entity.</p> <p>Benefits: Benefits cannot be calculated in terms of budget.</p>

Stage 2: Assessment and supervision of the entrusted entity's financial and control framework (towards 'budget autonomy'; 'financial rules').

Main internal control objectives: Ensuring that the entrusted entity is fully prepared to start/continue implementing the delegated funds autonomously with respect of all 5 ICOs.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
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⁽¹⁶⁾ Not yet autonomous, established by Council Regulation 2021/2085 (19/11/2021) establishing the Joint Undertakings under Horizon Europe.

⁽¹⁷⁾ Not yet autonomous, established by Regulation (EU) 2021/887 of the European Parliament and of the Council (20/05/2021) establishing the European Cybersecurity Industrial, Technology and Research Competence Centre and the Network of National Coordination Centres.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
The financial and control framework deployed by the entrusted entity is not fully mature to guarantee achieving all 5 ICOs	<p>Ex-ante assessment, conditional to granting budget autonomy</p> <p>Hierarchical validation within the authorising department</p> <p>Use of Model- or Framework- financial rules (MFR or FFR)</p> <p>Standard business processes and IT tools (EAs and JUs)</p> <p>Secondment or selection of key staff</p> <p>Continuous cooperation within the Research family (IC network, FAIR...) in order to harmonize the IC framework</p> <p>Review of audit reports (Internal Audit Service, European Court of Auditors)</p>	<p>Coverage/frequency: 100% of entrusted entities/once at the beginning and partial (problem focussed) for amendments or work arrangements</p> <p>Depth is determined after considering the type or nature of the entrusted entity, its form and/or the value of the budget concerned.</p>	<p>Effectiveness: The entrusted entities are granted budget autonomy, without too significant delays.</p> <p>Efficiency: Number of deviations from the MFF.</p> <p>Economy: Estimation of costs of staff involved in ex-ante assessment process.</p> <p>Benefits: The total budget amount entrusted to the entity.</p>

Stage 3: Operations: monitoring, supervision, reporting.

Main internal control objectives: Ensuring that the Commission is fully and timely informed of any relevant management issues encountered by the entrusted entity, in order to possibly mitigate any potential financial and/or reputational impacts (legality & regularity, achievement of scientific objectives, sound financial management, true and fair view reporting, and anti-fraud strategy).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The Commission is not informed of relevant management issues encountered by the entrusted entity in a timely manner</p> <p>The Commission does not react upon and mitigate notified issues in a timely manner which may reflect negatively on</p>	<p>Delegation Act/ Contribution agreement/etc. specifying the control, accounting, audit, publication, etc. related requirements – incl. the modalities on reporting back relevant and reliable control results</p> <p>Membership of the Governing Boards (KDT – the Commission holds 1/3 of voting rights) or the Steering Committee (Executive Agencies)</p> <p>Monitoring or supervision of the entrusted entity e.g. ‘regular’ monitoring meetings at operational level to review progress in</p>	<p>Coverage: 100% of the entities are monitored/supervised.</p> <p>Frequency: key KPI's reported on a monthly basis, regular steering committee or Governing Board meetings), annual reports (AAR and operational reporting), evaluation reports.</p>	<p>Effectiveness: Relevance and reliability of control data reported back, quality of underlying management/audit reports received.</p> <p>Efficiency: Overall supervision cost per entrusted entity</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>the Commission's governance reputation and quality of accountability reporting.</p> <p>The programmes Horizon Europe / H2020 implementation (procedures, monitoring arrangements, communication with beneficiaries, budget planning, etc.) is not consistent within the Research family and with the 7 years' framework.</p>	<p>achieving operational results; review of reported control results and any underlying management/audit reports; scrutiny of annual report, etc.</p> <p>Management review of the supervision results.</p> <p>If appropriate/needed:</p> <ul style="list-style-type: none"> - reinforced monitoring of operational and/or financial aspects of the entity - potential escalation of any major governance-related issues with entrusted entities <p>The Common Implementation Centre provides all the members of the Research Family with harmonised procedures, guidance and IT tools.</p> <p>DG RTD centralises the budget planning and the monitoring of the H2020's budget implementation.</p>	<p>In case of operational and/or financial issues, appropriate mitigating measures are available and should be used</p> <p>Coverage/ Frequency: 100%</p> <p>Depth</p> <p>All the underlying implementation tools are defined et developed at family level.</p>	<p>Economy:</p> <p>Estimation of costs of staff involved in monitoring of the entrusted entities</p> <p>Benefits:</p> <p>The average annual budget amount entrusted to the entity. Optimised procedures, harmonised approach to beneficiaries on multiple issues (audits, fraud, legal)</p>

Stage 4: Commission contribution: payment or suspension/interruption.

Main internal control objectives: Ensuring that the Commission adequately assesses the management situation at the entrusted entity, before either paying out the (next) contribution for the operational and/or operating budget of the entity, or deciding to suspend/interrupt the (next) contribution. This is very closely linked to stage 3 above.

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
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Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	Cost-Effectiveness indicators (effectiveness, efficiency, economy)
<p>The Commission pays out the (next) contribution to the entrusted entity, while not being aware of the management issues that may lead to financial and/or reputational damage.</p> <p>Bad cash forecast leading to the Commission paying too much compared to the EE's needs</p> <p>In times of shortage of credits, the budget appropriations are not optimised with the current needs within the family.</p>	<p>Delegation Act/ Contribution agreement/etc specifying the control, accounting, audit, publication, etc related requirements – including reporting</p> <p>Management review of the supervision results.</p> <p>Standard procedures for the validation of all payments and recovery of non-used operating budget subsidy</p> <p>Good internal communication to ensure that issues are known and dealt with (see stage 3)</p> <p>Family level budget coordination</p>	<p>Coverage: 100% of the contribution payments.</p> <p>Frequency: following the rhythm of the payments</p> <p>There is a review before each payment is made. However, the depth will depend on identified issues and on the body involved.</p>	<p>Effectiveness:</p> <p>Number of control failures.</p> <p>Efficiency:</p> <p>Overall supervision cost per entrusted entity</p> <p>Economy:</p> <p>Estimation of costs of staff involved in monitoring of the entrusted entities.</p> <p>Benefits:</p> <p>The average annual budget amount entrusted to the entity</p> <p>Qualitative benefit: optimised credit implementation</p>

ANNEX 7: Specific annexes related to "financial management"

This Annex 7 is divided in two sections: The first one contains details on the information provided in Sections 2.1.1 and 2.1.2 of the Annual Activity Report (AAR). The second contains 'Table Y', which details the figures on the cost of controls incurred by CONNECT.

SECTION 1

This section provides further information about different aspects of the 'Control results' of the AAR. Following the structure of the main text of the document, it presents the following:

- A. H2020 control results and the implementation of H2020 audit results;
- B. Supervisory arrangements and control results for the budget implemented by entrusted entities;
- C. Fraud prevention, detection and correction activities developed within CONNECT;
- D. Detailed analysis of efficiency indicators;
- E. The cost of controls (for direct management and for the supervision of entrusted entities);
- F. Audit observations and recommendations.

A) H2020 control results and the implementation of H2020 audit results

CONNECT uses internal control processes to ensure sound management of risks relating to the legality and regularity of the underlying transactions it is responsible for, taking into account the multiannual character of programmes and the nature of the payments concerned.

Ex-post control results for grant management

Since 2007, the research and innovation family (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 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* the Audit Strategy will be based on the achievements and lessons learnt from *Horizon 2020* and will be risk based. The strategy is currently under preparation.

The **main indicators** on legality and regularity ⁽¹⁸⁾ 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:

- 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% ⁽¹⁹⁾.

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 ⁽²⁰⁾ was achieved. The CAS managed to finalise audits on 633 participations corresponding to 103.6% of the planned most probable scenario for the 2022 target ⁽²¹⁾.

Horizon 2020 (H2020)

By the end of 2022, **the research and innovation family** (R&I family) audited 4 060 participations, covering 58.26% of total *Horizon 2020* expenditure to date.

The percentage of *Horizon 2020* expenditure covered by the audits (58.26%) refers to the value of the participations of the audited beneficiaries. It includes both fully audited

⁽¹⁸⁾ These indicators are described in Annex 5

⁽¹⁹⁾ 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.

⁽²⁰⁾ The overall target (most probable scenario) in the Horizon 2020 Audit Strategy for 2022 was 611 audited participations.

⁽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.

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%).

In 2022 a large number of actions, formerly managed by CONNECT, were transferred to other stakeholders of the R&I family (e.g. executive agencies). As a result, the number of audited actions managed by CONNECT has decreased significantly, which does not allow a complete analysis of the coverage.

The following table presents the error rates calculated for the *Horizon 2020* by the end of 2022.

	HORIZON 2020 ex-post audits
Representative Detected Error Rate	2,71%
Cumulative Residual Error Rate for CONNECT	1,71%

The tables below provide the results of the implementation of *Horizon 2020* audits and extensions.

They have been prepared according to the new guidance established in 2022 by Common Audit Service applicable to all R&I family services. They differ from the reporting data used by **CONNECT** until 2021, but allow homogeneous data comparison across the whole R&I family as requested by Common Audit Service. The guidance establishes **two main elements to monitor**:

- the number of implemented audit results and extensions;
- the time to implement audit results and extensions.

Number of audit results implementation, cumulative as from the start of H2020

	Audit results processed	% Audit results processed	Audit results pending	% Audit results pending	Total
Audits	482	99,18 %	4	0,82 %	486
Extensions	373	99,20 %	3	0,80 %	376
Total	855	99,19 %	7	0,81 %	862*

* Audit results implemented by CONNECT until 2021 for projects externalised to executive agencies are not included.

Time to implement closed audit implementation results in a financial year

	0-6 months	% (0-6 months)	above 6 months	% (above 6 months)	Total number
Closed Projects	68	100 %	0	0 %	68
Negative adjustments with recovery	21	100 %	0	0 %	21
Negative adjustments	5	100 %	0	0 %	5

without recovery					
Positive or zero adjustments	42	100 %	0	0 %	42
On-going Projects	12	100 %	0	0 %	12
Negative adjustments	8	100 %	0	0 %	8
Positive or zero adjustments	4	100 %	0	0 %	4
Total	80	100 %	0	0 %	80

The above tables show that **CONNECT met all targets** set by Common Audit Service in the above-mentioned guidance, both **in terms of completion** (target set to 80% of the total cumulative number of audit results implementation to be completed) and **in terms of timeliness** (completion within 6 months' targets set to 50% for closed projects with negative adjustments triggering a recovery order and to 100% for closed projects with negative adjustments not triggering a recovery order, for closed projects with positive or zero adjustment and for on-going projects).

B) Supervisory arrangements and control results by budget implemented by entrusted entities (Section 2.1.1, 'legality and regularity of the transactions' of the AAR)

CONNECT has entrusted the implementation of parts of its budget to different entities. As the entities are different in nature (other DG, Executive Agencies, Joint Undertakings, Private Law Body and Financial Instruments), the controls put in place are adapted to their specificities, as explained below.

1) Other Commission services - expenditure cross delegated

CONNECT has cross delegated operational budget implementation tasks to DG Informatics (DIGIT) for the implementation of part of the *Digital Europe*. CONNECT has also cross delegated administrative budget implementation tasks to the Office for Administration and Payment of Individual Entitlements (PMO) in order to arrange the provision of certain operations more efficiently.

Being a Commission service itself, the Authorising Officer by delegation (AOD) of the cross delegated service is required to implement the appropriations subject to the same Commission rules, responsibilities and accountability arrangements.

Entity	Type	Purpose	Payments (million EUR)
Other Commission Services	EU Institution	In the interests of sound budget implementation, the authorising officer by delegation ('the delegator') may, by way of exception, cross-delegate management of a budget line or part of a line to another Director-General or Head of Service ('the delegatee').	0.024

Control results

The cross-delegation agreement requires the AODs of cross delegated services to report on the use of these appropriations. The reports on the cross-delegations received from DIGIT, PMO did not provide any indication of particular unfavourable observation with regard to the regularity and legality of the transactions concerned. As a result, CONNECT considers that the control system over expenditure cross-delegated has been effective in 2022.

2) Executive Agencies (EA)

CONNECT is the partner DG of the European Research Executive Agency (REA), the European Health and Digital Executive Agency (HaDEA), the European Innovation Council and SMEs Executive Agency (EISMEA), and the European Education and Culture Executive Agency (EACEA).

In 2022, the amount of operational appropriations delegated by CONNECT to the executive agencies was EUR 608.39 million.

Entity	Payments (million EUR)
European Health and Digital Executive Agency (HaDEA)	276.29
European Research Executive Agency (REA)	22.27
European Innovation Council and SMEs Executive Agency (EISMEA)	125.64
European Education and Culture Executive Agency (EACEA)	184.19
Total	608.39

Supervision arrangements

The monitoring and supervision of the activities of the executive agencies are mainly achieved by means of participation of the partner DG(s) in the Steering Committees of the executive agencies. The Agency's Director ensures that the members and observers of the Steering Committee receive all relevant information and reliable control results needed for the appropriate fulfilment of their mandates.

This supervisory role is defined in several legal documents and guidance (the Commission Delegation Act to the agency, the Memorandum of Understanding between the DGs and the agency, the Commission Guidelines on Executive Agencies, etc.). The annual planning and reporting cycle forms the basis of the monitoring and supervision of the Agencies' activities by the Steering Committee. In particular, the Annual Work Programme contains an obligation of assessment of risks and risk exposure, and provides a number of key performance indicators. These constitute the benchmark against which the performance of the Executive Agencies is monitored through its interim reporting and Annual Activity Report. It is complemented by other relevant sources of information such as the reports from the discharge authority, the European Court of Auditors, the Internal Audit Service and the European Anti-Fraud Office. CONNECT uses their reports as an element of the supervision of these bodies. In addition, all the executive agencies participate in horizontal governance processes, such as the Commission peer review of critical risks.

As foreseen in the Memoranda of Understanding between the executive agencies and their parent DGs, the executive agencies also report half-yearly to the partner DG on the use of resources. The preparation of the executive agencies' budgets and annual work plans is coordinated with the parent DGs concerned.

Control results

1. The European Education and Culture Executive Agency (EACEA)

In the context of the preparation of its Annual Activity Report, the Agency analysed its organisational structure and the internal control systems in accordance with the Commission Internal Control Framework. It concluded that internal control system is effective, and the components and principles are present and functioning as intended.

The management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented.

2. The European Health and Digital Executive Agency (HaDEA)

HaDEA performed the assessment of the effectiveness of the internal control systems and concluded that its internal control system is effective, and the components and principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified related to the further development of HaDEA's control strategy, the improvement of the procedures and the reinforcement of the follow-up of the deviations.

HaDEA performed two in-depth risk assessments exercises and a monitoring of the risk management action plan. The *ex-ante* controls (performed in accordance with the programmes' rules), the *ex post* control strategy and the anti-fraud strategy are the key elements of the internal control system.

As regards *Connecting Europe Facility (CEF) - Telecom* legacy (delegated by CONNECT), the residual error rate was 3.28%, above the 2% materiality criteria. However, the cumulative conditions of the *de minimis* rule were met and no reservation was issued (i.e. the share of payments for *CEF - Telecom* legacy was 0.73% of the total payments of the Agency and the financial impact was EUR 2.49 million).

HaDEA concludes having a reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented.

3. The European Innovation Council and SMEs Executive Agency (EISMEA)

EISMEA considers that, for all programmes except COSME (not delegated by CONNECT), the cumulative residual error rates fall within the established materiality criteria. For COSME, the multi annual residual error rate at the end of 2022 was 2,69% (down from 2,90% in 2021), above the materiality threshold of 2%. However, this programme meets the cumulative criteria for the "de minimis rule" and hence it does not report a reservation.

The Agency reported in its annual report a positive conclusion on the cost-effectiveness of the controls for programmes delegated to the Agency albeit qualified by a reservation on reputational grounds concerning the late implementation and weaknesses affecting the governance and control systems of the investment component of the European Innovation Council (EIC) Accelerator scheme within the EIC Programme.

EISMEA assessed its internal control system and concluded that it is partially effective as internal control principles 3, 8, 10, 11, 12, 13, 14 need improvements which could have a significant impact on the assurance. It informs that the improvements and remedial measures envisaged to ensure adequate follow-up of the recommendations (duly described in the action plan designed following the internal control self-assessment and in the joint action plan following the recommendations in the final audit), was communicated to the Internal Audit Service on 22 February 2023.

CONNECT, in its supervisory role, follows up closely with EISMEA and supports the implementation of the remedial actions envisaged to address the reported internal control weaknesses.

4. The European Research Executive Agency (REA)

REA has assessed its internal control system during the reporting year and has concluded that it is effective, and the components and principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified related to collecting statistics about and monitoring attendance of mandatory training, compliance with data retention rules, and ensuring wider awareness of certain financial procedures.

During 2022, the level of error remained within the expected range, with residual rates below the 2% materiality threshold for all programmes implemented by the Agency.

Based on all work undertaken between 2018 and 2022, the Internal Audit Service has concluded in its contribution to REA's Annual Activity Report 2022 that the internal control systems in place for the audited processes are effective, except for the observations giving rise to the 'very important' recommendation concerning Single Electronic Data Interchange Area (SEDIA) implementation which is still pending.

Overall, CONNECT considers that the supervision of the Executive Agencies has been effective and sufficient in 2022.

3) Joint Undertakings

The Key Digital Technologies Joint Undertaking (KDT JU), successor of the Electronic Components and Systems for European Leadership (ECSEL JU)

The Key Digital Technologies Joint Undertaking was established by Council Regulation 2021/2085 (19/11/2021) establishing the Joint Undertakings under *Horizon Europe* for a period up to 31/12/2031. It repealed and replaced as from 30/11/2021 the former Electronic Components and Systems for European Leadership (ECSEL) JU.

Entity	Type	Purpose	Payments (million EUR)
KDT	Joint Undertaking	KDT is a partnership between the private and the public sectors for electronic components and systems. It, inter alia, contributes to the development of a strong and globally competitive electronics components and systems industry in the EU.	218.22

Supervision arrangements

Directorate A 'Artificial Intelligence and Digital Industry' of CONNECT represents the Commission in the Governing Board and the Public Authorities Board of the KDT JU. CONNECT closely monitors the work of the KDT JU⁽²²⁾, inter alia by preparing the Commission's position in the Boards referred to above.

The Commission's Internal Audit Service performs KDT's internal audit function. The European Court of Auditors is the external auditor of KDT and CONNECT receives copies of the reports, for action, if necessary.

The European Parliament and the Council are responsible for the annual budgetary and discharge procedures for the JUs.

Control results

On 16 December 2021, the KDT JU launched three calls for proposals with a total maximum EU contribution amounting to EUR 208 million, leveraging a commensurate amount from the participating States and some EUR 320 million in-kind contributions from the private participants. These were followed up during 2022. CONNECT effected payments of EUR 218.22 million.

The European Court of Auditors (ECA), in its annual report on Joint Undertakings regarding the financial year 2021, published 15/11/2022⁽²³⁾, considered that the payments underlying the accounts for the year ended 31 December 2021 were legal and regular in all material respects. However, it had several observations which do not call into question its positive opinion.

The ECA also noted that the Commission's Common Audit Service carries out the *ex post* audits of expenditure and that based on the audit results at the end of 2021, the JU reported a representative error rate for *Horizon 2020* of 2.2 % and a residual error rate of 1.2 % (below the materiality criteria of 2%).

⁽²²⁾ The ECSEL Joint Undertaking was active from 27 June 2014 until 30 November 2021, when it was replaced by the Key Digital Technologies Joint Undertaking. The ENIAC and ARTEMIS Joint Technology Initiatives operated until 27 June 2014, when ECSEL was established and took over their operations.

⁽²³⁾ [European Court of Auditors' annual report on EU Joint Undertakings for the financial year 2021.](#)

CONNECT provides advice and support to the KDT JU in its efforts to address all the concerns of the Court and of the budgetary authorities.

It must be noted that the mandate of the Executive Director ended on 31 October 2022, without the possibility to be extended. Since then, the Head of the Programme’s unit has been acting as interim Executive Director and so far managed to ensure a smooth functioning of the Joint Undertaking. In the meantime, the procedure to select a new Executive Director is ongoing. It is expected that s/he will take office before summer 2023.

Overall, CONNECT considers that its supervision of the KDT JU has been effective and appropriate in 2022. The regular supervision of KDT did not identify any particular events, issues or problems that could have a material impact on assurance or that would need to be included in this report.

European High Performance Computing (EuroHPC JU)

The EuroHPC Joint Undertaking was established under Article 187 of the Treaty on the Functioning of the European Union for the implementation of an initiative on European High Performance Computing by the Council Regulation (EU) 2018/1488 of 28 September 2018. It was repealed by Council Regulation (EU) 2021/1173 of 13 July 2021 ⁽²⁴⁾ on establishing the EuroHPC.

Entity	Type	Purpose	Payments (million EUR)
EuroHPC	Joint Undertaking	The EuroHPC is a partnership between the private and the public sectors for High Performance Computing. It, inter alia, contributes to the creation of the European supercomputing, quantum computing and data infrastructures, allowing to develop the necessary technologies, applications and skills for reaching exascale capabilities in Europe.	407.14

Supervision arrangements

Directorate C 'Digital Excellence and Science Infrastructure' of CONNECT represents the Commission in the Governing Board of the EuroHPC JU. CONNECT closely monitors the work of the EuroHPC JU, inter alia by preparing the Commission’s position in the Board referred to above.

The European Court of Auditors is the external auditor of the EuroHPC JU and CONNECT receives copies of the reports, for action, if necessary. The Commission’s Internal Audit Service performs EuroHPC’s JU internal audit function.

⁽²⁴⁾ Council Regulation (EU) 2021/1173 of 13 July 2021 on establishing the European High Performance Computing Joint Undertaking and repealing Regulation (EU) 2018/1488.

By the Governing Board Decision 15/2020, the EuroHPC JU acceded to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council and the Commission concerning internal investigations by the European Anti-Fraud Office.

For *Horizon 2020*, *Horizon Europe*, *Digital Europe*, and *Connecting Europe Facility II - Digital* payments, the Joint Undertakings are fully integrated in the Common Implementation Centre's structures and apply the same audit strategy as the Commission services.

The European Parliament and the Council are responsible for the annual budgetary and discharge procedures for the Joint Undertaking.

Control results

The European Court of Auditors, in its annual report on Joint Undertakings regarding the financial year 2021, published 15/11/2022 ⁽²⁵⁾, considered that the payments underlying the accounts for the year ended 31 December 2021 were legal and regular in all material respects. However, it had several observations which do not call into question its positive opinion:

The EuroHPC JU's Annual Activity Report 2021 ⁽²⁶⁾ was published in July 2022 and approved by the EuroHPC JU's Governing Board. The European Parliament is currently finalising the discharge of the JU.

Currently the European Court of Auditors and an external auditing company are auditing the 2022 accounts for the JU. The audits are still on-going. Once finalised, the reports will be made available to CONNECT.

Overall, CONNECT considers that its supervision of the EuroHPC JU has been effective and appropriate.

The Smart Networks and Services Joint Undertaking (SNS JU)

Smart Networks and Services Joint Undertaking (SNS JU) was established by Council Regulation 2021/2085 of 19/11/2021. CONNECT is responsible for the initial operations until SNS JU becomes autonomous, which is planned for the first semester of 2023. There were no activities/payments during 2021.

The activities of SNS JU build on two pillars: research and innovation under the Horizon Europe programme on technologies and systems for Smart Networks and Services towards 6G, and coordination of 5G deployment actions funded by European or national funding programmes.

4) Decentralised Agencies

⁽²⁵⁾ [European Court of Auditors' annual report on EU Joint Undertakings for the financial year 2021.](#)

⁽²⁶⁾ EuroHPC JU Decision No 20/2022- Approval of AAR 2021.

BEREC Office ⁽²⁷⁾

The tasks, organisation and operation of Body of European Regulators for Electronic Communicators (BEREC) and the Agency for Support for BEREC (BEREC Office) are set out in Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office). As an EU decentralised agency, it is managed by a Director, who is supervised by the Heads of the 27 EU National Regulatory Authorities. The Commission is represented in this Management Board, having one vote.

BEREC Office is responsible for providing administrative and professional support to BEREC (e.g. establish, maintain and make available databases on numbering resources and on operators' authorisations; implementation of a proper information and communication system for collaboration and data gathering).

Entity	Type	Purpose	Payments (million EUR)
BEREC Office	Decentralised Agency	BEREC promotes a consistent application of the EU regulatory framework, and its tasks are focused mainly on market regulation. It has also an advisory role towards the EU institutions and individual national regulatory authorities.	7.43

Supervision arrangements

The Commission representative in the BEREC Management Board is CONNECT's Director-General (member) and the Director of Directorate B (alternate member). The DG, in close cooperation with Commission central services dealing with financial and human resources, ensures that all Agency's acts are properly assessed and that the Commission position is agreed.

The Commission's Internal Audit Service is the internal auditor of the BEREC Office and the European Court of Auditors is the external auditor of the BEREC Office. All the audit reports are presented by the Director of the BEREC Office to the Management Board, of which the Commission is part. In addition, the Report of the European Court of Auditors is published on its website.

Control results

⁽²⁷⁾ The tasks, organisation and operation of BEREC and the Agency for Support for BEREC (BEREC Office) were set out in Regulation (EC) No 1211/2009 of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office. Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120, repealed Regulation (EC) No 1211/2009 as of 20 December 2018.

Based on the reports and all other available information, CONNECT can conclude that in 2022 the activities of BEREC Office have been used for the purpose of achieving its objectives and in accordance with the principles of sound financial management.

During the discharge exercise for the financial year 2021, the European Parliament repeated the Commission recommendation from the previous year that the issue of gender balance and adherence to agreed human resources figures should be brought to the attention of BEREC’s Managing Board.

Overall, CONNECT considers that its supervision of BEREC and the BEREC Office has been effective and appropriate in 2022.

ENISA ⁽²⁸⁾

The European Union Agency for Cybersecurity (ENISA) aims to contribute to a high level of network and information security within the European Union. It supports EU Institutions, Member States and business community in addressing, responding and especially preventing network and information security problems.

As outcome of the evaluation of the previous mandate of the Agency ⁽²⁹⁾, there was an agreement on the strengthening of ENISA’s roles and on the attribution of a permanent mandate and a better defined set of current and new tasks. The main elements identified were integrated into the cybersecurity act of 2019.

ENISA carries out its activities according to an annual and multiannual work programme. It has been granted an autonomous budget financed primarily through a contribution from the Union as well as contributions from third countries from countries in the European Economic Area participating in the Agency’s work. Member States are also allowed to make voluntary contributions to the revenue of the Agency.

Following the call to establish a Cyber Emergency Fund, the Commission allocated EUR 15 million to ENISA to put in place a short-term emergency programme. This was included in the Council conclusions of 23 May 2022 on the development of the European Union’s Cyber posture to reinforce preparedness and the capacity to respond to a large-scale cybersecurity incident.

Entity	Type	Purpose	Payments (million EUR)
ENISA	Decentralised Agency	ENISA carries out the tasks assigned to it under the Cybersecurity Act for the purpose of achieving a high common level of cybersecurity across the Union, including by actively supporting	24.21

⁽²⁸⁾ The tasks, organisation and operation of ENISA are set out in the Cybersecurity Act under Regulation (EU) 2019/881 of 17 April 2019 on ENISA (the European Union Agency for Cybersecurity) and on information and communications technology cybersecurity certification, and repealed Regulation (EC) No 526/2013 of 21 May 2013. The Cybersecurity Act entered into force on 27 June 2019.

⁽²⁹⁾ Published as annex to the Cybersecurity Act Regulation proposal (COM(2017) 477 final).

		Member States, Union institutions, bodies, offices and agencies in improving cybersecurity. ENISA acts as a reference point for advice and expertise on cybersecurity for Union institutions, bodies, offices and agencies as well as for other relevant Union stakeholders. ENISA contributes to reducing the fragmentation of the internal market by carrying out the tasks assigned to it under the Cybersecurity Act.	
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Supervision arrangements

The Commission is represented in the Management and Executive Board by CONNECT (Director for Digital Society, Trust and Cybersecurity) and the DG Informatics (Director for IT Security). The Boards meet three or four times per year.

At operational level, the cooperation between CONNECT and ENISA is ensured via a designated desk officer who maintains regular contact with ENISA's staff. Day to day working level communication between CONNECT staff and ENISA staff is encouraged and followed as a practice. In particular, regular weekly meetings are conducted to discuss cybersecurity certification. In addition, a monthly video call between CONNECT and ENISA is scheduled on a permanent basis.

At managerial level, regular meetings between the Executive Director of ENISA and senior members of the Management Board and the CONNECT's Director responsible take place. At any time, any additional information deemed necessary by CONNECT can be requested.

The Executive Director of ENISA, as authorising officer, must produce a consolidated annual activity report, which should include information on the management and internal control systems, a summary of internal audits carried out, the recommendations made and the action taken on these recommendations, as well as any observations of the European Court of Auditors and the actions taken on these observations. He signs the declaration of assurance. In addition, the Executive Director presents to the Management Board an annual *ex post* evaluation on the Agency's core activities.

The Commission's Internal Audit Service performs ENISA's internal audit function and the European Court of Auditor is the external auditor of ENISA. CONNECT receives copies of the reports, for action, if necessary.

Control results

The various reports presented at the Management Board and other available information did not provide any unfavourable observations with regard to the regularity and legality of the transactions. Where specific recommendations were made by the Internal Audit Service, these are being addressed. CONNECT has no reason to believe that the reports would be incomplete or unreliable. Overall, CONNECT considers that its supervision of ENISA has been effective and appropriate in 2022.

5) Private Law Body

The Ambient Assisted Living (AAL) Association

The active and assisted living joint programme (AAL JP) is a Member States' initiative. The budget for calls for proposals is composed of contributions from the Commission, of participating countries and organisations participating in the projects (approximately 25%, 25% and 50% respectively). The current AAL JP is a prolongation of the AAL JP (2008-2013), which has obtained a new mandate for the period 2014-2020⁽³⁰⁾ with the same annual budget as a part of the innovation investment package.

The programme is managed by the participating countries through the Ambient Assisted Living (AAL) Association⁽³¹⁾. The Commission is part of the governance structure. It has the right to undertake every year an operational review with independent external experts in order to supervise its financial contribution. Furthermore, the Commission can veto the work programme of the AAL in the General Assembly. Day-to-day operations are run by the Central Management Unit supervised by the Executive Board.

Entity	Type	Purpose	Payments (million EUR)
Ambient Assisted Living (AAL) Association	Private Law Body	The AAL Joint Programme is a public partnership funding activities that aim to create better conditions of life for the older adults and to strengthen the international industrial opportunities in the area of information and communication technology.	13.81

Supervision arrangements

The General Assembly is the decision-making body of the AALA. It appoints the members of the Executive Board and supervises the implementation of the AAL JP, including approval of annual work programmes, allocation of national funding to projects and applications for new memberships. The Commission has observer status in the meetings of the General Assembly and has the right to veto the annual work programme.

Day-to-day operations are run by the Central Management Unit (CMU) supervised by the Executive Board. The CMU is supported by a network of national contact points (NCPs) responsible for the administrative, financial and contractual management at national level. The 2017 restructuring of the CMU resulted in an improved sense of participation in management and the governing bodies, which not only relates to operational aspects of the business but also to debate on strategy to ensure a place in Europe beyond *Horizon 2020*.

The Commission is also part of the governance structure. CONNECT undertakes every year an annual on-site (2 days) operational review with independent external experts to assess

⁽³⁰⁾ Decision No554/2014/EU.

⁽³¹⁾ The AAL Association is an international not-for-profit association established under Belgian law and constitutes the dedicated implementation structure created by the participating EU Member States, Canada, Norway, Switzerland and Taiwan (Participating Countries).

the overall performance of the AAL Association and whether all contractual obligations are met.

The AAL JP risk management assessment includes verification of financial commitments of participating countries before EU financing is allocated. It also includes a review of the payments, where the EU contribution is subject to a certification of incurred costs by the responsible national public bodies before disbursement of EU funds by the AAL Association. The Association has to provide information about the audit procedures in each of the participating countries and reports annually on audits implemented. In addition, the AAL Association should report as soon as there is a suspicion of fraud or irregularities.

Following-up on the European Court of Auditors audit finding on the level of reporting control related information between the involved authorities in a participating country, CONNECT developed mitigating actions that were adopted by senior management in January 2019. Their follow-up and implementation began immediately and resulted in an amendment of the Delegation agreement on the implementation of the AAL JP, in order to clarify and introduce stronger provisions on the Association's access and checks to the Early Detection and Exclusion System, the exclusion criteria in its programme application requirements, its reporting requirements towards the European Commission, as well as the applicable rules on the processing of personal data by the AAL Association and the European Commission. The AAL Association signed the new Delegation agreement on 1 December 2020.

In 2021, AAL Association carried out its final annual transfer of funds agreement under *Horizon 2020*. As of July 2021, the programme entered into the 'phasing out' period till 31 December 2027, the definitive closure of the programme as laid down in the Delegation Agreement.

Control results

The annual review performed by CONNECT to assess the overall performance of the AAL Association confirmed sound financial situation of the AAL Association and good operation of the AAL JP which supports the assurance of CONNECT.

In 2022, CONNECT performed the final evaluation covering the seven-years of operation of the programme, from June 2014 to June 2021 based on the five evaluation criteria of the better regulation guidelines. The evaluation report (COM(2022) 708 final) and accompanying Staff Working Document (SWD(2022) 404 final) presenting the results of the final evaluation were transmitted to the European Parliament and the Council.

Based on the findings of the final evaluation the Commission concluded that the AAL programme has been successful in achieving its main goals. The programme was highly relevant in terms of the problems addressed and the stakeholders involved, and responded well to changing technologies and the fast-evolving market environment. It demonstrated that the EU intervention had been both necessary and effective in delivering digital innovation in active and healthy ageing. The Programme brings together a highly relevant combination of beneficiaries, including small and medium-sized enterprises and end-user organisations that do not typically participate in *Horizon 2020*.

CONNECT concludes from the information available, and there is no reason to believe that this information would not be complete or reliable, that resources assigned to the activities of AAL JP have been used for the purpose of achieving the objectives of AAL JP and in accordance with the principles of sound financial management.

6) Union Body

European Cybersecurity and Competence Centre (ECCC)

It was established by Regulation (EU) 2021/887 on 20/05/2021 ⁽³²⁾. Together with the Network of National Coordination Centres (NCCs), the ECCC is Europe’s new framework to support innovation and industrial policy in cybersecurity. It will be responsible for parts of *Digital Europe* and *Horizon Europe*.

Supervision arrangements

In this initial period the functions and duties of the ECCC are ensured by CONNECT, which acts on behalf of the ECCC for the establishment and initial operation ⁽³³⁾, until it reaches full financial autonomy, planned for 2023.

Once the ECCC will have reached its financial autonomy, CONNECT will supervise it through its membership in the Governing Board. The Commission holds a veto over Governing Board decisions affecting the EU budget.

7) Contribution agreement with international organisations

European Space Agency (ESA), European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), and European Centre for Medium-Range Weather Forecasts (ECMWF)

CONNECT signed contribution agreements with the ESA, EUMETSAT and ECMWF on 15/12/2021. They set out tasks entrusted for the implementation of the Destination Earth initiative under the *Digital Europe* work programme 2021-2022 (as described in detail in the Technical Annex I of the Contribution Agreements) and the corresponding Union contribution.

Entity	Type	Purpose	Payments (million EUR)
European Space Agency (ESA)	Intergovernmental organization	The ESA is an intergovernmental organisation of 22 member states, a world leader in space exploration and Earth observation. Its mission is to shape the development of Europe’s space and Earth observation capabilities and to	2.45

⁽³²⁾ Regulation (EU) 2021/887 of the European Parliament and the Council establishing the European Cybersecurity Industrial, Technology and Research Competence Centre and the Network of National Coordination Centres.

⁽³³⁾ Article 46 of the Regulation.

		continue delivering benefits to the citizens of Europe and the world.	
European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)	Intergovernmental organization	EUMETSAT is the European operational satellite agency for monitoring weather, climate and the environment from space. It establishes, maintains and exploits European systems of operational meteorological satellites, and contributes to the operational monitoring of the climate and the detection of global climatic changes.	5.74
European Centre for Medium-Range Weather Forecasts (ECMWF)	Intergovernmental organization	The ECMWF is an independent intergovernmental organisation serving as a research institute and a 24/7 operational service, producing global numerical weather predictions and other data for its members and co-operating states and the broader community. ECMWF has one of the largest supercomputer facilities and meteorological data archives in the world.	21.20

Supervision arrangements

The contribution agreements establish, *inter alia*, the implementation rules, the conditions for the payment of the Union contribution, and the overall relation between the Commission and ESA, EUMETSAT and ECMWF, respectively.

It provides for the appropriate monitoring and supervisory measures in order to prevent, detect, correct and follow-up on fraud and irregularities. Such measures include regular reporting to the Commission via annual, semestrial, and ad hoc reports, submission for approval of annual work plans, regular coordination meetings at technical and working levels, and the possibility for the Commission, the European Anti-Fraud Office, the European Public Prosecutor's Office and the European Court of Auditor to perform checks, reviews, audits and investigations, as necessary. In addition, payments under the agreement are linked to the fulfilment of key performance indicators clearly set out. In case of irregularities, fraud or breach of obligations, the Commission may suspend payments as well as the implementation of the entrusted tasks or even terminate the agreement.

Prior to the signature of the contribution agreements, ESA, EUMETSAT and ECMWF were pillar assessed by the Commission.

Control results

In 2022, payments were effected as indicated in the table below and the three entrusted entities report to the Commission on a mid-year and annual basis.

CONNECT, from its own desk monitoring and the review of the above-mentioned reports (and other additional operational reporting) received from the entrusted entities by the time of preparation of this report, did not identify issues or weaknesses which would affect the assurance related to the implementation of the Destination Earth initiative under the *Digital*

Europe work programme 2021-2022.

Overall, CONNECT has reasonable assurance regarding the implementation of the Destination Earth initiative and considers that the EU funds transferred to the entrusted entities are used for the intended purposes and that the controls in place are cost-effective.

United Nations Department of Economic and Social Affairs (UN DESA)

CONNECT signed a contribution agreement on 14/12/2022 with UN DESA with a view to delegate the implementation of one of the actions of the Communication of the European Commission 'Internet Policy and Governance: Europe's role in shaping the future of Internet Governance' (COM/2014/072 final). This is part of a Commission initiative, in close cooperation with the Member States, to coordinate access to and interoperability of networks, and to underpin the digital single market.

Entity	Type	Purpose	Payments (million EUR)
United Nations Department of Economic and Social Affairs	Intergovernmental organisation	The UN Department of Economic and Social Affairs is part of the United Nations Secretariat .	0.24

Supervision arrangements

The contribution agreement establishes, inter alia, the implementation rules, the conditions for the payment of the Union contribution, and the overall relation between the Commission and UN DESA.

It provides for the appropriate monitoring and supervisory measures in order to prevent, detect, correct and follow-up on fraud and irregularities. Such measures include regular reporting to the Commission via annual, half-yearly, and ad hoc reports, submission for approval of annual work plans, regular coordination meetings at technical and working levels, and the possibility for the Commission, the European Anti-Fraud Office, the European Public Prosecutor's Office and the European Court of Auditors to perform checks, reviews, audits and investigations, as necessary. In addition, payments under the agreement are linked to the fulfilment of key performance indicators clearly set out. In case of irregularities, fraud or breach of obligations, the Commission may suspend payments as well as the implementation of the entrusted tasks or even terminate the agreement.

At operational level, the cooperation between CONNECT and UN DESA is ensured via a designated desk officer who maintains regular contact with UN DESA's staff. Day to day working level communication between CONNECT staff and UN DESA staff is encouraged and followed as a practice. At the time of the signature of the contribution agreement, the complementary pillar assessment of UN DESA by the Commission was ongoing. The contribution agreement was signed to allow to support the Internet Governance Forum (IGF) for the year 2022.

Control results

The contribution agreement was signed on the 14/12/2022 for the period 01/01/2022 to 31/12/2022 with a progress report to be received during first quarter of 2023 and the certified financial statement from the UN to be received in July 2023.

From the available monitoring and communication received from UN DESA during the year, CONNECT can conclude that its supervision has been effective and there is no weakness to report.

European Audiovisual Observatory (EAO)

Entity	Type	Purpose	Payments (million EUR)
European Audiovisual Observatory	Intergovernmental organization	The EAO is an entity established as an enlarged partial agreement of the Council of Europe in order to collect and distribute information about the audiovisual industries in Europe. It aims at promoting greater transparency and achieving a clearer understanding of the ways in which the audiovisual industries in Europe function.	0.53

CONNECT signed a contribution agreement on 24/11/2021 with the EAO with a view to provide a financial contribution to finance the implementation of the action ‘EA06 – Information and Research on the Audiovisual Sector’. The rationale is to support the development of essential tools for the audiovisual sector, provide the Commission with specific briefings and data to cater with its work programme and policies in the audiovisual field and prepare the collection of pan-European comparable indicators to accompany the implementation of sustainable production policies.

Supervision arrangements

The contribution agreement establishes, *inter alia*, the implementation rules, the conditions for the payment of the Union contribution, and the overall relation between the Commission and the EAO.

It provides for the appropriate monitoring and supervisory measures in order to prevent, detect, correct and follow-up on fraud and irregularities. Such measures regular reporting, coordination meetings and the possibility for the Commission, or any authorised representatives (the European Anti-Fraud Office, the European Court of Auditors), to conduct desk reviews, investigations on-the-spot checks and inspections on the use made of the EU contribution on the basis of supporting accounting documents and any other document related to the financing of the action. To facilitate the assessment by Commission services of each individual activity covered by the Contribution Agreement, the European Audiovisual Observatory is required by article 4.3 of the special conditions of the Contribution Agreement to submit an individual narrative report on the implementation of each activity at the latest 15 days after the end of the activity. In addition, the Commission

services fill-in an individual evaluation sheet on each of the activity covered by the agreement before final payment is effected. The report prepared by the EAO, whether progress or final, describe the implementation of the action according to the activities envisaged as well as the degree of achievement of its results (outcomes or outputs) as measured by corresponding Indicators.

Control results

CONNECT, from its own desk monitoring and the review of the above-mentioned reports (and other additional operational reporting) received from the EAO by the time of preparation of this report, did not identify issues or weaknesses which would affect the assurance related to the implementation of the action designated ‘EA06 — Information and Research on the Audiovisual Sector’. Overall, CONNECT has reasonable assurance regarding the implementation of the action and considers that the EU funds transferred to the entrusted entities are used for the intended purposes and that the controls in place are cost-effective.

8) Financial Instruments

CEF Debt Instrument (CEF DI)

The European Investment Bank (EIB) manages, on behalf of the Commission ⁽³⁴⁾, the CEF Debt Instrument (CEF DI), which aims to enable long-term capital market financing of infrastructure projects including, but not limited to, those carried out under project finance structures. The amount committed by CONNECT for projects in information and communications technology and broadband sectors is EUR 17,5 million ⁽³⁵⁾. This amount has been fully committed and paid in December 2020 and enabled a EUR 100 million loan from the EIB to support the roll-out of a broadband fibre access network in Slovenia. There were no payments made during 2022. The activities during 2022 were funded by the payment done in December 2020. The project will enable a significant uplift of the broadband service offering to gigabit speeds in the concerned areas.

Entity	Type	Purpose	Payments (million)
European Investment Bank (CEF Debt Instrument)	Financial Instrument	Enable long-term capital market financing of infrastructure projects including, but not limited to, those carried out under project finance structures (on a risk-sharing basis).	0.00

Supervision arrangements

⁽³⁴⁾ DG Economic and Financial Affairs, DG Mobility and Transport, DG Energy, CONNECT.

⁽³⁵⁾ During the pilot phase of the PBI, the total EU budget contribution for the PBI was limited to EUR 230 million.

The EIB delivers an annual operational report on the CEF DI to all services involved. The same applies for financial reporting. Quarterly reports informing on the allocation of the CEF DI assets are also provided. The Commission has four nominees on the Steering Committee of the CEF DI, which is chaired by DG Economic and Financial Affairs. This DG also coordinates the exchange of views between Commission members of the committee before the meetings. It also reports twice a year to the European Parliament and to the Council on behalf of the Commission with the support of the designated services.

The Commission's contribution to the CEF DI serves as a guarantee for the project. In case of project default or construction cost overruns, the capital provisioned as a guarantee will actually be disbursed to support the reimbursement of the overdue amounts, up to the level of EU budgetary commitment.

Control results

There were no payments made for the CEF Debt Instrument in 2022.

Overall, CONNECT considers that its supervision of the CEF DI has been effective and appropriate in 2022. In particular, CONNECT considers that the operational and financial reporting (monthly and annual reports) is sufficient and provides relevant information and figures to ensure sound and effective management of the policy aspects of this financial instrument.

CEF Equity Instrument – Connecting Europe Broadband Fund ('CEBF')

The Connecting Europe Broadband Fund (CEBF) is an investment fund which provides equity and quasi-equity financing to smaller-scale, higher-risk broadband projects, which do not have sufficient access to financing, in (under-served) suburban and rural areas. Five public institutions have committed capital to the fund, namely the Commission, the European Investment Bank (EIB) and three National Promotional Banks and Institutions (NPBI), alongside private investors. The fund is the first investment platform to support broadband infrastructure under the European fund for strategic investments, the heart of the investment plan for Europe. It is contributing to the Digital Decade objectives in terms of gigabit connectivity for all households with over 625,000 premises connected. Cube Infrastructure Managers S.A., an independent investment firm with extensive experience in infrastructure and information and communications technology projects, has been selected to manage the fund through an open and public selection process carried out by the EIB.

The operational launch of the fund took place on 27 June 2018 with EUR 420 million at first closing (including EUR 100 million from the Commission via the *Connecting Europe Facility*). Its final closing in June 2021, the fund has raised EUR 555 million, above the target size of EUR 500 million, of which EUR 160 million (or about 30% of the fund) from six private sector institutional investors.

By the end of 2022, CEBF has only used EUR 246.1 million (44.3% of the EUR 555 million committed). The natural deadline for the investment period is June 2023. Shareholders can decide to extend by one year twice (i.e. maximum until June 2025). The capital actually drawn and invested is still limited. The financial profitability of few of the projects in which

the fund has invested remains uncertain as they have been facing issues related to, *inter alia*, the speed of deployment of the infrastructure and the slow uptake of number of connections. The Commission and the other institutional shareholders (EIB and NPBI), in their role of limited partners, who may not intervene in the management of the fund, have rapidly asked the fund manager to take corrective actions and increase the periodicity of its reporting (from quarterly to monthly) until these issues are resolved.

Entity	Type	Purpose	Payments (million EUR)
Cube Infrastructure Managers S.A. - Connecting Europe Broadband Fund	Financial Instrument	Investment Fund to provide equity and quasi-equity financing to smaller-scale, higher-risk broadband projects, which do not have sufficient access to financing, in (under-served) suburban and rural areas. Cube Infrastructure Managers S.A. manages the Fund and was nominated through a public procurement process carried out by the EIB.	12.61

Control arrangements

The assurance on the cost-effectiveness of controls as regards the budget implemented by Cube Infrastructure Managers S.A. for the Commission is built on several operational, financial and audit reports provided by Cube Infrastructure Managers S.A among which:

- report on the implementation of the tasks entrusted;
- the accounts drawn up for the expenditure incurred in the execution of the entrusted tasks; accompanied by a management declaration confirming that i) the information is properly presented, complete and accurate, ii) the expenditure was used for its intended purpose, iii) the control systems put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions;
- a summary of the final audit reports and of controls carried out, including an analysis of the nature and extent of errors and weaknesses identified in systems, as well as corrective action taken or planned;
- an opinion of an independent audit body establishing whether the accounts give a true and fair view, whether the control systems put in place function properly, and whether the underlying transactions are legal and regular.

In addition, another support for the assurance lies with the fact that the Fund, which involves European Fund for Strategic Investment and EIB's own capital, is also supervised by the EIB Group.

Control results

During 2022, CONNECT effected payments to Cube Infrastructure Managers S.A amounting to EUR 12.61 million.

CONNECT, from its own desk monitoring and the review of the above-mentioned reports (and other additional operational reporting) received from Cube Infrastructure Managers S.A by the time of preparation of this report, did not identify issues or weaknesses which would affect the assurance related to the implementation of CEF Equity Instrument – Connecting Europe Broadband Fund (CEBF).

Overall, CONNECT has reasonable assurance regarding the implementation of the CEBF and considers that the EU funds transferred to Cube Infrastructures Managers S.A. are used for the intended purposes and that the controls in place are cost-effective.

Cultural and Creative Sectors Guarantee Facility (CCS GF)

The implementation of the Cultural and Creative Sectors Guarantee Facility (CCS GF) under *Creative Europe* is entrusted to the European Investment Fund (EIF) in compliance with the Financial Regulation, the Financial and Administrative Framework Agreement and specific conditions laid down in the Delegation Agreement signed by the Commission and the EIF ⁽³⁶⁾. Full reporting on control results (effectiveness as regards legality and regularity, efficiency and cost effectiveness and Fraud prevention and detection) is part of the Delegation Agreement in force.

Entity	Type	Purpose	Payments (million EUR)
European Investment Fund - Cultural and Creative Sectors Guarantee Facility	Financial Instrument	The CCS GF is managed by the EIF on behalf of the Commission in the context of the Creative Europe programme. The Facility benefits micro, small and medium-sized enterprises in the cultural and creative sectors, often facing difficulties in accessing loans, based in any of the participating countries.	15.43

Supervision arrangements

The Delegation Agreement provides for detailed supervision arrangements. Those provisions require the EIF to undertake comprehensive and timely monitoring of CCS GF Transactions under the CCS GF, covering financial intermediaries, financial sub-intermediaries and final recipients, and to report on the monitoring activities to the Designated Service. In line with the provisions of the Delegation Agreement, the reports are delivered on annual, quarterly or monthly basis.

Based on its own controls, the EIF shall monitor the compliance of the operations with this Delegation Agreement, assess the eligibility of financial intermediaries, monitor the eligibility of the final recipients, and monitor the proper execution by the financial intermediaries of their contractual obligations, including their reporting obligations.

⁽³⁶⁾ On the 30 June 2016 and amended on 12 December 2017, on 9 January 2020 and 29 July 2020.

The EIF shall require the financial intermediary to monitor the contractual compliance of the agreements with final recipients, where applicable, assess the eligibility of financial sub-intermediaries, and monitor the eligibility of final recipients.

The Commission may exercise further controls to validate the operational and financial reporting received from the EIF. The Commission may request the EIF to transmit representative and/or risk-based samples of transactions.

Control results

CONNECTs supervision of this financial instrument did not identify particular issues that would need to be included in this report. Thus, CONNECT considers that its supervision of the CCS GF was effective and appropriate. In particular, the operational and financial reporting (monthly, quarterly and annual reports) provided sufficient and relevant information and figures to ensure sound and efficient management of the policy aspects of this financial instrument.

C) Fraud prevention, detection and correction activities developed within CONNECT in 2020 (Section 2.1.1, ‘fraud prevention, detection and correction’ of the AAR)

Based on CONNECT’s 2022 Management Plan, the following measures to minimize the risk of fraud in the DG were taken during 2022:

Objective: The risk of fraud is minimised through the application of effective anti-fraud measures and the implementation of the Commission Anti-Fraud Strategy (CAFS) ⁽³⁷⁾ aimed at the prevention, detection and correction ⁽³⁸⁾ of fraud

Main outputs in 2022:

Output	Indicator	Target	Latest known results (situation on 31/12/2022)
Implementation of the anti-fraud strategies (Research Anti-Fraud Strategy, CONNECT)	% of implementation of actions planned in the anti-fraud strategies	100%	96%
Participation in the Fraud and Irregularities in Research Committee	Number of meetings	2	2
Fraud risk awareness raising training and similar	% of newcomers trained (=staff involved in procurement and grant	80%	62% Two training sessions on anti-fraud were organised in October

⁽³⁷⁾ Communication from the Commission ‘Commission Anti-Fraud Strategy: enhanced action to protect the EU budget’, COM(2019) 176 of 29 April 2019 – ‘the CAFS Communication’ – and the accompanying action plan, SWD(2019) 170 – ‘the CAFS Action Plan’.

⁽³⁸⁾ Correction of fraud is an umbrella term, which notably refers to the recovery of amounts unduly spent and to administrative sanctions.

anti-fraud training sessions	management for less than 2 years).		and November 2022. 52 staff participated.
Cooperation with OLAF	Participation in the Fraud Prevention and Detection Network meetings	Participation in all Network meetings	Participation in 2 of the 3 meetings. Absence from the meeting of 16/06 was justified by participation in a DG level event.
Use of the anti-plagiarism tool	Number of requests to use the anti-plagiarism tool	More than 8 requests	10 requests sent to operational units to run anti-plagiarism checks in SIMBA

During 2022, the European Anti-Fraud Office (OLAF) closed two investigations: one without recommendations and one with a financial recommendation. The latter concerned findings to be implemented in three CONNECT *Horizon 2020* projects regarding financial support to third parties. The implementation is under discussion with the Common Legal Support Service of DG Research and Innovation, the Legal Service and DG Budget. The DG is implementing the financial recommendations from previous years and reports regularly to OLAF and DG Budget on the status of the recoveries. CONNECT also reported to OLAF on the implementation of the administrative recommendations (mainly linked to the Early Detection and Exclusion System). In 2022, OLAF opened three new investigations involving CONNECT projects.

Entrusted entities

CONNECT ensures through its supervisory role that the entrusted entities have appropriate fraud prevention and detection measures in place.

KDT's JU Governing Board adopted the common anti-fraud strategy in the Research and Innovation family in 2015 and is represented in the Fraud and Irregularities in Research (FAIR) Committee. The majority of its staff members participated in anti-fraud trainings.

Both ENISA and the BEREC Office implement their own anti-fraud strategies and action plans. The BEREC Office updated its strategy and action plan in 2020, further updated in 2022 to be concluded in 2023. ENISA revised its strategy in late 2020.

As regards the AAL Association, anti-fraud management is addressed in the risk management and *ex post* audit strategy of the AAL Joint Programme agreed between the Commission and the AAL Association in 2015. National programme management agencies provide an overview of their audit system. In particular, they provide the AAL Association – and in turn the Commission – with information about the audit and control procedures to prevent fraud and irregularities.

For the financial instruments under management by the European Investment Bank (EIB), the fraud prevention strategy is based on the principles agreed between the Commission and the EIB. Similarly, the European Investment Fund (EIF) is in charge of the implementation of the Cultural and Creative Sectors Guarantee Facility in compliance with the Financial Regulation, the Financial and Administrative Framework Agreement and

specific conditions laid down in the Delegation Agreement signed by the Commission and the EIF, which contains provisions on fraud prevention and detection and reporting on control results.

D) Detailed analysis of efficiency indicators

CONNECT's control system for grant management under direct management is divided into four distinct stages – programming, evaluation and selection of proposals (stage 1), contracting (stage 2), monitoring the execution of the projects (stage 3) and *ex post* controls and recoveries (stage 4). Key efficiency indicators have been defined for each stage of the process.

Stage one: Programming, evaluation and selection of proposals

The first stage concerns the preparation and the publication of the calls for proposals and the subsequent evaluation of the received proposals. The overall control objective of this stage is to ensure that the most promising projects, meeting the policy objectives, are among the selected proposals. In order to ensure this control objective, CONNECT has put in place a set of rules and procedures that are objective, transparent and ensure equal treatment of all applicants.

The selection process implies an initial screening of the submitted proposals to assess their admissibility and eligibility. In a second stage the eligible proposals are evaluated by an independent evaluation panel and an adequate evaluation review procedure is put in place in case of complaints regarding the evaluation. The aim of all steps in this process is to ensure a robust and transparent selection which in turn will guarantee the highest value for money return.

The key indicator which can be used to measure the efficiency of this stage is the time-to-inform.

CONNECT complied with this control cost-effectiveness indicator (target: above 95%). In 100% of the cases, the applicants were informed of the results of the evaluation within the maximum time-to-inform period of 5 months (150 days) in *Horizon Europe* and 6 months (180 days) in *Digital Europe* (average time to inform was 123 days in 2022 compared to 101 days in 2021, 108 days in 2020 and 114 days in 2019).

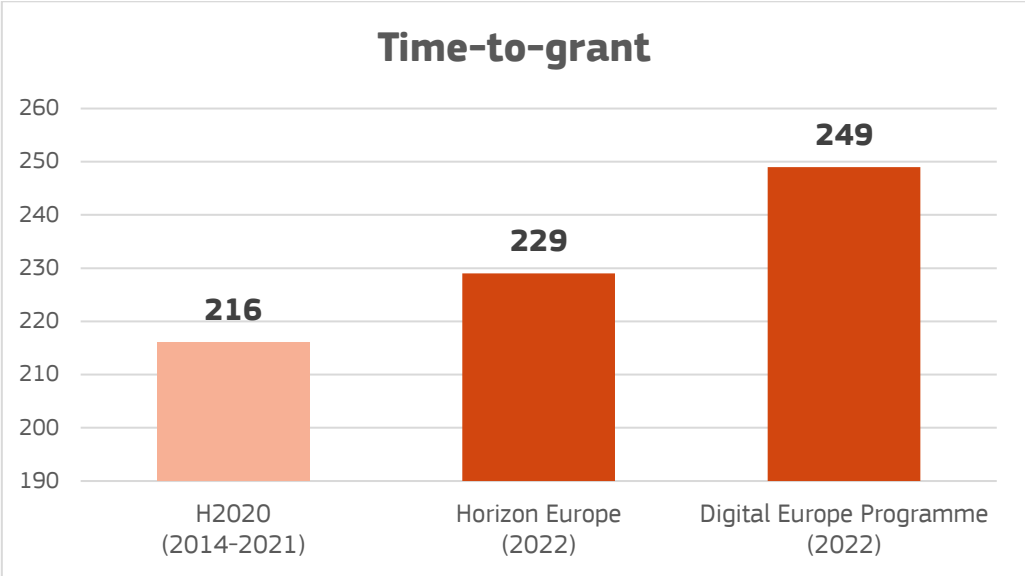
Stage two: grant preparation/contracting

After a sound and transparent selection process, the next stage consists of formalizing the contractual side of the proposals. The overall control objective of this stage is translating each of the selected proposals into legally binding grant agreements, allowing for the management of both the scientific and financial aspects of the projects and to ensure the best value for money output of each of the contracted projects.

Proposals under *Horizon Europe* are expected to be mature and ready to be implemented without the need for substantial adjustments in the scope and repartition of the scientific work, the duration or the maximum financial contribution for the project. Given that no

negotiation phase is foreseen for this programme, the difference between the recommended funding and the final grant awarded is negligible.

Digital Europe, on the other hand, allows for small adjustments to the proposal following its evaluation. This may imply minor budget reductions. The key indicator which can be used to measure the performance of this stage is the time-to-grant. The time to grant is the length of the time between the closure date of the call for proposals and the date of the signature of the grant agreement. The time-to-grant indicator shows the average period between the calls' closure date and the grants' signature. The time-to-grant for *Horizon Europe* and *Digital Europe* is shown in the table below and compared to the time-to-grant for *Horizon 2020*.



In 2022, 207 *Horizon Europe* projects were signed for a total Commission contribution of EUR 1 185.9 million and a total budgeted cost of EUR 1 264.7 million. The average time-to-grant of these projects was 229 days.

Also 203 *Digital Europe* projects were signed in 2022 for a total EU contribution of EUR 721.6 million and total budgeted costs of EUR 1 408.4 million. The average time-to-grant of these *Digital Europe* projects was 249 days.

The longer time to grant compared to *Horizon 2020* is due to the fact that 2022 is the first year of the new programming cycle and the granting process includes more checks compared to *Horizon 2020*. Some grants had to undergo security scrutiny and/or ownership control. Furthermore, *Digital Europe* is also targeting new types of beneficiaries not familiar with EU funding programmes and requires a financial viability check of its beneficiaries.

The legal time-to-grant for *Horizon Europe* (eight months or 245 calendar days) was complied with in 94% of the grants, marginally below the target of 95% for this indicator.

The time-to-grant for *Digital Europe* (nine months or 275 calendar days) was complied with in 77% of the grants, slightly above the target of 75% for this indicator.

The main benefits of the grant preparation/contracting stage consist in translating valuable scientific ideas into legally binding grant agreements in a way that ensures an optimal allocation of EU funds.

Stage three: monitoring the execution

The overall control objective of this stage is to ensure that the projects are performing according to their schedule and that the financial operations comply with regulatory and contractual provisions.

The execution of the projects is monitored through different tools, the *ex ante* controls being one of the most important ones at the time of cost claims submitted by the beneficiaries. Other monitoring measures include the assessment of the technical reports, which in some programmes may have further pre-financing implications and commitments adjustments (only applicable to multi-annual programmes), as well as direct and regular contacts with the beneficiaries and project promoters, technical site visits, project management workshops, among others.

The key indicators which can be used to measure the performance of this stage are the time-to-pay and the average time to pay monitors/independent experts.

The time-to-pay (%) indicator measures the payment amount accepted on time (in percentage). Since 2020, a corporate standard indicator timely payments (%) has been chosen for the reporting of the time-to-pay. It is also presented in the Financial Scorecard (Annex 4).

CONNECT continued its efforts to maintain the low late payments, in line with the tighter deadlines imposed by the Financial Regulation.

For the year 2022, 100% of the total payment accepted amounts paid on time. CONNECT complied with this efficiency indicator (target: above 95%). The average time for payments made on time is 17 days. The overall average payment time is 17 days.

2022	2021	2020	2019	2018	2017	2016
100%	100%	100%	99%	98.5%	97.2%	97.6%

Table: Evolution of the TTP in CONNECT (%)

The average time for paying independent experts assessing technical reports in reviews in 2022 is 8.4 calendar days compared to 8 days in 2021. This is well within the binding deadline of 30 days for payments, imposed by the Financial Regulation.

Stage four: ex-post controls

The fourth stage includes the ex-post audits as well as the recovery of any amounts found to have been paid in excess of the amount due. The results of the audits, namely the error rates, are detailed in the section dedicated to the control results in terms of effectiveness as regards legality and regularity. Unlike the other stages of the grant management control system, the scope of the audit stage is wider than just CONNECT. The Common Audit

Service is responsible for all *Horizon Europe* ⁽³⁹⁾ and 2020 audits (including Executive Agencies and Joint Undertakings). HaDEA is responsible for all audits in *Digital Europe* grants ⁽⁴⁰⁾.

A detailed analysis of the work performed by the Common Implementation Centre can be found in DG Research and Innovation's Annual Activity Report.

The benefit of ex-post controls in terms of adjustment, recoveries and offsetting is set out above; however, the real benefit of the ex-post controls, including the deterrent and training effect, cannot be fully quantified.

E) The cost of controls (for direct management and for supervision)

The control system for grant management is divided into four distinct stages. Key indicators have been defined for each stage of the process.

The table below provides an estimate of the total costs of control for direct grant management within CONNECT. It also includes the costs of the common shared services by the European Research Executive Agency (REA) and the Common Implementation Centre (CIC) hosted by DG Research and Innovation. The estimated cost of controls for each of the four stages was calculated based on the corporate methodology for the estimation, assessment and reporting on the cost-effectiveness of controls. The estimated cost of controls of CONNECT is given for each of the different grant management stages. The complete picture is shown in the table below.

As the CIC is a corporate service whose work is crucial for the assurance model of all members of the Research and Innovation family, its costs are presented in this report as a whole. The support services provided by REA to the *Horizon programmes* implementing bodies is part of this family-wide integrated control system as well.

Cost of controls indicator in direct grant management	Costs (EUR million)			2022 Grant payments for the R&I Family	Overall rate (total costs/total amount paid)
	Internal costs	External costs	Total		
Common Implementation Centre (CIC)				Total amount (EUR million)	%
H2020 & HE					
Ex-ante controls (mainly common services for IT systems and operations)	7.23	31.64	38.87	11 273.56	0.34%
H2020					
Ex-posts audits	9.12	4.02	13.14	4 441.56	0.30%

⁽³⁹⁾ For Horizon Europe the audits will start late in 2023 when sufficient payments become auditable.

⁽⁴⁰⁾ Audits for Digital Europe will only start in the beginning of 2024 when sufficient payments become auditable.

TOTAL (CIC)	16.35	35.66	52.01		0.64%
Evaluation Experts costs paid by REA			79.51	8 758.00	0.91%

More details of the estimated cost related to shared/pooled control activities carried out by REA and hosted by DG Research and Innovation (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 DG Research and Innovation.

CONNECT Costs of controls grant management	Internal costs	External costs	Total	2022 Operational payments for grants CONNECT (H2020, HE, DEP, etc)	Overall Rate
Stage 1 – programming and evaluation	3.93	0.03	3.97	1 540.40	0.26%
Stage 2 – contracting	3.09	0.10	3.19	1 540.40	0.21%
Stage 3 – monitoring the execution (financial circuits)	21.89	0.52	22.40	1 540.40	1.45%
Stage 4 – ex-post controls and recoveries	0.87	0	0.87	1 540.40	0.06%
TOTAL CONNECT costs of controls grant management	29.78	0.64	30.42	1 540.40	1.98%

CONNECT costs of control

The total cost of control within CONNECT can be evaluated at approximately EUR 30.42 million, corresponding to 1.98 % of the total operational grant payments made in 2022.

As also explained in the Annual Activity Report section 2.1.1. control results, the decrease of the overall cost of control rate as compared to the last year is mainly due to the very important increase of total operational grant payments from EUR 527.51 million in 2021 to EUR 1 540.40 million in 2022. It is mainly due to the payments made related to the programmes of the multi-annual financial framework (MFF) 2021-2027 (*Horizon Europe, Digital Europe, and Creative Europe - MEDIA*). In 2021 the payments made were very limited as delays were encountered due to the late adoption of the MFF 2021-2027, of the legal basis for the new programmes and of the related work programmes.

The costs incurred by CONNECT for the monitoring and the supervision of the entities entrusted with budget implementation tasks amounts, approximately, to EUR 6.88 million. This amount includes primarily personnel costs (in total 44 full time equivalents). This represents 0.51% of the operational payments made to these entities during 2022. The overall rate of the cost of control remains stable compared to previous years (see table below).

Year	Payments made (million EUR)	Estimated costs of control	Ratio
2019	683.31	3.57	0.52%
2020	807.70	3.99	0.49%
2021	1 049.04	5.06	0.48%
2022	1 337.42	6.88	0.51%

Table: Evolution cost of controls Indirect Management at DG/Commission level

The table below provides a more detailed overview of the supervision and monitoring cost per entity in 2022:

Entity	Payments made (million EUR)	Estimated costs of control	Ratio
EC services through cross delegations (DIGIT, MPO)⁴¹	0.02	0.001	3.20%
Executive agencies	608.39	1.874	0.31%
EuroHPC JU	407.14	0.797	0.20%
KDT (former ECSEL)	218.22	0.719	0.33%
ECCC	NA	0.799	NA
SNS JU	NA	0.873	NA
BEREC Office	7.43	0.288	3.88%
ENISA	24.21	0.296	1.22%
Ambient Assisted Living (AAL) Association	13.81	0.127	0.92%
EIF (CCSGF FI)	15.43	0.154	1.33%
Cube Infrastructure Managers S.A. (CEBF FI)	12.61	0.218	
ESA, EAO, EUMETSAT, ECMWF, UNDESA	30.16	0.732	2.43%
TOTAL	1 337.42	6.88	0.51%

Out of the total payments made of EUR 1 337.42 million, EUR 608.39 million constitute the delegated budget entrusted to the four executive agencies for which CONNECT is parent DG. The actual transfer of funds was not directly effected by CONNECT, it was made by the Commission central service DG Budget. However, they have been included in the table above, as CONNECT is responsible for their supervision, and hence, CONNECT reports the related costs of control.

The estimated cost of control has also been calculated at entrusted entity level.

⁽⁴¹⁾ For 'Administrative expenditure cross delegated', the supervision arrangements are based on the principle of controlling 'with' the relevant entity. Being a Commission service itself, the Authorising Officer by delegation (AOD) of the cross-delegated service is required to implement the expenditure/ appropriations subject to the same rules, responsibilities and accountability arrangements, notably on efficiency and cost effectiveness.

Entrusted Entity	Payments made (million EUR)	Management/ Remuneration fees paid (million EUR)	Ratio
EC services through cross delegations (DIGIT, PMO)	0.02	NA	NA
Executive Agencies	608.39	NA	NA
EuroHPC JU	407.14	5.25	1.29%
KDT JU	218.22	2.47	1.13%
AAL	13.81	0.57	4.12%
BEREC	7.43	5.19	69.88%
ENISA	24.21	15.32	63.28%
EIF (CCSGF FI)	15.43	0.03	0.21%
Cube Infrastructure Managers S.A. (CEBF FI)	12.61	1.39	11.03%
EUMETSAT	5.74	0.40	7.00%
ESA	2.45	-	NA
ECMWF	21.20	1.48	7.00%
EAO	0.53	0.03	6.54%
UNDESA	0.24	0.02	7.00%
TOTAL	1 337.42	32.16	2.40%

F) Additional information on audit observations and recommendations (Section 2.1.2 of the AAR)

Internal Audit Service (IAS) - audits closed during 2022 (including January and February 2023)

Audit on the design and early implementation of the European Innovation Council (EIC)

The audit assessed the effectiveness of the management and control system for the implementation of the EIC and the European Innovation Ecosystems.

The audit was closed in January 2023. Although the final report is considered critical, CONNECT is only involved as associated DG in one sub-recommendation which is related to the governance framework of the EIC programme.

Ongoing IAS audits

Audit on Horizon Europe governance

The objective of the audit is to assess the adequacy of the design and the effectiveness of the (early) implementation of the Horizon Europe governance, with the focus on (i) the governance arrangements, (ii) the process to prepare the WPs, and (iii) the process to prepare and support the budget planning allocation and monitoring at programme level.

Audit on the design and set-up of the Digital Europe Programme

The objective of the audit is to assess the preparedness of CONNECT and HaDEA management and control systems put in place for the implementation of *Digital Europe*, the coordination between the two entities and the supervision by CONNECT.

Limited conclusion of the Internal Auditor on the state of Internal Control in CONNECT

In its contribution to the 2022 Annual Activity Report process, the Internal Audit Service (IAS) provided a limited conclusion on the state of internal control in CONNECT. The IAS concluded that the internal control system in place for the audited processes are effective. CONNECT does not have any ‘critical’ or ‘very important’ open recommendation from the IAS.

State of play of the implementation of IAS recommendations

In 2022, CONNECT implemented the last open recommendation from the IAS audit on anti-fraud in the research area.

At the end of 2022, CONNECT had no open IAS recommendations.

European Court of Auditors (ECA)

ECA Audits closed in 2022 with involvement of CONNECT

Special report on SME internationalisation instruments

This multi-DG audit (DGs Internal Market, Industry, Entrepreneurship and SMEs, Trade, Research and Innovation, CONNECT, Regional and Urban Policy, International Partnerships, Foreign Policy Instruments, and European Executive Agency for Small and Medium-sized Enterprises) assessed whether the EU policy for SME internationalization is supported by a coherent and coordinated strategy and if the key actions, managed directly by the different services of the Commission, effectively support that strategy. Apart from the focus on the coherence of the Commission’s strategy, the Court specifically analyzed the startup Europe initiative managed by CONNECT. CONNECT received three recommendations to improve the monitoring and long-term effectiveness of the startup Europe initiative. The recommendations were implemented by the end of 2022.

Special report on e-Government actions targeting businesses

The audit assessed whether the Commission appropriately designed its e-Government actions, if actions targeting businesses achieved their purpose, and whether the Commission appropriately monitored the implementation of the 2016-2020 e-Government action plan. CONNECT received four recommendations to strengthen the implementation framework to urge Member States to complete eGovernment services and to develop a comprehensive strategy to promote eGovernment services effectively.

Special report on tools facilitating travel within the EU during the COVID-19 pandemic

The ECA audited whether the Commission had developed effective tools to facilitate travel within the EU during the COVID-19 pandemic. The tools covered in the audit scope are the European federation gateway service (EFGS), the digital contact tracing app gateway; the EU digital COVID-19 certificates (EU DCC); the platform for exchanging passenger locator forms (PLF); and the EU digital PLF. In particular, the EFGS and EU DCC are relevant to CONNECT. CONNECT received one recommendation to streamline communication on incidents linked to the EU DCC.

Ongoing ECA Audits

Special report on digitalisation of schools

The audit focuses on the measures the EU has undertaken during the period 2014-2020 on the topic of school digitalisation, taking also into consideration the planned actions for the upcoming period 2021-2027. The audit addresses specific questions on connectivity, in particular, the ECA assesses whether the Commission defined the Europe 2025 target for connectivity of schools on a sound basis and whether the connection of schools in the EU is well on track.

Special report on smart cities

The audit assesses the effectiveness of EU-financed research projects and their impact in making cities smart(er). It also assesses whether the design of *Horizon Europe* (including missions) took into account past lessons learned.

Special report on recovering EU funds

The audit focuses on three areas: (i) EU funds for direct and indirect management, (ii) agricultural funds and (iii) cohesion policy. The objective is to assess whether the Commission has established an effective system to recover irregular expenditure from beneficiaries of EU funds and if it provides adequate information about such recoveries and related matters in its published reports.

Special report artificial intelligence

The audit analyses whether Commission investments in the area of artificial intelligence, mainly through *Horizon 2020*, are being exploited commercially within the EU, and particularly within EU industry.

Special report on circular economy

The audit focuses on measures taken by the Commission in relation to two of the six phases of the circular economy: design and production. CONNECT involvement is very limited.

State of play of the implementation of ECA recommendations

At the end of 2022, CONNECT had the following open ECA recommendations:

Special report on 5G security

- Together with Member States, develop a common definition of the expected quality of service of 5G networks, such as the performance requirements it should offer in terms of minimum speed and maximum latency;
- Encourage Member States to include the 2025 and 2030 objectives for 5G deployment, and the measures that will be needed to achieve them, in the next updates of their 5G/digital strategies or broadband plans;
- Promote transparency on the Member States' approaches to 5G security, by monitoring and reporting on the implementation of the security measures of the EU toolbox on 5G cybersecurity. This should be done using a common set of key performance indicators.
- Together with Member States, assess for which aspects of 5G networks security there is a need for specifying enforceable requirements and, where appropriate, initiate legislation.
- Promote a transparent and consistent approach regarding the Member States' treatment of MNOs' costs for replacing 5G equipment purchased from high-risk vendors by regularly monitoring and reporting on this issue within the implementation of the EU toolbox on 5G cybersecurity.
- Assess what the impact on the single market would be of a Member State building its 5G networks using equipment from a vendor considered to be high-risk in another Member State.

Special report on e-Government actions targeting businesses

- Unequivocally defining the terms used in the digital targets so that they can be applied in the same way across the EU.
- Analysing the Digital Decade national roadmaps and taking the necessary action if it judges that the policies, measures and actions set out therein are insufficient.
- Take action if Member States experience delays in attaining the digital targets when compared to their planned trajectories.
- Develop a comprehensive strategy to promote e-Government services effectively

Special report on tools facilitating travel within the EU during the COVID-19 pandemic'

- Streamline communication on incidents linked to the EU Digital COVID Certificate

CONNECT is working to implement all these recommendations.

Discharge recommendations open at the end of 2022

There is one open recommendation from the European Parliament, with CONNECT as the lead service, concerning a recovery order from 2012 following a European Court of Auditors audit, for which the Commission Legal Service is working to enforce a final Court judgement.

SECTION 2

Table Y - Overview of CONNECT's estimated cost of controls at Commission (EC) level:

EXPENDITURE

The absolute values are presented in EUR

CNECT	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)+(d)	Ratio (%)** (g)/(b)
Direct management - grants	29.557.502,04 €	1.540.404.010,70 €	1,92%	865.885,42 €	21.476.159,49 €	4,03%	30.423.387,46 €	1,98%
Indirect management - entrusted entities	6.878.238,14 €	1.337.420.917,90 €	0,51%	- €	- €	0,00%	6.878.238,14 €	0,51%
OVERALL total estimated cost of control at EC level for expenditure	36.435.740,18 €	2.877.824.928,60 €	1,27%	865.885,42 €	21.476.159,49 €	4,03%	37.301.625,59 €	1,30%

NON-EXPENDITURE ITEMS ****

CNECT	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 amounts	Ratio (%)** (a)/(b)	EC total costs	total value verified and/or audited	Ratio (%) (d)/(e)	EC total estimated cost of controls (a)+(d)	Ratio (%)** (g)/(b)
Only applicable for DGs with non-expenditure items								
	- €	- €	N/A	- €	- €	N/A	- €	N/A
	- €	- €	N/A	- €	- €	N/A	- €	N/A
	- €	- €	N/A	- €	- €	N/A	- €	N/A
	- €	- €	N/A	- €	- €	N/A	- €	N/A

*** any 'holistic' control elements (e.g. with 'combined' ex-ante & ex-post characteristics) can be reported in the ex-ante column provided that a footnote clarifies this (their nature + their cost). Example: MS system audits in shared management.

**** These include revenue operations (e.g. assigned revenue, fines, interest); assets (e.g. (in)tangible or financial assets, inventories, treasury) and financial liabilities or 'off balance sheet' items (e.g. employee benefits, guarantees offered or other commitments)

Notes to the Table Y:

(1) Details of the estimated cost 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 DG RTD.

(2) Out of the total payments made to entrusted entities of EUR 1,337.42 million, EUR 608.39 million constitute the delegated budget entrusted to the four Executive Agencies for which CONNECT is parent DG. The actual transfer of funds was not directly effected by CONNECT, the funds were transferred by the Commission central service BUDG.

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

CONNECT assesses on a continuous basis the effectiveness of its internal control systems, in order to determine whether they work as intended and ensuring that any control weaknesses in the system are detected, analysed and considered for improvement.

The annual assessment of the effectiveness of the internal control systems is based on the assessment of the internal control monitoring criteria and the analysis of various sources of information such as the register of deviations, the Internal Audit Service and the European Court of Auditors recommendations, the risk register and of the main internal control issues mentioned in the 2022 Directorates' Management Reports.

Assessment of the internal control monitoring criteria

CONNECT established the Internal control monitoring criteria to allow the DG to effectively monitor and assess its internal control system and, on that basis, to build on its strengths and to address its weaknesses.

The DG's review of the internal control monitoring criteria was conducted in January and February 2023. The lead units responsible for each indicator of the different internal control principles were asked to report. Where needed, lead services were contacted for further details.

The conclusion of the assessment was positive with remarks in Principles 8 ⁽⁴²⁾ and 13 ⁽⁴³⁾:

- Principle 8 – 62% of staff involved in procurement and grant management for less than 2 years participated in the anti-fraud training sessions. This is a significant increase compared to 31% of staff in 2021, but still lower than the 80% target. Active involvement of middle management to ensure participation in CONNECT's anti-fraud training of the newcomers in their units is needed.
- Principle 13 – The records for new processing operations identified was 70% (7 out of 10) while the target was set at 100%. Seven records were created, but three records belonging to the "Development of the European Digital Media Observatory (EDMO) Digital Service Infrastructure" could not be created due to a lack of consistent information. In the meantime, the necessary information has been received and the records have been created in February 2023.

Register of deviations

⁽⁴²⁾ Principle 8: 'The Commission considers the potential for fraud in assessing risks to the achievement of objectives'.

⁽⁴³⁾ Principle 13: 'The Commission obtains or generates and uses relevant quality information to support the functioning of internal control'.

The DG has a system in place to ensure the recording of exceptions and non-compliance to procedures/rules through a process of justification by the initiating service, approval by the Director and/or Director-General and the maintenance of a central register. Such events do not automatically represent a weakness in controls, as they could be the result of many factors. Nevertheless, such events are recorded and analysed to find indications of possible underlying, systemic weaknesses.

A total number of 19 deviations were reported (3 exceptions and 16 non-compliance events) in 2022. The assessment of potential risks resulting from the deviations did not reveal any control weaknesses.

Internal Audit Service (IAS) and European Court of Auditors (ECA) audit recommendations

CONNECT continued its pro-active supervision and frequent reporting on the state of implementation of the audit recommendations. The state of implementation of the IAS and ECA recommendations is regularly reported to senior management. The list of open recommendations was analysed and the outstanding risks assessed as low as none of the recommendations stemming from these audits are 'critical' or 'very important' (more details are presented in Annex 7 – Section F).

Risk Management

During 2022, CONNECT's risk register has been regularly reviewed by the responsible Directorates, enabling senior management to monitor the evolution of the reported risks as well as to react to changes.

Where necessary and possible, risk mitigating measures were established. The implementation of those will be the object of careful attention in 2023.

Overview of the main internal control issues mentioned in the 2022 Directorates' Management Reports (DMRs)

In their 2022 DMRs, all CONNECT Directors have reported reasonable assurance that risks are under control and that suitable controls are in place and working as intended. No material issues were reported.

The analysis concluded that all Directorates established, maintained and enhanced the management and control systems in order to provide reasonable assurance that suitable controls are in place and working as intended to reduce or keep the risk exposure at an acceptable level.

Conclusion

CONNECT has assessed its internal control system during the reporting year and has concluded that it is effective and the components and principles are present and functioning well overall.

The following findings were made during the annual assessment of the effectiveness of the internal control systems, which do not impact the overall effectiveness of the internal control system:

Principle 8: the participation of newcomers (i.e. staff involved in procurement and grant management for less than 2 years) in anti-fraud trainings in 2022 was lower than expected. 62% compared to the target of 80%. CONNECT will continue providing anti-fraud training sessions in 2023, with newcomers as target audience.

Principle 13: At the end of 2022, three records for identified processing activities pertaining to the same contract had not been finalised. At the time of drafting the Annual Activity Report, the three records were finalised and validated.

For the above findings, given the actions planned and given the other risk mitigating measures in place such as the availability of detailed guidance, the residual risk is assessed to be very low.

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

1. Annex related to "Control results"

Table X: Estimated risk at payment and at closure

DG CNECT	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: Horizon Europe (HE)	806,99	- 806,99	0,00	0,00	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants: Horizon 2020 (H2020)	262,29	- 11,96	624,19	874,52	2,71% - 2,71%	23,70 - 23,70	1,00% - 1,00%	8,75 - 8,75	14,95 - 14,95
Grants: Digital Europe (DEP)	423,11	- 423,11	0,00	0,00	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants: Creative Europe-Media	0,58	- 0,28	0,03	0,34	1,50% - 2,00%	0,01 - 0,01	0,00% - 0,00%	0,00 - 0,00	0,01 - 0,01
Grants: Creative Europe-Media (Legacy)	0,13	0,00	0,00	0,13	1,50% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Grants: Emergency Support Instrument (ESI)	3,21	- 0,80	13,25	15,66	2,00% - 3,00%	0,31 - 0,47	0,54% - 0,54%	0,09 - 0,09	0,23 - 0,38
Grants: Pilot Projects and Preparatory Actions (PP/PA)	18,43	- 10,07	6,69	15,04	3,00% - 3,00%	0,45 - 0,45	0,00% - 0,00%	0,00 - 0,00	0,45 - 0,45
Other Grants (e-comm multimedia prerogative)	25,67	- 4,00	1,58	23,24	1,50% - 2,00%	0,35 - 0,46	0,54% - 0,54%	0,13 - 0,13	0,22 - 0,34
Procurement	54,62	- 0,34	0,31	54,58	0,50% - 0,50%	0,27 - 0,27	0,00% - 0,00%	0,00 - 0,00	0,27 - 0,27
Other	7,60	0,00	0,00	7,60	0,50% - 0,50%	0,04 - 0,04	0,00% - 0,00%	0,00 - 0,00	0,04 - 0,04
Entrustees Entities: Ambient Assisted Living (AAL) Association (H2020)	13,81	- 13,81	0,15	0,15	2,71% - 2,71%	0,00 - 0,00	1,00% - 1,00%	0,00 - 0,00	0,00 - 0,00
Entrustees Entities: Body of European Regulators for Electronic Communications (BEREC) Office	7,43	- 7,43	7,23	7,23	0,50% - 1,00%	0,04 - 0,07	0,00% - 0,00%	0,00 - 0,00	0,04 - 0,07
Entrustees Entities: European Union Agency for Cybersecurity (ENISA)	24,21	- 24,21	22,51	22,51	0,50% - 1,00%	0,11 - 0,23	0,00% - 0,00%	0,00 - 0,00	0,11 - 0,23
Entrustees Entities: European High-Performance Computing (EuroHPC)/CEF/Procurement	30,04	- 30,00	0,00	0,04	0,50% - 0,50%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Entrustees Entities: European High-Performance Computing (EuroHPC)/ H2020	68,97	0,00	0,00	68,97	2,71% - 2,71%	1,87 - 1,87	1,00% - 1,00%	0,69 - 0,69	1,18 - 1,18
Entrustees Entities: European High-Performance Computing (EuroHPC)/HE	96,76	- 96,76	0,00	0,00	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Entrustees Entities: European High-Performance Computing (EuroHPC)/DEP	211,36	- 211,36	0,00	0,00	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Entrustees Entities: Key Digital Technologies (KDT)/HE	117,74	- 117,74	0,00	0,00	2,00% - 2,00%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Entrustees Entities: Key Digital Technologies (KDT)/H2020	100,48	0,00	0,00	100,48	2,71% - 2,71%	2,72 - 2,72	1,00% - 1,00%	1,00 - 1,00	1,72 - 1,72
Entrustees Entities: EIF, Cube Infrastructure Managers S.A. (CCSGF, CEBF Financial Instruments)	28,04	0,00	0,00	28,04	0,00% - 0,50%	0,00 - 0,14	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,14
Entrustees Entities: ESA, EAO, EUMETSAT, ECMWF, UN	30,16	- 30,08	0,12	0,20	0,50% - 0,50%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
Cross-delegations to other DGs (DIGIT, PMD)	0,02	0,00	0,00	0,02	0,50% - 0,50%	0,00 - 0,00	0,00% - 0,00%	0,00 - 0,00	0,00 - 0,00
DG total	2 331,65	-1 788,94	676,06	1 218,77		29,88 - 30,44	0,87% - 0,87%	10,65 - 10,65	19,22 - 19,79
						Overall risk at payment in %	2,45% - 2,50%	Overall risk at closure in %	1,58% - 1,62%
							<i>(7) / (5)</i>		<i>(10) / (5)</i>

Notes to the table X

(1) Relevant Control Systems differentiated per relevant portfolio segments and at a level which is lower than the total.

(2) Payments made or equivalent, e.g. expenditure registered in the Commission's accounting system, accepted expenditure or cleared pre-financing. In any case, this means after the preventive (ex-ante) control measures have already been implemented earlier in the cycle.

In all cases of Co-Delegations (Internal Rules Article 3), "payments made" are reported by the Delegated departments. For Cross-SubDelegations (Internal Rules Article 12), the reporting remains with the Delegating departments.

(3) New pre-financing actually paid by out by the department itself during the financial year (i.e. excluding any pre-financing received as a transfer from another department), as per note 2.5.1 to the Commission annual accounts thus excluding "Other advances to Member States" which are covered on a purely payment-made basis (note 2.5.2). Pre-financing paid/cleared" are always covered by the Delegated departments, even for Cross-SubDelegations.

Two corrections have been made manually by DG Budget to ensure consistency of reporting:

(1) deduction of a clearing of a pre-financing which appeared in CONNECT's cleared payments report but which has actually been cleared by HaDEA (amount of EUR 1.30 million).

(2) deduction of two pre-financing amounts which appeared in CONNECT's payments report but concerned a correction done in 2022 of Joint Undertaking payments executed in 2021 (amount of EUR 1.98 million and of EUR 52.00 million).

(4) Pre-financing actually cleared during the financial year (i.e. their 'delta' in the Financial Year 'actuals', not their 'cut-off' based estimated 'consumption').

(5) For the purpose of equivalence with the ECA's scope of the EC funds with potential exposure to legality & regularity errors (see the ECA's Annual Report methodological annex 1.1), our concept of "relevant expenditure" includes the payments made, subtracts the new pre-financing paid out [& adds the retentions made], and adds the pre-financing actually cleared during the FY. This is a separate and 'hybrid' concept, intentionally combining elements from the budgetary accounting and from the general ledger accounting.

(6) In this column, we disclose the detected error rates or equivalent estimates.

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 contributions to agencies*), the rate which should be used is 0.5% as a conservative estimate, unless the department has a more precise estimate based on evidence.

(7) The adjusted average recovery and corrections percentage is to some extent based on the 7 years historic Average of Recoveries and financial Corrections (ARC) (i.e. 0.54%), which is the best available indication of the corrective measures each department applied over the past years as a result of ex post controls. The AOD has adjusted this historic average to take into account any ex-ante elements, one-off events, (partially) cancelled or waived Recovery Orders, and other factors from the past years that would no longer be relevant for the current programmes (e.g. higher ex-post corrections of previously higher errors in earlier generations of grant programmes, current programmes with entirely ex-ante control systems) or that corresponded to exceptional situations in order to come to the best and most conservative estimate of the ex-post future corrections to be applied to the reporting year's relevant expenditure for the current programmes.

In particular for Horizon programmes, the average recoveries and corrections is calculated as the difference between the detected error rate and the residual error rate. This is in line with the method used by the research family DGs. Where no recoveries are expected (e.g. *administrative expenditure, procurement*) a 0% rate was cautiously used.

The average amount of the implemented corrections over the past 3 years (2020-2022) is EUR 2.14 million euros (0.2% of the average amount of relevant expenditure of that period), compared to an average amount of estimated future corrections during the same period of EUR 9.81 million (0.7% of the average amount of relevant expenditure of that period).

A correlation between the average amount of the implemented corrections and the average amount of estimated future corrections should be regarded with caution considering that the implemented corrections were made only in respect of audited grant management in CONNECT's portfolio (e.g. H2020) while the future corrections were estimated in respect of all items of expenditure in CONNECT's portfolio (i.e. overall relevant expenditure). The estimation of future corrections has been made using best professional judgement to adjust the 7 years historic Average of Recoveries and financial Corrections (ARC) provided by DG BUDG or as explained above under footnote 7.

2. Reservations

Not applicable

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

a) Human resources management

Objective: CONNECT employs a competent and engaged workforce and contributes to gender equality at all levels of management to effectively deliver on the Commission's priorities and core business			
Indicator 1: Number and percentage of first female appointments to middle management positions			
Source of data: HR Reporting			
Baseline (2019)	Target (2022)	Latest known results (31/12/2022)	
37% (15 female middle managers)	3 first female appointments for CONNECT	7 first female appointments for CONNECT by end of 2022	
Indicator 2: CONNECT staff engagement index			
Source of data: 2020/2021 Pulse survey			
Baseline (2019)	Target (2024)	Latest known results (31/12/2022)	
68% (EC average of 69%)	Further increase and align with EC average in the next Staff Survey	75% (EC average of 72%) stemming from the 2021 Staff Survey	
Main outputs in 2022:			
Description	Indicator	Target	Latest known results
Gender balance in CONNECT	Number of first female appointments to middle management positions	3 first female appointments for CONNECT by end of 2022	7 first female appointments on 31/12/2022
	Number of women designated as Head of Unit and percentage (baseline: 15 (37%) on 01/12/2019)	Increase (>37%, >15)	51% (20 female middle managers out of 39 filled Head of Unit positions) on 31/12/2022
Staff Engagement Index	Staff Engagement Index	Staff engagement index of 69% - in line with Commission average - at next Staff Survey	75% (EC average of 72%) stemming from the 2021 Staff Survey

Description	Indicator	Target	Latest known results
Close monitoring and management of job quotas / budget and careful assessment of replacements for every departure, in light of the operational and political priorities	Taxation targets met within the deadlines set by the budgetary authority	Staff reduction laid down in the 2022 allocation of establishment plan posts and the appropriations for external personnel	All taxation targets due by 01/01/2022 were met. Monthly monitoring of consumption of appropriations for external personnel at HRC led to controlled 2022 consumption within the budgetary ceiling.
Learning & Development Strategy tailored to the skills/ competences/ knowledge required for the delivery of our operational and political priorities	L&D priorities to be adopted as part of the overall HR strategy for the DG	Endorsement by the Management Team of the 2022 L&D priorities	The 2022 L&D priorities were adopted by the Management Team on 10/01/2022

b) Digital transformation and information management

Objective: CONNECT is using innovative, trusted digital solutions for better policy-shaping, information management and administrative processes to forge a truly digitally transformed, user-focused and data-driven Commission

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

Source of data: Modernisation plan

Baseline (2019)	Target (2024)	Latest known results (31/12/2022)
10%	100%	50%

Indicator 2: Percentage of CONNECT's key data assets for which corporate principles for data governance have been implemented

Source of data: CONNECT

Baseline (2019)	Target (2024)	Latest known results (31/12/2022)
10%	80%	50%

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

Source of data: CONNECT's Data Protection Coordinator

Baseline (2019)	Target (2024)	Latest known results (31/12/2022)
24,31%	100% of staff	63,30%

Main outputs in 2022:

Description	Indicator	Target	Latest known results
Implementation of the corporate principles for data governance for CONNECT's key data assets	Percentage of implementation of the corporate principles for data governance for CONNECT's key data assets	50%	50%
Implementation of the Digital Preservation Strategy	Number of IT systems that can be decommissioned after a preservation assessment	0	0
Implementation of the corporate IT security framework for CONNECT's IT systems ⁽⁴⁴⁾	Percentage of implementation of the corporate IT security framework for CONNECT's IT systems	>90%	95%
Implementation of the IT Security Risk Management	Percentage of CONNECT's IT systems with an IT security plan	100%	90%. The target cannot not be reached because at any given time new IT systems can be added and it takes time to fill in the respective security plan
Awareness in cybersecurity threats	Awareness raising events for management team and system owners	2	3
Specialised training sessions on data4policy in collaboration with HR	Number of sessions organised	at least 3 training sessions organised	No DG specific training sessions are offered anymore. CONNECT uses the offer tailored by DG Human Resources and Security and the Secretariat-General
Migrating colleagues to M365 and TEAMS	Percentage of colleague adopting M365 and Welcome	100% colleagues on Teams	50% already migrated to welcome and 100 % of colleagues regularly uses teams. The remaining migration to welcome depends on DIGIT support and will completed during 2023

⁽⁴⁴⁾ The IT security framework at the Commission, built around the legal base - the Commission decision 2017/46 of 10 January 2017, the IT Security Risk Management (ITSRM) methodology, the IT Security Strategy, the IT security standards, and guidelines.

Description	Indicator	Target	Latest known results
Supporting digital collaboration and paperless processes	Adoption of the Collaboration Blueprint by colleagues	at least 50% Teams Groups include the Blueprint as a Tab	Because of privacy reasons it is not possible to monitor the creation of the Tab in private teams. However, all colleagues received the necessary information to create it
DPC to organise tailor-made training sessions	Number of sessions organised	training sessions	10 training session
	% of staff trained about the requirements of Regulation (EU) 2018/1725	45%	63,30%
Establishing records for new processing operations	Percentage of new identified processing operations reflected in created records	100% of identified new processing operations	We have started the process for adoption of all the necessary new data protection records
Note reminding operational controllers of their article 29 IDPR obligations.	Note sent to operational controllers	Q4 2022	The note was published on the DPC Corner in Q1 2022
Internal documentation of DPO templates for handling requests from data subjects	Percentage of internal documentation and availability of templates	100% of new templates documented and made available to CONNECT operational controllers	We published the DPO guidance on data subject rights on the DPC Corner and templates are available to operational controllers through the DPC Team

c) Sound environmental management

Objective: CONNECT takes full account of its environmental impact in all its actions and actively promotes measures to reduce the related day-to-day impact of the administration and its work

Main outputs in 2022:

Description	Indicator	Target	Latest known results
Staff awareness actions to reduce energy use in the framework of EMAS corporate campaigns and/or awareness actions about DG's total energy	Statistics on Green at Connect space, internal newsletter and Diversity and Inclusions Network	Increase the number of visits by 10%	As there were 3 different EMAS correspondents over the last year, it was not possible to gather the data on this specific aspect.

Description	Indicator	Target	Latest known results
consumption in collaboration with OIB/OIL	Number of actions	2	Promotion of the Mobility week in September 2022, volunteering action to clean upriver banks in March 2022, Interinstitutional EMAS Days in February 2022.
Participation in the end of the year energy saving action	Number of buildings participating	At least 2 of DG buildings participating	Only the new DG building in Brussels participated as the one in Luxemburg needs to be kept open.
Paperless working methods at DG level	Number of actions	2	With the hybrid working environment, colleagues are getting more used to working in a paperless way. Even though printers are still available in the new building, colleagues refrain from using them as their desks are no longer personal and storage of personal paper files or archive is not encouraged.
Optimise and gradually reduce CO ₂ emissions.	Number of business trips	Reduce number of business trips by at least 30 % (baseline 2019: 3.665)	In 2022, 1.102 colleagues went on a mission, which means a decrease of almost 70% (instead of 30%, meaning 2.565 business trips).
Staff awareness on digital pollution and gradual change of behaviours avoiding heavy emails, encouraging the use of ICT platforms.	Number of awareness actions	2	The implementation and promotion of IT tools like M365 and Teams within the DG has made the colleagues work in a more effective and quicker way. This enables a decrease in emails as all the relevant colleagues can collaborate in the same document at the same time and coordinate more easily. Also, applications like Signal enable teams and units to communicate on an immediate paperless basis.

Description	Indicator	Target	Latest known results
Staff awareness actions about waste reduction and sorting	Number or awareness actions	2	<p>Individual garbage bins are no longer available. Common garbage bins have been implemented, which enable an easy recycling. The waste they can contain is clearly identified by the colour of the bin and the pictograms.</p> <p>Also, the common spaces like the kitchens or social spaces contain garbage bins that ensure an easy recycling.</p>

ANNEX 11: Implementation through national or international public-sector bodies and bodies governed by private law with a public sector mission

A. Key Digital Technologies (KDT) Joint Undertaking (successor of the Electronic Components and Systems for European Leadership (ECSEL) Joint Undertaking)

1. Programmes concerned:	Horizon 2020 - the Framework Programme for RTD (2014-2020) - PART II. PRIORITY Industrial leadership, under specific objective - Leadership in enabling and industrial technologies On 30 November 2021, Council Regulation (EU) 2021/2085 entered into force and set up the KDT Joint Undertaking, that replaces and repeals the Council Regulation establishing ECSEL Joint Undertaking. The KDT Joint Undertaking's concerned Programme is Horizon Europe, the Framework Programme for RTD (2021-2027).
2. Annual budgetary amount entrusted / payments made	EUR 218.22 million
3. Duration of the delegation:	For ECSEL: 27 June 2014 - 31 December 2024 For KDT: 30 November 2021 – 31 December 2031
4. Justification of recourse to indirect centralised management:	Required by the Council Regulation establishing ECSEL Joint Undertaking and by the Council Regulation (EU) 2021/2085 establishing the KDT Joint Undertaking.
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc):	Set out in the Council Regulation establishing the ECSEL Joint Undertaking and the Council Regulation (EU) 2021/2085 establishing the KDT Joint Undertaking as Union bodies
6. Summary description of the implementing tasks entrusted.	The ECSEL JU shall carry out the following tasks: (a) support financially research and innovation indirect actions, mainly in the form of grants; (b) implement the tasks related to the operations of the Participants Guarantee Fund (PGF) for all the grants awarded by the ECSEL JU, according to the rules set out in the Rules for Participation and the Commission Decision on the financial management of the Participants Guarantee Fund C (2013) 9092, that establishes that the Executive Director of the ECSEL JU as the Authorising Officer (AO) will be responsible: - for retaining, from each initial pre-financing, 5% of the maximum grant amount provided for in the grant agreement and for transferring this amount from their specific account to the PGF; - for returning PGF contributions to beneficiaries, for PGF interventions and for receipts. (c) ensure sustainable management of the ECSEL JU;

	<p>(d) develop close cooperation and ensure coordination with European (in particular Horizon 2020), national and transnational activities, bodies and stakeholders, aiming at fostering a fertile innovation environment in Europe, creating synergies and improving exploitation of research and innovation results in the area of electronic components and systems;</p> <p>(e) define and make any necessary adjustments to the multiannual strategic plan;</p> <p>(f) draw up and implement work plans for executing the multiannual strategic plan;</p> <p>(f) initiate open calls for proposals, evaluate proposals, and award funding to indirect actions through open and transparent procedures within the limits of available funds;</p> <p>(g) publish information on the indirect actions;</p> <p>(h) monitor the implementation of the indirect actions and manage the grant agreements or decisions;</p> <p>(i) monitor overall progress towards achieving the objectives of the ECSEL JU;</p> <p>(j) engage in information, communication, exploitation and dissemination activities by applying mutatis mutandis Article 28 of Regulation (EU) No 1291/2013, including making the detailed information on results from calls for proposals available and accessible in a common Horizon 2020 e-database;</p> <p>(k) liaise with a broad range of stakeholders, including research organisations and universities.</p> <p>The KDT Joint Undertaking shall, inter alia:</p> <ul style="list-style-type: none"> a) provide financial support, mainly in the form of grants, to research and innovation indirect actions, selected following open, transparent and competitive calls except in duly justified cases specified in their work programme in order to set additional conditions requiring the participation of members of the joint undertaking or their constituent or affiliated entities; b) define and implement its work programme; c) promote the involvement of SMEs and start-ups in their activities and ensure the provision of timely information to them, in line with the objectives of Horizon Europe; d) identify and report, in line with the common policy feedback framework and with strategies and actions to support the European Green Deal objectives, the relevant knowledge acquired from the management of research and innovation projects and their results to the Commission to serve as input for monitoring, evaluating and rectifying, where necessary, existing policy measures or shaping new policy initiatives and decisions. <p>All the tasks of the KDT Joint Undertaking are listed in Article 5 of Council Regulation (EU) 2021/2085.</p>
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B. European High Performance Computing (EuroHPC) Joint Undertaking

1. Programmes concerned	<p>Connecting Europe Facility (CEF) — Telecommunication Networks and in particular of projects of common interest in the area of digital service infrastructures.</p> <p>Horizon 2020 – In particular the ‘Strengthening research in future and emerging technologies’ and the ‘Strengthening European research infrastructure, including e-infrastructure’ segments of the priority ‘Excellent Science’ and the ‘Information and communications technology’ segment of the priority ‘Industrial leadership’.</p> <p>Horizon Europe – ‘Digital, Industry and Space’. It shall have the objective of putting Europe back at the forefront of supercomputing technology and of providing researchers, industry, SMEs and public authorities with access to world-class supercomputers unleashing their innovation and transformation potential.</p> <p>Digital Europe Programme – It is intended to cover SO1 actions to build-up and strengthen the Union’s high-performance computing and data processing capacities, and ensure their wide use both in areas of public interest such as health, climate, environment, and security, and by industry, notably SMEs.</p> <p>Connecting Europe Facility (CEF) Digital – HPC Backbone Tera-bit Connectivity</p>
2. Annual budgetary amount entrusted / payments made	EUR 407.14 million
3. Duration of the delegation	8 August 2021 – 31 December 2033
4. Justification of recourse to indirect centralised management	Required by the Council Regulation (EU) 2021/1173 of 13 July 2021 on establishing the European High Performance Computing Joint Undertaking and repealing Regulation (EU) 2018/1488
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	Set out in the Council Regulation establishing the EuroHPC Joint Undertaking as a Union body.
6. Summary description of the implementing tasks entrusted.	<p>The Joint Undertaking will fulfil the objectives from the current Regulation ⁽⁴⁵⁾:</p> <ul style="list-style-type: none"> – A federated, secure and hyper-connected European HPC and data infrastructure with mid-range supercomputers and at least two top class exascale and two top class post-exascale systems (at least one of each category built with European technology); – Hybrid computing infrastructures integrating advanced computing systems – notably quantum simulators and quantum computers – in HPC

⁽⁴⁵⁾ Council Regulation (EU) 2021/1173 of 13 July 2021 on establishing the European High Performance Computing Joint Undertaking and repealing Regulation (EU) 2018/1488, OJ L 256, 19.7.2021, p. 3–51.

	<p>infrastructures;</p> <ul style="list-style-type: none"> – A secure cloud-based HPC and data infrastructure for European private users; – HPC-powered capacities and services based on European public data spaces for scientists, industry and the public sector; – Next generation technology building blocks (hardware and software) and their integration into innovative HPC architectures for exascale and post-exascale systems; – Centres of Excellence in HPC applications and industrialisation of HPC software, with novel algorithms, codes and tools optimised for future generations of supercomputers; – Large-scale industrial pilot test-beds and platforms for HPC and data applications and services in key industrial sectors; – National HPC Competence Centres, ensuring a wide coverage of HPC in the EU, with specific services and resources for industrial innovation (including SMEs); – A significant increase for Europe’s workforce in HPC skills and know-how; – Reinforced data storage, processing capacities, and new services, in areas of public interest across the Member States.
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C. Smart Networks and Services JU (SNS)

1. Programmes concerned	<p>Connecting Europe Facility (CEF) — Digital connectivity infrastructure and in particular 5G coverage along major transport paths.</p> <p>Horizon Europe – ‘Digital, Industry and Space’ to develop world-class high-performance computing, data and communication technologies (including Quantum and ‘Beyond 5G’ connectivity).</p>
2. Annual budgetary amount entrusted /payments made	<p>The SNS was established through Council Regulation (EU) 2021/2085 (19/11/2021) establishing the Joint Undertakings under Horizon Europe. SNS is not yet autonomous. The Commission services will carry out SNS activities until its autonomy.</p>
3. Duration of the delegation	<p>30 November 2021 – 31 December 2031</p>
4. Justification of recourse to indirect centralised management	<p>Required by Council Regulation (EU) 2021/2085 (19/11/2021) establishing the SNS Joint Undertaking.</p>
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	<p>Set out in Council Regulation (EU) 2021/2085 (19/11/2021) establishing the SNS Joint Undertaking as Union body</p>
6. Summary description of the implementing tasks entrusted	<p>The SNS Joint Undertaking shall, inter alia:</p> <ul style="list-style-type: none"> a) provide financial support, mainly in the form of grants, to research and innovation indirect actions, selected following open, transparent and competitive calls except in duly justified cases specified in their work programme in order to set additional

	<p>conditions requiring the participation of members of the joint undertaking or their constituent or affiliated entities;</p> <p>b) define and implement its work programme;</p> <p>c) promote the involvement of SMEs and start-ups in their activities and ensure the provision of timely information to them, in line with the objectives of Horizon Europe;</p> <p>d) identify and report, in line with the common policy feedback framework and with strategies and actions to support the European Green Deal objectives, the relevant knowledge acquired from the management of research and innovation projects and their results to the Commission to serve as input for monitoring, evaluating and rectifying, where necessary, existing policy measures or shaping new policy initiatives and decisions.</p> <p>All the tasks of the SNS Joint Undertaking are listed in Article 5 of Council Regulation (EU) 2021/2085 of 19/11/2021.</p>
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D. European Cybersecurity Competence Centre (ECCC)

1. Programmes concerned	Digital Europe and, under certain conditions, Horizon Europe
2. Annual budgetary amount entrusted /payments made	CONNECT carries out the activities on behalf of the ECCC until its autonomy. The related payments made by CONNECT during 2022 are included in the CONNECT total payments made (as reported in section 2.1.1 of the AAR).
3. Duration of the delegation	As of autonomy, until 2029
4. Justification of recourse to indirect centralised management	Required by Regulation (EU) 2021/887 of the European Parliament and of the Council of 20 May 2021
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	Set out by Regulation (EU) 2021/887 of the European Parliament and of the Council of 20 May 2021
6. Summary description of the implementing tasks entrusted	<p>In accordance with Article 5 of Regulation (EU) 2021/887 the European Cybersecurity Competence Centre shall have the following tasks:</p> <p>(a) strategic tasks; and</p> <p>(b) implementation tasks.</p> <p>1. The strategic tasks referred to in point (a) of paragraph 1 shall consist of:</p> <p>(a) developing and monitoring the implementation of the Agenda;</p> <p>(b) through the Agenda and the multiannual work programme, while avoiding any duplication of activities with ENISA and taking into account the need to create synergies between cybersecurity and other parts of Horizon Europe and the Digital Europe Programme:</p> <p>(i) establishing priorities for the work of the Competence Centre in</p>

	<p>relation to:</p> <ul style="list-style-type: none"> (1) the enhancement of cybersecurity research and innovation, covering the entire innovation cycle, and the deployment of that research and innovation; (2) the development of cybersecurity industrial, technological and research capacities, capabilities, and infra- structure; (3) the reinforcement of cybersecurity and technology skills and competence in industry, technology and research and at all relevant educational levels, supporting gender balance; (4) the deployment of cybersecurity products, services and processes; (5) support for the uptake by the market of cybersecurity products, services and processes contributing to the mission set out in Article 3; (6) support for the adoption and integration of state-of-the-art cybersecurity products, services and processes by public authorities at their request, by demand-side industries and by other users; <ul style="list-style-type: none"> (ii) supporting the cybersecurity industry, in particular SMEs, with a view to strengthening Union excellence, capacity and competitiveness with regard to cybersecurity, including with a view to connecting to potential markets and deployment opportunities, and to attracting investment; and (iii) providing support and technical assistance to cybersecurity start-ups, SMEs, microenterprises, associations, individual experts and civic technology projects; <ul style="list-style-type: none"> (c) ensuring synergies between and cooperation with relevant Union institutions, bodies, offices and agencies, in particular ENISA, while avoiding any duplication of activities with those Union institutions, bodies, offices and agencies; (d) coordinating national coordination centres through the Network and ensuring a regular exchange of expertise; (e) providing expert cybersecurity industrial, technology and research advice to Member States at their request, including with regard to the procurement and deployment of technologies; (f) facilitating collaboration and the sharing of expertise among all relevant stakeholders, in particular members of the Community; (g) attending Union, national and international conferences, fairs and forums related to the mission, objectives and tasks of the Competence Centre with the aim of sharing views and exchanging relevant best practices with other participants; (h) facilitating the use of results from research and innovation projects in actions related to the development of cybersecurity products, services and processes, while seeking to avoid the fragmentation and duplication of efforts and replicating good cybersecurity practices and cybersecurity products, services and processes, in particular those developed by SMEs and those using open source software. <p>2. The implementation tasks referred to in point (b) of paragraph 1</p>
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	<p>shall consist of:</p> <ul style="list-style-type: none"> (a) coordinating and administrating the work of the Network and the Community in order to fulfil the mission set out in Article 3, in particular by supporting cybersecurity start-ups, SMEs, microenterprises, associations and civic technology projects in the Union and facilitating their access to expertise, funding, investment and markets; (b) establishing and implementing the annual work programme, in accordance with the Agenda and the multiannual work programme, for the cybersecurity parts of: <ul style="list-style-type: none"> (i) the Digital Europe Programme, in particular actions related to Article 6 of Regulation (EU) 2021/694; (ii) joint actions receiving support under the provisions that relate to cybersecurity in Horizon Europe, in particular with regard to Section 3.1.3 of Pillar II of Annex I to Decision (EU) 2021/764, in accordance with the multi-annual work programme and the strategic planning process of Horizon Europe; and (iii) other programmes where provided for in the relevant legislative acts of the Union; (c) supporting, where appropriate, the achievement of Specific Objective 4 – ‘Advanced Digital Skills’ as set out in Article 7 of Regulation (EU) 2021/694, in cooperation with European Digital Innovation Hubs; (d) providing expert advice on cybersecurity industry, technology and research to the Commission when the Commission prepares draft work programmes pursuant to Article 13 of Decision (EU) 2021/764; (e) carrying out or enabling the deployment of ICT infrastructure and facilitating the acquisition of such infrastructure, for the benefit of society, industry and the public sector, at the request of Member States, research communities and operators of essential services, by means of, inter alia, contributions from Member States and Union funding for joint actions, in accordance with the Agenda, the annual work programme and the multiannual work programme; (f) raising awareness of the mission of the Competence Centre and the Network and of the objectives and tasks of the Competence Centre; (g) without prejudice to the civilian nature of projects to be financed from Horizon Europe, and in accordance with Regulations (EU) 2021/695 and (EU) 2021/694, enhancing synergies and coordination between the cybersecurity civilian and defence spheres, by facilitating the exchange of: <ul style="list-style-type: none"> (i) knowledge and information with regard to dual-use technologies and applications; (ii) results, requirements and best practices; and (iii) information with regard to the priorities of relevant Union programmes. <p>3. The Competence Centre shall carry out the tasks set out in paragraph 1 in close cooperation with the Network.</p> <p>4. In accordance with Article 6 of Regulation (EU) 2021/695 and subject to a contribution agreement as defined in point (18) of Article 2 of the Financial Regulation, the Competence Centre may be entrusted with the</p>
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	implementation of the cybersecurity parts under Horizon Europe that are not co-funded by the Member States, in particular with regard to Section 3.1.3 of Pillar II of Annex I to Decision (EU) 2021/764.
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E. Active and Assisted Living (AAL II) Joint Programme

1. Programmes concerned	H2020 Societal Challenges – Health, demographic change and well-being
2. Annual budgetary amount entrusted /payments made	EUR 13.81 million
3. Duration of the delegation	2014-2027
4. Justification of recourse to indirect centralised management	Required by co-decision ⁽⁴⁶⁾ by the European Parliament and the Council concerning the Community participation in the AAL Joint Programme (represented by the AAL Association, an International ASBL under Belgian Law)
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc):	Set out in co-decision by the European Parliament and the Council on the participation of the Union in the AAL Programme jointly undertaken by several Member States
6. Summary description of the implementing tasks entrusted.	<p>The AAL JP shall implement the following tasks set out in the co-decision by the European Parliament and the Council ⁽⁴⁷⁾:</p> <ol style="list-style-type: none"> 1. Support market-oriented research and innovation projects for active and healthy ageing, which shall demonstrate the capability to exploit the project results within a realistic time frame; the financing of those indirect actions under the AAL Programme shall mainly take the form of grants. It may also take other forms such as prizes, pre-commercial procurement, and public procurement of innovative solutions. 2. Implement actions for the purposes of brokerage, programme promotion, in particular outreach activities to countries not currently participating in the AAL Programme, actions to raise awareness of the current capabilities, foster deployment of innovative solutions and connect supply and demand side organisations and facilitating access to finance and investors may be supported. 3. Draw up and implement annual work plans identifying forms of funding and topics for calls for proposals. 4. Consult with relevant stakeholders (including decision-makers from public authorities, user representatives, private-sector service providers and insurance providers as well as industry, including small and medium-sized enterprises) concerning the applied research and innovation priorities to be addressed. 5. Take into account demographic trends and demographic research in order to provide solutions that reflect the social and economic situation

⁽⁴⁶⁾ Decision 554/2014/EU of 15 May 2014.

⁽⁴⁷⁾ Annex II of Decision 554/2014/EU of 15 May 2014.

	<p>across the Union.</p> <p>6. Take into account the Union's industrial, climate and energy policies. The AAL Programme shall also promote energy efficiency and reflect the need to tackle energy poverty.</p> <p>7. Due account shall be taken of gender, ethical, social sciences and humanities and privacy issues, in line with the Horizon 2020 principles and rules. Account shall also be taken of relevant Union and national legislation and international guidelines, in particular regarding the rights to privacy and data protection.</p> <p>8. In line with the close-to-market nature of the AAL Programme and in compliance with the rules set out in Regulation (EU, Euratom) No 966/2012, the AALA shall ensure time-to-grant and time-to-payment in accordance with Regulation (EU) No 1290/2013 and ensure compliance with them by Participating States during the implementation of the AAL Programme.</p> <p>9. Each Participating State shall strongly promote, from the earliest stage of all research and innovation projects, the participation of organisations representing demand side actors, including end users.</p> <p>10. Each Participating State shall co-finance its national participants whose proposals are successful through national agencies that shall, in addition, channel the Union co-funding from the dedicated implementation structure, on the basis of a common project description, which forms part of an agreement to be concluded between the respective national programme management agencies and their national participants for each project.</p> <p>11. After the closure of a call for project proposals, a central eligibility check shall be carried out by the AALA in cooperation with the designated national programme management agencies. That check shall be performed on the basis of the common eligibility criteria for the AAL Programme which shall be published with the call for project proposals.</p> <p>12. The AALA shall, with the assistance of the national programme management agencies, check the fulfilment of additional national eligibility criteria set out in the calls for project proposals.</p> <p>13. The national eligibility criteria shall relate only to the legal and financial status of the individual applicants and not to the content of the proposal and shall concern the following aspects:</p> <p>13.1. applicant type, including legal status and purpose;</p> <p>13.2. liability and viability, including financial soundness, fulfilment of tax and social obligations.</p> <p>14. Eligible project proposals shall be evaluated by the AALA with the assistance of independent experts, on the basis of transparent and common evaluation criteria, as set out in the published call for proposals, and a list of projects in order of score shall be produced. Projects shall be selected in accordance with that ranking and taking account of available funding. That selection, once adopted by the General Assembly of the AALA, shall be binding on the Participating States.</p> <p>15. If a project participant fails to meet one or more of the national eligibility criteria or if the corresponding national budget for commitment for funding is exhausted, the Executive Board of the AALA may decide that</p>
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	<p>an additional central independent evaluation of the proposal concerned should be carried out with the assistance of independent experts, in order to evaluate the proposal either without the participation of the participant in question or with a replacement participant, as suggested by project participants.</p> <p>16. Legal and financial issues concerning participants in projects selected for funding shall be handled by the designated national programme management agency. National administrative rules and principles shall be applied.</p>
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F. European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)

1. Programmes concerned	Digital Europe Programme
2. Annual budgetary amount entrusted /payments made	EUR 5.74 million
3. Duration of the delegation	The contribution agreement was signed with EUMETSAT on 15 December 2021 under the new EU MFF (2021-2027) for 30 months.
4. Justification of recourse to indirect centralised management	<p>The new EU 'Destination Earth' aims at developing a very high precision digital model of the Earth to monitor and simulate natural and human activity, which would allow combining prediction and simulation capacities and connecting environmental challenges with socio-economic impacts and hence enhance the ability to anticipate environmental disasters and their impacts on society.</p> <p>The implementation of the Destination Earth Initiative relies on the cooperation between the Commission and three global leaders in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, ie: the European Space Agency (ESA), the European Centre for Medium-Range Weather Forecasts (ECMWF) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) with a view to maximise the synergies and the respective expertise.</p> <p>Legal basis: Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240 (the 'Digital Europe Regulation').</p>
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	As a recognised global leader whose key expertise in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, EUMETSAT is pivotal to the successful implementation of the Destination Earth. In addition, in its capacity as an entrusted entity under the Copernicus programme it will contribute to the creation of synergies foreseen between Copernicus and the Destination Earth initiative.
6. Summary description of the implementing tasks entrusted	End-to-end development, implementation and operation of the Destination Earth Data Lake and dedicated Data Infrastructure, provision of high value data sets and data tailoring services; technical expertise in design, implementation and operation of state-of-the-art cloud and data

	federations.
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G. European Space Agency (ESA)

1. Programmes concerned	Digital Europe Programme
2. Annual budgetary amount entrusted /payments made	EUR 2.45 million
3. Duration of the delegation	The contribution agreement was signed with ESA on 15 December 2021 under the new EU MFF (2021-2027) for 30 months.
4. Justification of recourse to indirect centralised management	<p>The new EU 'Destination Earth' aims at developing a very high precision digital model of the Earth to monitor and simulate natural and human activity, which would allow combining prediction and simulation capacities and connecting environmental challenges with socio-economic impacts and hence enhance the ability to anticipate environmental disasters and their impacts on society.</p> <p>The implementation of the Destination Earth Initiative relies on the cooperation between the Commission and three global leaders in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, i.e.: the European Space Agency (ESA), the European Centre for Medium-Range Weather Forecasts (ECMWF) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) with a view to maximise the synergies and the respective expertise.</p> <p>Legal basis: Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240 (the 'Digital Europe Regulation').</p>
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	As a recognised global leader whose key expertise in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, ESA is pivotal to the successful implementation of the Destination Earth. In addition, in its capacity as an entrusted entity under the Copernicus programme it will contribute to the creation of synergies foreseen between Copernicus and the Destination Earth initiative.
6. Summary description of the implementing tasks entrusted	ESA is the core developer, system integrator and operator of the core service platform, responsible for providing programmatic framework; design, implementation, integration of the platform with dedicated data infrastructure, supercomputing Infrastructure elements, digital twins and other enabling digital technologies; management of large industrial procurements, implementation of the "AI-everywhere" approach. It will also coordinate the inputs from other implementing entities as described in the Joint Work Plan annexed to the contribution agreements.

H. European Centre for Medium-Range Weather Forecasts (ECMWF)

1. Programmes concerned	Digital Europe Programme
2. Annual budgetary amount	EUR 21.20 million

entrusted /payments made	
3. Duration of the delegation	The contribution agreement was signed with ECMWF on 15 December 2021 under the new EU MFF (2021-2027) for 30 months.
4. Justification of recourse to indirect centralised management	<p>The new EU 'Destination Earth' aims at developing a very high precision digital model of the Earth to monitor and simulate natural and human activity, which would allow combining prediction and simulation capacities and connecting environmental challenges with socio-economic impacts and hence enhance the ability to anticipate environmental disasters and their impacts on society.</p> <p>The implementation of the Destination Earth Initiative relies on the cooperation between the Commission and three global leaders in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, i.e.: the European Space Agency (ESA), the European Centre for Medium-Range Weather Forecasts (ECMWF) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) with a view to maximise the synergies and the respective expertise.</p> <p>Legal basis: Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240 (the 'Digital Europe Regulation').</p>
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	As a recognised global leader whose key expertise in world-class Earth Observation systems, Earth-system modelling and data assimilation, data and services provision, ECMWF is pivotal to the successful implementation of the Destination Earth. In addition, in its capacity as an entrusted entity under the Copernicus programme it will contribute to the creation of synergies foreseen between Copernicus and the Destination Earth initiative.
6. Summary description of the implementing tasks entrusted	ECMWF leads the Digital Twin development. It is also responsible for horizontal software layers enabling Earth-system modelling and data assimilation, digital twins and supporting digital technologies; extreme-scale computing and data handling; HPC and big-data hardware infrastructures; tools and datasets for AI, federated cloud computing and data management; support interfaces.

I. United Nations Department of Economic and Social Affairs

1. Programmes concerned	Electronic Communications Commission Decision C(2021)646 of 09/02/2022
2. Annual budgetary amount entrusted /payments made	EUR 0.24 million
3. Duration of the delegation	The contribution agreement was signed on 14/12/2022 for a duration of 12 months (01/01/2022-31/12/2022)
4. Justification of recourse to indirect centralised management	Working with a pillar assessed international organisation requires a contribution agreement and therefore indirect management.

5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	The IGF secretariat being hosted by the United Nations is a body in a <i>de facto</i> monopoly situation.
6. Summary description of the implementing tasks entrusted	<p>Commission Decision C(2022)646 of 09/02/2022.</p> <p>The IGF Secretariat's activities are funded through extra-budgetary contributions paid to a multi-donor trust fund administered by the United Nations Department of Economic and Social Affairs and the funds are not earmarked for specific items or categories of expenditure. However, through constant dialogue with the IGF Secretariat, the Commission makes sure that the funds are used to support activities of relevance for the EU, including:</p> <ul style="list-style-type: none"> - Enabling environment for multi-stakeholder policy dialogue related to the key elements of Internet governance; - Enhanced collaboration among key organisations dealing with different Internet governance issues in support of the EU digital and development goals; - Exchange of information to foster the sustainability, robustness, security, stability and development of the global Internet; - Strengthened capacity of developing country stakeholders to participate effectively in Internet governance. In addition, the funds will allow supporting enhancements of the IGF model towards an IGF+ in line with the Commission recommendations, including: <ul style="list-style-type: none"> - The careful elaboration of a more focused agenda, based on a limited number of strategic policy issues; - The creation of stronger links among the global Forum and its regional, national, sub-regional and youth initiatives; - A better integration of the programme and intersessional policy development work to support priority areas; - A mechanism to coordinate follow-up action on IGF discussions and relay proposed policy approaches and recommendations from the IGF to the appropriate normative and decision-making fora; - The elaboration of a strategy for the long-term sustainability of the Forum and the resources necessary for increased participation, through an innovative and viable fundraising strategy.

J. The European Audiovisual Observatory (EAO)

1. Programmes concerned	Connecting Europe Facility
2. Annual budgetary amount entrusted /payments made	EUR 0.53 million
3. Duration of the delegation	The contribution agreement was signed on 24/11/2021. The implementation period of the agreement commenced on 01/03/2021 for a duration of 22 months.

4. Justification of recourse to indirect centralised management	We are working with an international organisation (Council of Europe/EAO) and the type of contract, according to Commission rules, is a contribution agreement under indirect management.
5. Justification of the selection of the bodies (identity, selection criteria, possible indication in the legal basis etc)	Most suitable organisation in Europe to achieve the objective, recognised as the European public entity for collecting data and providing transparency on the audiovisual market, also mentioned in Article 11 of the Creative Europe Regulation
6. Summary description of the implementing tasks entrusted	<p>The purpose of this Agreement is to provide a financial contribution to finance the implementation of the action entitled “EA06 — Information and Research on the Audiovisual Sector”. The Agreement establishes the rules for the implementation and for the payment of the EU Contribution, and defines the relations between the Organisation and the Contracting Authority.</p> <p>In the performance of the activities, the Organisation shall:</p> <ul style="list-style-type: none"> a) apply its own accounting, internal control and audit systems, which have been positively assessed in the ex-ante pillar assessment. b) apply its own procurement procedures, which have been positively assessed in the ex ante pillar assessment. c) apply its own rules and procedures for exclusion from access to funding, which have been positively assessed in the ex-ante pillar assessment. d) apply its own rules and procedures for publication of information on recipients, as assessed in the ex-ante pillar assessment. e) apply its own rules and procedures for the protection of personal data, as assessed in the ex-ante pillar assessment. f) In the implementation of the activities foreseen in Annex I, the systems, rules and procedures referred to in points a) to e) will be those of the European Audiovisual Observatory. Even though these procedures have not been pillar assessed, they are closely aligned to those of the Council of Europe.

ANNEX 12: EAMR of the Union Delegations

Not applicable

ANNEX 13: Decentralised agencies

Entity: European Union Agency for Cybersecurity (ENISA)

Role of DG: Supervision

Policy area concerned	Contribution to the Operating (administrative) budget	Contribution to the Operational Budget
To achieve a high and effective level of Network and Information Security within the European Union. Together with the EU-institutions and the Member States, ENISA seeks to develop a culture of Network and Information Security for the benefit of citizens, consumers, business and public sector organisations in the European Union.	EUR 15.32 million	EUR 8.89 million

Entity: Office of the Body of European Regulators for Electronic Communications (BEREC Office)

Role of DG: Supervision

Policy area concerned	Contribution to the Operating (administrative) budget	Contribution to the Operational Budget
The main task of the BEREC Office is to support and assist BEREC, the Body of European Regulators for Electronic Communications. BEREC's mission is to contribute to the development and better functioning of the internal market for electronic communications networks and services by aiming to ensure a consistent application of the EU regulatory framework for electronic communications.	EUR 5.19 million	EUR 2.24 million

ANNEX 14: Reporting on the Recovery and Resilience Facility

Not applicable