

ANNEXES

ANNEX 1: Statement of the Resources Director

I declare that in accordance with the Commission's communication on clarification of the responsibilities of the key actors in the domain of internal audit and internal control in the Commission¹, I have reported my advice and recommendations to the Director-General on the overall state of internal control in the DG.

I hereby certify that the information provided in Section 2 of the present AAR and in its annexes is, to the best of my knowledge, accurate and complete.

Brussels, 31 March 2017

Signed

Gail Kent

Director Resources & Support, Internal Control Coordinator

¹ Communication to the Commission: Clarification of the responsibilities of the key actors in the domain of internal audit and internal control in the Commission; SEC(2003)59 of 21.01.2003.

ANNEX 2: Reporting – Human Resources, Better Regulation, Information Management and External Communication

Human resources

Objective: The DG deploys effectively its resources in support of the delivery of the Commission's priorities and core business, has a competent and engaged workforce, which is driven by an effective and gender-balanced management and which can deploy its full potential within supportive and healthy working conditions.

Indicator (data to be provided by DG HR): Percentage of female representation in middle management.

Source of data: HR Reporting

Baseline 01/01/2016	Target 2019	Latest known results
28,9%	40%	30% by 31/12/2016

Indicator 2 (data to be provided by DG HR): Percentage of staff who feel that the Commission cares about their well-being².

Source of data: Commission staff survey.

Baseline 2014	Target 2019	Latest known results
33,5%	50% by end 2019 This target is in line with the DG CONNECT results in the former (2013) staff satisfaction survey and slightly above the current EC average.	32% on 18/10/2016

Indicator 3 (data to be provided by DG HR): Staff engagement index.

Source of data: Commission staff survey.

Baseline 2014	Target 2019	Latest known results
62	70 by end 2019 This target is in line with the DG CONNECT results in the former (2013) staff satisfaction survey and with the current EC average.	60% by end 2016

² This indicator may be replaced by a fit@work index on which DG HR is currently working.

Main outputs in 2016:			
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 2016 Allocation of Establishment Plan Posts and the Appropriations for External Personnel.	All taxation targets laid down in the 2016 allocation of establishment plan posts and the appropriations for external personnel were met.
Learning & Development Strategy tailored to the skills/ competences/ knowledge required for the completion of our operational and political priorities.	2016 Learning & Development Framework approved.	Complete curriculum reflecting newly identified requirements.	2016 Learning & Development Strategy approved by the Management Team on 14/12/2015.
Pursue efforts to redeploy staff from administrative support and policy coordination or financial functions to operational activities, also in search of efficiency gains and geographical staffing requirements.	Lower the overhead ratio in the DG below Family average (8.1% in 2015) and as close as possible to EC average (6.9% in 2015).	Progressive reduction of staff allocated to overhead functions in compliance with screening exercise.	<p>The final 2016 Screening Results equals to 8.1%, which corresponds to the 2015 final screening ratio. This is slightly above the Family average of 7.4%. However, DG HR confirmed that this exercise was the last one launched in the habitual format.</p> <p>DG CONNECT reduced its level of support function in line with the 2016 target (10 FTEs) agreed with DG HR as a result of the Synergies & Efficiencies Review.</p>
<p>Monitor the implementation of the DG action plan as a follow-up to the 2014 Commission staff satisfaction survey.</p> <ul style="list-style-type: none"> HR transparency: 	Staff Engagement Index within the 2016 Commission staff satisfaction survey.	Staff Engagement Index of 65	<p>Staff Engagement of 60% as set out in the 2016 Staff Survey.</p> <p>The results of the 2016 Staff Survey</p>

<p>publication in advance of the Human Resources Committee meeting agenda, rotating-based participation of Directors, staff information seminars.</p> <ul style="list-style-type: none"> • Work-life balance: e-mail code of conduct, parking arrangements during absences; parking arrangements, simplification of reporting on meetings. • Career development: extend on-going 180°/360° for a wider staff, encourage managers' career feedback to contract agents, more attention to training path during the appraisal process. • Equal Opportunities: infographics on gender balance; managers acting as role-model for future managers, in particular women. • Logistics: improve catering (BXL), renovate buildings (BXL), and improve parking (OIL). 			<p>were analysed and led to the adoption of an action plan by the Management Team on 19/12/2016.</p>
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Better regulation

For **Better regulation (BR)**, the data for the indicators is collected by the DG.

Objective: Prepare new policy initiatives and manage the EU's acquis in line with better regulation practices to ensure that EU policy objectives are achieved

effectively and efficiently.

Indicator 1: Percentage of Impact assessments submitted by DG CONNECT to the Regulatory Scrutiny Board that received a favourable opinion on first submission.

Source of data: DG CONNECT (based on Regulatory Scrutiny Board reports)

Baseline 2015	Interim milestone 2016	Target 2020	Latest known results
68% = Commission average in 2014: We use the percentage of 2014 as the CNECT value for 2015 is 100 % (2 out of the 2 IA submitted) because this figure has limited significance as DG CONNECT had very few IAs in 2015.	Positive trend compared to the DG's 2014 situation	Positive trend compared to the DG's 2016 situation.	56% (5 out of 9 IAs first submitted to the RSB in 2016) which is on par with the DGs' average IA success rates (58% in 2016, against 52% in 2015).

Indicator 2: Percentage of the DG's primary regulatory acquis covered by evaluations and Fitness Checks not older than five years.

Source of data: DG CONNECT

Baseline 2015	Interim milestone 2016	Target 2020	Latest known results
Percentage of the DG's primary regulatory acquis covered by retrospective evaluations and Fitness Checks not older than five years: 67%.	Positive trend compared to baseline	Positive trend compared to interim milestone	2016: 75%

Main outputs in 2016:

Description	Indicator	Target	Latest known results
Percentage of Impact Assessments (IA) in 2016 which received a positive opinion at their first submission to the Regulatory Scrutiny Board.	Number of IAs out of the total number of IA submitted (in %).	75% (2014 average across DGs – before BR strengthened even more existing IA requirements– was 60%).	56% (5 out of the 9 IAs that DG CONNECT first presented to the RSB in 2016 received straight away a positive opinion from the RSB). This success rate was lower among REFIT initiatives (only 1 out of 3 had directly a

			positive RSB opinion) but the 2 which required resubmission were huge exercises (more akin to Fitness Checks)
Acknowledgement and implementation of evaluation recommendations by senior management.	% of evaluation recommendations a) acknowledged by senior management and, b) implemented (e.g. taken up in IA, in new legislation), if within the remit of DG decision making.	a) 100% b) 75%	a) 100% b) The findings and conclusions from the REFIT evaluations and from the Review of the Recommendations on fixed and mobile termination rates have been taken into account for the Impact Assessments and reflected in the legislative proposals. As for the two evaluations contributing to the Overall Interim Evaluation of H2020, the recommendations have just been finalised and have not been implemented yet. Results of progress in eGovernment policy have been taken into account when developing the new eGovernment action plan. The Review of the Satellite and Cable Directive did not include recommendations.
Supporting the quality of the DG CONNECT Stakeholders' consultations (SC).	1) Respondents' satisfaction (2) Operational units' satisfaction with the support units' help.	(1) 80% satisfaction rate by respondents (2) 100% satisfaction rate by operational units.	DG CONNECT provided support to 19 Public Consultations. Note that the performance of DG CONNECT in its

			Stakeholder consultation and support activities is already reflected in the DG CONNECT IA success indicator specified above.
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The previously proposed indicator to measure the quality of the DG CONNECT Stakeholders Consultations was never measured in the past (even before the DG CONNECT reorganisation), so no baseline was available against which to measure the 2016 activities. Related output indicators are instead provided above. Note that since impact assessments always include a stakeholder consultation, the DG CONNECT IA success indicator also reflects the success of the Stakeholder Consultation activities undertaken to feed into the Impact Assessments.

Information Management

Objective: Information and knowledge in DG CONNECT is shared and reusable by other DGs. Important documents are registered, filed and retrievable		
Indicator 1: Percentage of registered documents that are not filed³ (ratio)		
Source of data: Hermes-Ares-Nomcom (HAN)⁴ statistics		
Baseline 2015	Target 2016	Latest known results 2016
3,07 %	0 %	0.79%
Indicator 2: Number of HAN files readable/accessible by all units in the DG		
Source of data: HAN statistics		
Baseline 2015	Target 2016	Latest known results 2016
98,63 %	95% ⁵	98,96%
Indicator 3: Number of HAN files shared with other DGs		
Source of data: HAN statistics		
Baseline 2015	Target 2016	Latest known results 2016
22,55 %	95% ⁶	18.66%
Indicator 4: Percentage of units using collaborative tools to manage their activities		
Source of data: CONNECTED + SharePoint		
Baseline	Target	Latest known results

³ Each registered document must be filed in at least one official file of the Chef de file, as required by the e-Domec policy rules (and by ICS 11 requirements). The indicator is to be measured via reporting tools available in Ares.

⁴ Suite of tools designed to implement the e-Domec policy rules.

⁵ HR and OLAF files remain restricted, this is why 100% is not the target

⁶ HR and OLAF files remain restricted, this is why 100% is not the target

2015	2016	2016
95% ⁷	100% ⁸	97% for CONNECTED 84% for SharePoint

Main outputs in 2016:			
Description	Indicator	Target	Latest known results
Provide training and coaching on document registration and filing	Training/coaching of unit secretariat and DMO correspondent	100% of units trained/coached	- 1 session on Eurolook and Markings - 1 session on SharePoint and Markings - 1 session on Areslook, External Transmission, Filing and Markings
Awareness and compliance campaigns	2 campaigns (1 for Areslook and 1 for CONNECTED documents)	Q4 2016	The use of markings increased by 25% compared with 2015

The opening of DG CONNECT files to all Commission departments is subject to the deployment of corporate technical solutions able to protect sensitive information and documents adequately within an "open by default" environment. This capability could not be demonstrated in 2016, notably due to a series of leaks of sensitive DG CONNECT documents that occurred in the course of the year. It was therefore decided to postpone the opening of DG CONNECT files until further steps are undertaken at corporate level to manage access to sensitive documents in a structural way. A possible digital rights management based solution was identified and shared with DG HR.DS, receiving a positive feedback. It will be investigated further in 2017.

External Communication

Objective: Citizens perceive that the EU is working to improve their lives and engage with the EU. They feel that their concerns are taken into consideration in European decision making and they know about their rights in the EU.

Indicator 1: Percentage of EU citizens having a positive image of the EU

Definition: Eurobarometer measures the state of public opinion in the EU Member States. This global indicator is influenced by many factors, including the work of other EU institutions and national governments, as well as political and economic factors, not just the communication actions of the Commission. It is relevant as a proxy for the overall perception of the EU citizens. Positive visibility for the EU is the desirable corporate outcome of Commission communication, even if individual DGs' actions may only make a small contribution.

⁷ According to the most recent figures, 95% of staff are at least "readers", while 70% are "contributing".

⁸ All units are encouraged to use collaborative tools but, some categories of personnel (e.g. ushers) are not concerned.

Source of data: Standard Eurobarometer (DG COMM budget) [<i>monitored by DG COMM here</i>].			
Baseline Q4 2014		Target 2020	Latest known results
Total "Positive": 39% Neutral: 37 % Total "Negative": 22%		Positive image of the EU ≥ 50%	Positive: 35% Neutral: 38% Negative: 25% (Do not know: 2%) Based on the Eurobarometer 2016 – page 15
Indicator 2: Composite index: How people interacted with us on the base of DG CONNECT communication activities? Source of data: Collated monitoring data collected by DGs from DG COMM ENGAGOR Account			
Baseline Target 1.1.2016		Target 31.12.2016	Latest known results 2016
100% of the targets set for the previous years (which represent about 60-80% of targets of the following year). The index is the weighted ratio of partial targets; each of the targets is increased yearly by 20-30%.		100% of set targets for the current year (previous years targets are increased by 20-30% in average).	Composite index: 125%
Main outputs in 2016:			
Description	Indicator	Target	Latest known results
How much people we have reached through our communication activities	1) People reading the Digital Single Market (DSM)website	Yearly median 13,400 Unique browsers per day (base line12,211) increase 15%	88% (11,808 unique browsers)
	2) People using DSM website services	Total of the DSM website accounts 15,000 (base line 11,725) increase 28%	102% (15,252)
	3) Stakeholders awareness of the narrative on the potential of ICT R&I results to change the way of living and working in Europe, and hence on the need for policy actions deriving from fast technological developments	Yearly survey indicating an increase of at least 10% of H2020 participants aware of the narrative published on the Europa website.	n/a
	4) People participating on	Total of Event in	104% (69,780 Event

	events	the Box accounts 67,000 (base line 62,867) increase 6%	in the Box accounts)
	5) People reading any of the DSM Newsletters	Total of Newsroom subscription for newsletters 230,000 (base line 190,078) increase 21%	100% (230,501 unique subscriptions)

	6) People following DSM Facebook page	Total of DSM Facebook likes 17,500 (base line 14,802) increase 18%	111% (19,458 likes)
	7) People following DSM Twitter account	Total of DSM Twitter followers 62,000 (base line 52,440) increase 18%	108% (66,727 followers)
	8) Traditional Media Impact	Cumulative monthly average of media uptake 8% (base line 7.92%) increase 1%	253% (18% of the media uptake)
How people interacted with us on the base of our communication activities	1) Engagement with DAE Facebook page	Cumulative monthly average 720 interaction (base line 590) increase 22%	165% (817 interaction as monthly)
	2) Engagement with DAE Twitter account	Cumulative monthly average 16,500 interaction (base line 8,931) increase 85%	48% (7,978 interaction as monthly average)

For **Communication**⁹, the data for the mandatory indicator is available on the Eurobarometer website [here](#). The data for the optional indicators is collected by each DG.

⁹ The Communication on Synergies and Efficiencies (SEC(2016)170) of 04.04.2016 stipulates that DG COMM together with DG HR shall carry out an inventory of existing resources (to be submitted via the CCSC to the Corporate Management Board), data collected via this Annex (Annex 2 of AAR) will be aggregated to this end.

Annual communication spending (based on estimated commitments):

Baseline (2015)	Target (2016)	Total amount spent	Total of FTEs working on external communication
6,448,000 EUR	3,002,000 EUR	1.5 million EUR ¹⁰ (including 300k contribution to RTD for Euronews-Futuris programme and 700K on press/media and social media monitoring).	21

¹⁰ An additional amount of about 600k was used for organising key events in 2016 with only a small part for communication activities (i.e. a video to kick-off the event). No detailed breakdown is available as the tender included many organisational elements and did not single out communication aspects.

ANNEX 3: Draft annual accounts and financial report

Annex 3 Financial Reports - DG CNECT - Financial Year 2016

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 (excluding Building Contracts)

Table 12 : Summary of Procedures (excluding Building Contracts)

Table 13 : Building Contracts

Table 14 : Contracts declared Secret

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2016 (in Mio €)					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
Title 05 Agriculture and rural development					
05	05 09	Horizon 2020 - Research and innovation related to agriculture	14,99991939	14,9999194	100,00 %
Total Title 05			14,99991939	14,9999194	100,00 %
Title 09 Communications networks, content and technology					
09	09 01	Administrative expenditure of the 'Communications networks, content and technology' policy area	69,62732872	68,9900985	99,08 %
	09 02	Digital single market	20,0919382	19,790188	98,50 %
	09 03	Connecting Europe Facility (CEF) - Telecommunication networks	114,340301	114,320347	99,98 %
	09 04	Horizon 2020	1301,46809	1213,79775	93,26 %
	09 05	Creative Europe	29,22025347	28,3864795	97,15 %
Total Title 09			1534,747912	1445,28486	94,17%
Title 15 Education and culture					
15	15 04	Creative Europe	16,395	16,395	100,00 %
Total Title 15			16,395	16,395	100,00 %
Total DG CNECT			1566,142831	1476,67978	94,29 %

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

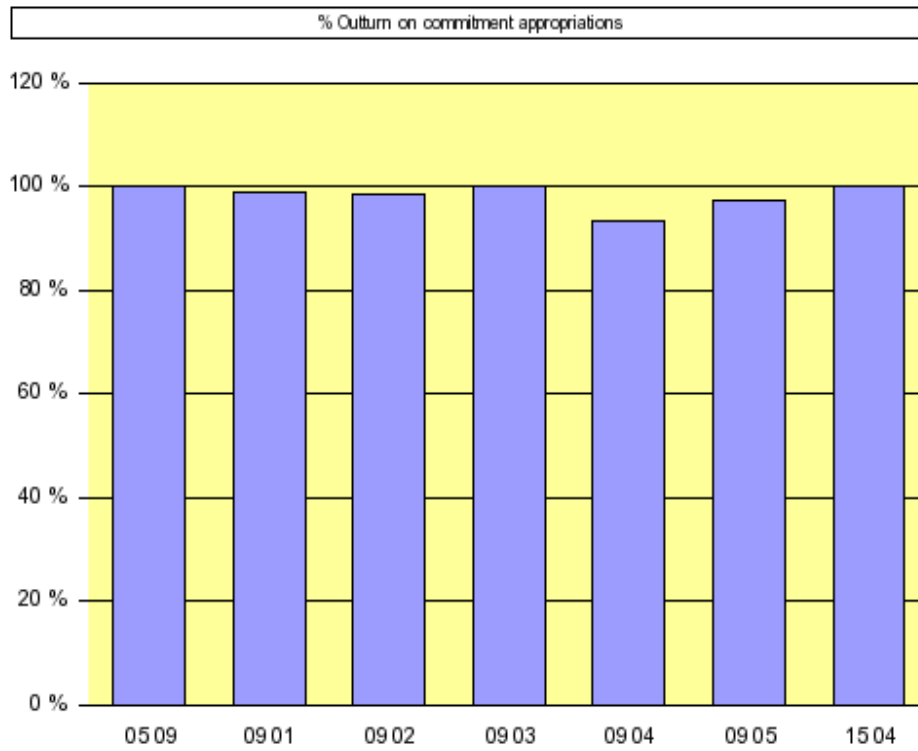


TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2016 (in Mio €)					
Chapter			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 05 Agriculture and rural development					
05	05 09	Horizon 2020 - Research and innovation related to agriculture	7,99995701	7,99995701	100,00 %
Total Title 05			7,99995701	7,99995701	100,00%
Title 09 Communications networks, content and technology					
09	09 01	Administrative expenditure of the 'Communications networks, content and technology' policy area	77,93218569	65,07846027	83,51 %
	09 02	Digital single market	22,18052808	22,17151924	99,96 %
	09 03	Connecting Europe Facility (CEF) - Telecommunication networks	14,83468713	14,20791807	95,77 %
	09 04	Horizon 2020	1993,884382	1860,455258	93,31 %
	09 05	Creative Europe	25,51987388	24,73609933	96,93 %
Total Title 09			2134,351657	1986,649255	93,08%
Title 15 Education and culture					
15	15 04	Creative Europe	6,88745135	6,88744169	100,00 %
Total Title 15			6,88745135	6,88744169	100,00%
	Total DG CNECT		2149,239065	2001,536654	93,13 %

* 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).

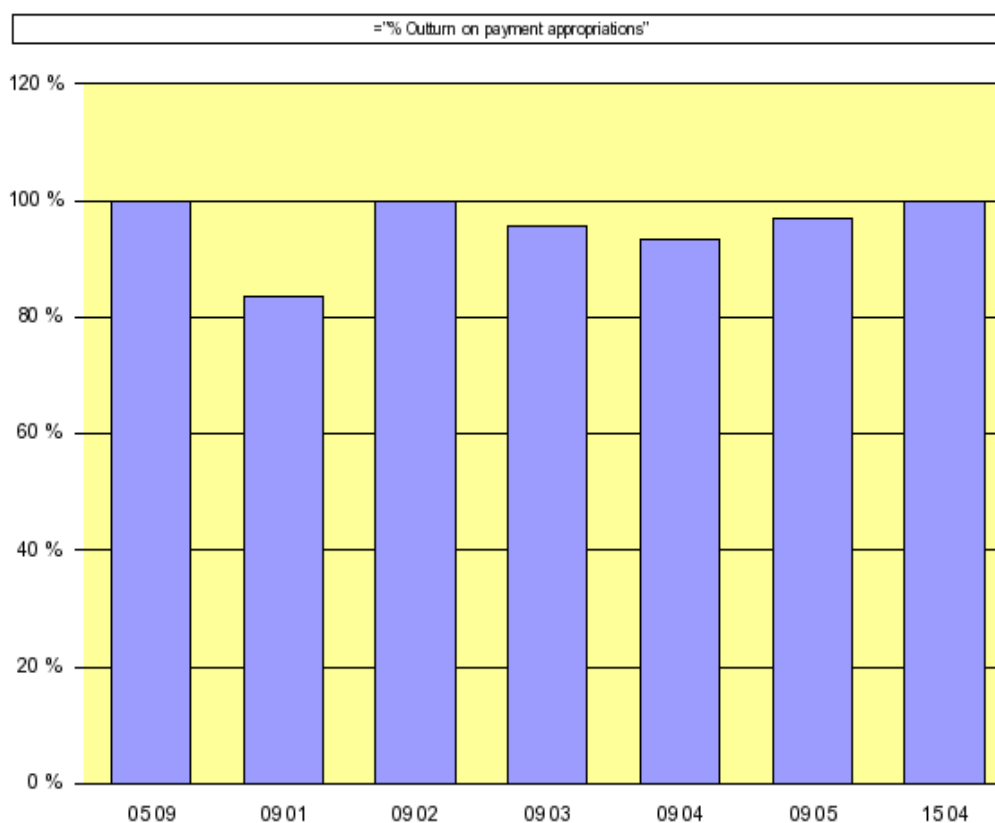


TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2016 (in Mio €)									
Chapter			2016 Commitments to be settled				Commitments to be settled from financial years previous to 2016	Total of commitments to be settled at end of financial year 2016 (incl. corrections)	Total of commitments to be settled at end of financial year 2015 (incl. corrections)
			Commitments 2016	Payments 2016	RAL 2016	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
Title 05 : Agriculture and rural development									
05	05 09	Horizon 2020 - Research and innovation related to agriculture	14,9999 1939	8,00	6,999 96238	46,67 %	0,00	7,00	0,00
Total Title 05			14,9999 1939	8,00	6,999 96238	46,67%	0	6,99996 238	0
Title 09 : Communications networks, content and technology									

09	0901	Administrative expenditure of the 'Communications networks, content and technology' policy area	68,80606016	57,48	11,32175255	16,45 %	0,00	11,32	8,30
	0902	Digital single market Connecting Europe Facility (CEF)	19,79018803	16,40	3,38862956	17,12 %	2,55	5,94	8,54
	0903	- Telecommunication networks	114,3203468	0,15	114,1709396	99,87 %	56,66	170,83	67,90
	0904	Horizon 2020	1213,797748	671,35	542,4482375	44,69 %	1.537,15	2.079,60	2740,42
	0905	Creative Europe	28,38647953	3,90	24,48247953	86,25 %	7,64	32,12	28,47
Total Title 09			1445,100823	749,29	695,8120387	48,15%	1604,003127	2299,815165	2853,64457
Title 15 : Education and culture									
15	1504	Creative Europe	16,395	5,47	10,92414331	66,63 %	0,16	11,08	1,58
Total Title 15			16,395	5,47	10,92414331	66,63%	0,16	11,08414331	1,58161727
	Total DG CNECT		1476,495742	762,76	713,7361444	48,34 %	1604,163127	2317,899271	2855,22619

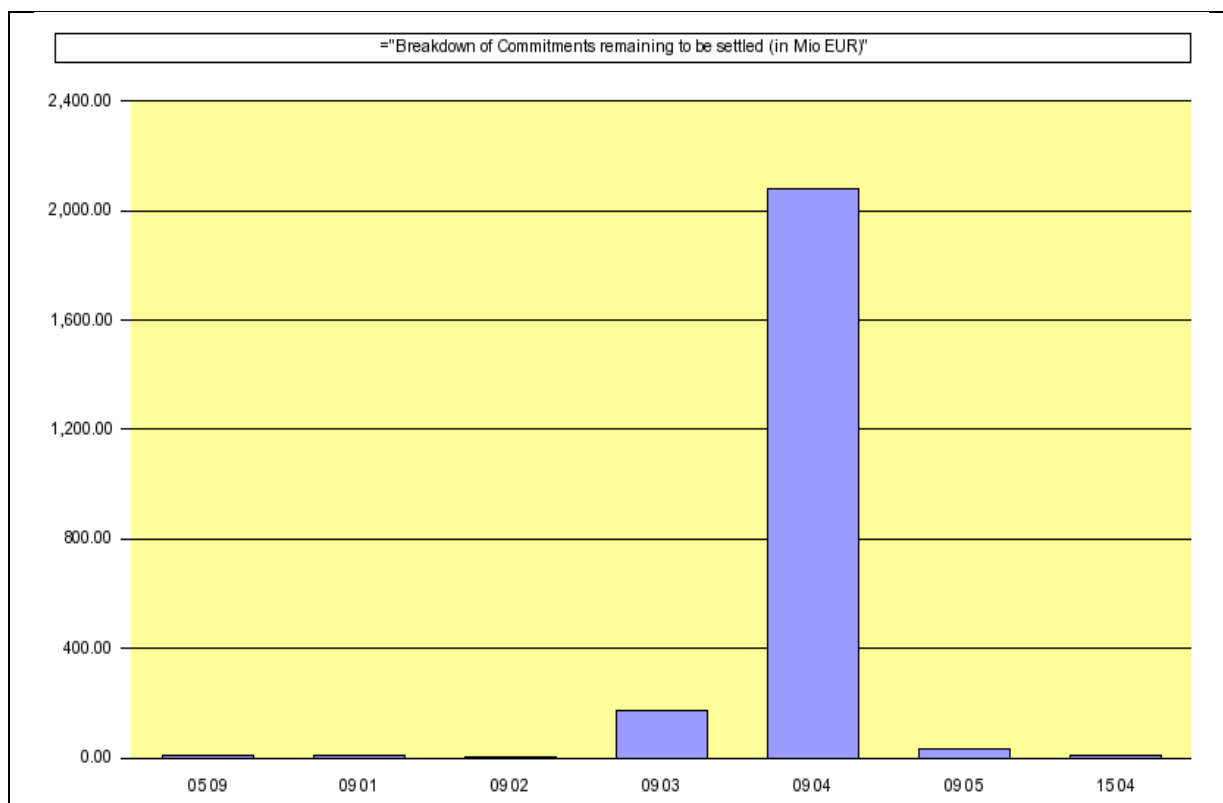


TABLE 4 : BALANCE SHEET CNECT

BALANCE SHEET	2016	2015
A.I. NON CURRENT ASSETS	298.720.414,18	194.667.137,10
A.I.1. Intangible Assets	5.360.322,99	5.360.322,99
A.I.3. Invstmnts Acctnd For Using Equity Meth	-	-
A.I.4. Non-Current Financial Assets	16.935.222,00	17.260.350,00
A.I.5. Non-Current Pre-Financing	276.424.869,19	172.046.464,42
A.I.6. Non-Cur Exch Receiv & Non-Ex Recoverab	-	0,31
A.II. CURRENT ASSETS	782.036.637,53	528.913.610,81
A.II.1. Current Financial Assets	2.471.010,46	116.908,46
A.II.2. Current Pre-Financing	725.222.934,13	483.068.627,26
A.II.3. Curr Exch Receiv & Non-Ex Recoverables	48.666.333,94	43.937.877,09
A.II.6. Cash and Cash Equivalents	5.676.359,00	1.790.198,00
ASSETS	1.080.757.051,71	723.580.747,91
P.III. NET ASSETS/LIABILITIES	-	-
	218.965,00	151.852,00

P.III.1. Reserves	- 218.965,00	- 151.852,00
P.II. CURRENT LIABILITIES	- 266.634.184,48	- 221.231.706,29
P.II.2. Current Provisions	- 507.000,00	-
P.II.4. Current Payables	- 114.437.026,03	- 75.795.971,76
P.II.5. Current Accrued Charges & Defrd Income	- 151.690.158,45	- 145.435.734,53
LIABILITIES	- 266.853.149,48	- 221.383.558,29
NET ASSETS (ASSETS less LIABILITIES)	813.903.902,23	502.197.189,62

P.III.2. Accumulated Surplus / Deficit	4.707.322.087,87	3.147.779.174,91
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Non-allocated central (surplus)/deficit*	- 5.521.225.990,10	- 3.649.976.364,53
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TOTAL	0,00	0,00
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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 CNECT

STATEMENT OF FINANCIAL PERFORMANCE	2016	2015
II.1 REVENUES	- 11.945.915,70	- 12.761.039,53
II.1.1. NON-EXCHANGE REVENUES	- 14.098.684,63	- 13.790.911,13
II.1.1.4. FINES	-	- 580.000,00
II.1.1.5. RECOVERY OF EXPENSES	- 13.915.797,11	- 12.759.117,04
II.1.1.6. OTHER NON-EXCHANGE REVENUES	- 182.887,52	- 451.794,09
II.1.2. EXCHANGE REVENUES	2.152.768,93	1.029.871,60
II.1.2.1. FINANCIAL INCOME	- 273.873,52	- 316.236,51

II.1.2.2. OTHER EXCHANGE REVENUE	2.426.642,45	1.346.108,11
II.2. EXPENSES	1.622.253.520,15	1.572.303.952,49
II.2. EXPENSES	1.622.253.520,15	1.572.303.952,49
II.2.10.OTHER EXPENSES	11.557.566,90	21.025.180,92
II.2.2. EXP IMPL BY COMMISS&EX.AGENC. (DM)	1.320.828.680,40	1.372.171.863,61
II.2.3. EXP IMPL BY OTH EU AGENC&BODIES (IM)	277.978.011,05	13.118.684,26
II.2.5. EXP IMPL BY OTHER ENTITIES (IM)	11.898.464,65	21.304.050,58
II.2.8. FINANCE COSTS	-	
II.2.9. SHARE NET DEFICIT JOINT VENT & ASSOC	9.202,85	41.847,92
		144.642.325,20
STATEMENT OF FINANCIAL PERFORMANCE	1.610.307.604,45	1.559.542.912,96

Explanatory Notes (facultative):

TABLE 5bis : OFF BALANCE SHEET CNECT

OFF BALANCE	2016	2015
OB.1. Contingent Assets	4.760.587,29	8.292.187,66
GR for other		-
GR for pre-financing	4.760.587,29	8.292.187,66
OB.2. Contingent Liabilities	- 18.796.637,00	- 18.896.841,71
OB.2.1. CL Guarantees given	- 18.789.137,00	- 18.804.386,00
OB.2.7. CL Amounts relating to legal cases	- 7.500,00	- 92.455,71
OB.3. Other Significant Disclosures	- 2.047.206.587,22	- 2.629.926.721,37
OB.3.2. Comm against app. not yet consumed	- 2.047.206.587,22	- 2.629.926.721,37
OB.4. Balancing Accounts	2.061.242.636,93	2.640.531.375,42
OB.4. Balancing Accounts	2.061.242.636,93	2.640.531.375,42
OFF BALANCE	0,00	- 0,00

Explanatory Notes (facultative):

TABLE 6: AVERAGE PAYMENT TIMES FOR 2016 - DG CNECT

Legal Times							
Maximum Payment Time (Days)	Total Number of Payments	Nbr of Payments within Time Limit	Percentage	Average Payment Times (Days)	Nbr of Late Payments	Percentage	Average Payment Times (Days)
20	3	3	100 %	11			
30	5384	5247	97,46 %	13,04	137	2,54 %	45,20
45	16	16	100 %	25,38			
46	1	1	100 %	17			
50	1	1	100 %	27			
60	187	186	99,47 %	20,78	1	0,53 %	73
90	1158	1138	98,27 %	59,47	20	1,73 %	121,2
105	1	1	100 %	91			
109	1	1	100 %	15			
120	43	43	100 %	15,84			
200	2	2	100 %	15			

Total Number of Payments	6797	6639	97,68 %		158	2,32 %	
Average Net Payment Time	22,06			21,27			55
Average Gross Payment Time	35,17			34,55			61,18

Target Times							
Target Payment Time (Days)	Total Number of Payments	Nbr of Payments within Target Time	Percentage	Average Payment Times (Days)	Nbr of Late Payments	Percentage	Average Payment Times (Days)
20	344	294	85,47 %	5,38	50	14,53 %	28,14
30	131	114	87,02 %	13,73	17	12,98 %	55,94
90	1				1	100 %	91

Total Number of Payment	476	408	85,71 %		68	14,29 %	
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s							
Average Net Payment Time	11,76			7,72			36,01
Average Gross Payment Time	20,53			13,96			59,97
Suspensions							
Average Report Approval Suspension Days	Average Payment Suspension Days	Number of Suspende d Payments	% of Total Numb er	Total Number of Paymen ts	Amount of Suspend ed Payment s	% of Total Amou nt	Total Paid Amount
0	41	2180	32,07 %	6797	##### #	28,85 %	#####

Late Interest paid in 2016			
DG	GL Account	Description	Amount (Eur)
CNECT	65010000	Interest expense on late payment of charges	-27 790,00
CNECT	65010100	Interest on late payment of charges New FR	13 466,70
			-14 323,30

TABLE 7 : SITUATION ON REVENUE AND INCOME IN 2016								
Chapter		Revenue and income recognized			Revenue and income cashed from			Outstanding
		Current year RO	Carried over RO	Total	Current Year RO	Carried over RO	Total	balance
		1	2	3=1+2	4	5	6=4+5	7=3-6
52	REVENUE FROM INVESTMENTS OR LOANS GRANTED, BANK AND OTHER INTEREST	246.598,65	-	246.598,65	29.766,52	-	29.766,52	216.832,13
57	OTHER CONTRIBUTIONS AND REFUNDS IN CONNECTION WITH THE ADMINISTRATIVE OPERATION OF THE INSTITUTION	250.806,43	1.657,50	252.463,93	250.806,43	1.657,50	252.463,93	-
66	OTHER CONTRIBUTIONS AND REFUNDS	14.662.338,35	31.794.949,53	46.457.287,88	6.702.626,48	3.629.257,39	10.331.883,87	36.125.404,01
71	FINES	-	580.000,00	580.000,00	-	-	-	580.000,00
90	MISCELLANEOUS REVENUE	177.137,52	1.708.009,94	1.885.147,46	5.750,00	6.360,49	610,49	1.884.536,97
Total DG CNECT		15.336.880,95	34.084.616,97	49.421.497,92	6.977.449,43	3.637.275,38	10.614.724,81	38.806.773,11

TABLE 8 : RECOVERY OF PAYMENTS
(Number of Recovery Contexts and corresponding Transaction Amount)

INCOME BUDGET RECOVERY ORDERS ISSUED IN 2016 Year of Origin (commitment)	Error		Irregularity		Total undue payments recovered		Total transactions in recovery context (incl. non-qualified)		% Qualified/Total RC	
	Nbr	RO Amount	Nbr	RO Amount	Nbr	RO Amount	Nbr	RO Amount	Nbr	RO Amount
2004			3	242.367,97	3	242.367,97	6	632.837,66	50,00%	38,30%
2005			3	81.594,73	3	81.594,73	4	246.594,73	75,00%	33,09%
2006			5	453.181,17	5	453.181,17	7	952.894,37	71,43%	47,56%
2007			21	1.259.721,00	21	1.259.721,00	22	1.314.349,00	95,45%	95,84%
2008			31	1.969.227,24	31	1.969.227,24	39	2.841.680,17	79,49%	69,30%
2009			17	1.060.447,45	17	1.060.447,45	18	1.295.907,45	94,44%	81,83%
2010			39	975.800,79	39	975.800,79	44	1.505.954,88	88,64%	64,80%
2011			17	592.698,45	17	592.698,45	17	592.698,45	100,00%	100,00%
2012			23	848.273,33	23	848.273,33	32	1.891.012,72	71,88%	44,86%
2013			5	99.334,80	5	99.334,80	7	296.650,80	71,43%	33,49%
2014			1	7.848,20	1	7.848,20	2	11.166,20	50,00%	70,29%
2015							3	556.651,54		
2016	2	806,43			2	806,43	2	806,43	100,00%	100,00%
No Link			1	197.799,52	1	197.799,52	14	2.996.444,62	7,14%	6,60%

Sub-Total	2	806,43	166	7.788.294,65	168	7.789.101,08	217	15.135.649,02	77,42%	51,46%
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EXPENSES BUDGET	Error		Irregularity		OLAF Notified		Total undue payments recovered		Total transactions in recovery context (incl. non-qualified)		% Qualified/Total RC	
	Nbr	Amount	Nbr	Amount	Nbr	Amount	Nbr	Amount	Nbr	Amount	Nbr	Amount
INCOME LINES IN INVOICES			40	1.218.095,08			40	1.218.095,08	41	1.218.157,08	97,56%	99,99%
NON ELIGIBLE IN COST CLAIMS	4	10.912,00	222	16.246.310,07			226	16.257.222,07	700	53.168.929,66	32,29%	30,58%
CREDIT NOTES	29	155.934,01	9	816.016,32			38	971.950,33	48	1.156.353,79	79,17%	84,05%
Sub-Total	33	166.846,01	271	18.280.421,47			304	18.447.267,48	789	55.543.440,53	38,53%	33,21%
GRAND TOTAL	35	168.458,87	437	26.160.108,12			472	26.328.566,99	1006	70.679.089,55	46,92%	27,00%

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 31/12/2016 FOR CNECT

	Number at 01/01/2016	Number at 31/12/2016	Evolution	Open Amount (Eur) at 01/01/2016	Open Amount (Eur) at 31/12/2016	Evolution
1999	1		-100 %	180.250,00		-100 %
2002	2	2	0 %	737.418,19	737.418,19	0 %
2003	1	1	0 %	350.703,53	350.703,53	0 %
2004	4	4	0 %	459.123,69	459.123,69	0 %
2005	1	1	0 %	126.071,93	126.071,93	0 %
2006	5	5	0 %	504.054,93	504.054,93	0 %
2007	1	1	0 %	57.116,87	57.116,87	0 %
2008	11	11	0 %	1.661.042,66	1.655.788,71	-0,32 %
2009	28	26	-7,14 %	4.271.466,09	4.091.241,27	-4,22 %
2010	34	34	0 %	3.707.909,09	3.707.909,09	0 %
2011	63	62	-1,59 %	8.222.812,07	8.171.599,15	-0,62 %
2012	39	39	0 %	2.160.595,69	2.142.095,69	-0,86 %
2013	36	32	-11,11 %	2.290.543,93	2.206.047,16	-3,69 %
2014	45	38	-15,56 %	5.644.975,65	4.799.437,59	-14,98 %
2015	62	30	-51,61 %	3.867.464,97	1.560.908,79	-59,64 %
2016		68			8.389.868,79	
	333	354	6,31 %	34.241.549,29	38.959.385,38	13,78 %

TABLE 10 : RECOVERY ORDER WAIVERS IN 2016 >= EUR 100.000

	Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments

Total DG
Number of RO waivers
Justifications:

TABLE 11 : CENSUS OF NEGOTIATED PROCEDURES - DG CNECT - 2016**Procurement > EUR 60,000**

Negotiated Procedure Legal base	Number of Procedures	Amount (€)
Art. 134.1(b)	5	661.535,00
Total	5,	661.535,00

TABLE 12 : SUMMARY OF PROCEDURES OF DG CNECT EXCLUDING BUILDING CONTRACTS

Internal Procedures > € 60,000			
Procedure Type		Count	Amount (€)
Internal Procedures > € 60,000	Exceptional Negotiated Procedure without publication of a contract notice (Art. 134 RAP)	5	661.535,00
	Negotiated Procedure with at least five candidates below Directive thresholds (Art. 136a RAP)	5	527.692,00
	Open Procedure (Art. 104(1) (a) FR)	12	17.281.993,02
	Open Procedure (Art. 127.2 RAP)	8	11.403.729,00
TOTAL		30	29.874.949,02

Additional comments

In 2016, DG CNECT had 10 negotiated procedures. 5 were Exceptional Negotiated Procedure without publication of a contract notice (Art. 134 RAP). These exceptional negotiated procedures were used for CONNECT participation to conferences with exclusivity rights of the organisers of events, as provided for in Art 134(1)(b)(iii) RAP. These procedures were used on the basis of justifications from the operational directorates which confirmed that the contracts could only be performed by one economic operator.

TABLE 13 : BUILDING CONTRACTS

Total number of contracts :	
Total amount :	

Legal base	Contract Number	Contractor Name	Description	Amount (€)

No data to be reported

TABLE 14 : CONTRACTS DECLARED SECRET

Total Number of Contracts :	
Total amount :	

Legal base	Contract Number	Contractor Name	Type of contract	Description	Amount (€)

No data to be reported

ANNEX 4: Materiality criteria

The present document details the way DG CONNECT assesses the level of errors in its annual financial statements and the definition of the level of misstatement that is considered as quantitatively material.

DG CONNECT managed in 2016 financial operations under H2020, FP7 and other programmes and actions which have been addressed by the DG's CIP ICT PSP/SI audit strategy.

The Research Framework programmes H2020, FP7 (common aspects)

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, 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 to be adjusted by subtracting:

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

For FP7, this results in a residual error rate, which is calculated in accordance with the following formula:

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

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. For FP 7 this rate is the same for all Research services.

RepERsys% portion of the RepER% representing (negative) systematic errors, expressed as a percentage. The RepER% is composed of two complementary portions reflecting the proportion of negative systematic and non-systematic errors detected.

- P** total aggregated amount in € of EC share of funding in the auditable population. In FP7, the population is that of all received cost statements, and the € amounts those that reflect the EC share included in the costs claimed in each cost statement.
- A** total EC share of all audited amounts, expressed in €. This will be collected from audit results.
- E** total non-audited amounts of all audited beneficiaries. In FP7, this consists of the total EC share, expressed in €, of all non-audited received cost statements for all audited beneficiaries (excluding those beneficiaries for which an extrapolation in ongoing).

The Common Representative Audit Sample (CRAS) 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 (or Director for the Executive Agencies) 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 FP7/Horizon 2020. This 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 CRAS 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.

In case a calculation of the residual error rate based on a representative sample is not possible for a FP for reasons not involving control deficiencies,¹¹ 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 be then 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)

¹¹ 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.

for which a multi-annual control system is more effective. In such cases, the calculation of errors, corrections and materiality of the residual amount at risk should be done on a "cumulative basis" on the basis of the totals over the entire programme lifecycle.

Because of its multiannual nature, the effectiveness of the Research 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 systematic errors have been detected and corrected.

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

Notwithstanding the multiannual span of their control strategy, the Director-Generals of the Research DGs (and the Directors of ERCEA, REA, and, for Horizon 2020, EASME and INEA) 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 planned.

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 so 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 to be 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 (or Director for the Executive Agencies) 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 case, she or he would be expected to qualify his annual statement of assurance with a reservation.

Research Framework programmes – specific aspects

The control system of each framework programme is designed in order 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.

Each programme having 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.

Seventh Framework programme

For the Seventh Framework programme, the general control objective, following the standard quantitative materiality threshold proposed in the Standing Instructions for AAR, 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.

The question of being on track towards this objective is to be (re)assessed annually, in view of the results of the implementation of the ex-post audit strategy and taking into account both the frequency and importance of the errors found as well as a cost-benefit analysis of the effort needed to detect and correct them.

Horizon 2020 Framework Programme

The Commission's proposal for the Regulation establishing the H2020 framework programme¹² 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 excellent and in particular the costs of controls need to be considered.

¹² 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.

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

Further, it explains also that

"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 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 %."

In summary, 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.

The question of being on track towards this objective is to be (re)assessed annually, in view of the results of the implementation of the ex-post audit strategy and taking into account both the frequency and importance of the errors found as well as a cost-benefit analysis of the effort needed to detect and correct them.

CIP ICT PSP

For the CIP ICT PSP, the calculation of the residual error rate is done according to the same principles as for the FP7 error rate, as follows:

$$\text{REsER}\% = \frac{\text{CumER}\% \cdot (P - A) - \text{Ex}}{P}$$

Where:

ResER% residual error rate, expressed as a percentage.

CumER% cumulative error rate detected in the non-risk based audit sample.

P The P represents the requested EU contribution until the moment when the error rate is calculated.

A The value of the EU contribution of all audited amounts, expressed in Euros.

Ex The value of the implemented extrapolations in the CIP programme in DG CONNECT.

If the residual error rate is not (yet) below 2% at the end of a reporting, a reservation must be considered.

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). This 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.

In case a calculation of the residual error rate based on a representative sample is not possible for a programme for reasons not involving control deficiencies¹³, 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 be then 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.

¹³ 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.

Adequacy of the audit scope

The quantity of the (cumulative) audit effort carried out until the end of each year is to be 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 case, she or he would be expected to qualify his annual statement of assurance with a reservation.

ANNEX 5: Internal Control Template(s) for budget implementation (ICTs)

Grants direct management – FP7 and H2020

Stage 1: Programming, evaluation and selection of proposals

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

Main control objectives: Ensuring that the most promising projects for meeting the policy objectives are among the proposals submitted; Compliance; Prevention of fraud

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
<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 annual work programmes are not consistent within the Research family and with the 7 years' framework</p> <p>The programme H2020 implementation (procedures, monitoring arrangements, communication with beneficiaries, budget planning, etc.) is not consistent within the Research family and with the 7 years'</p>	<p>Hierarchical validation within the authorising department Inter-service consultation, including all relevant services Adoption by the Commission Explicit allocation of responsibility.</p> <p>The Common Support Centre in DG RTD provides all the members of the Family with harmonised procedures, guidance and IT tools. DG RTD centralises the budget planning and the</p>	<p>Coverage / Frequency: 100%</p> <p>Depth: All work programmes are thoroughly reviewed at all levels, including for operational and legal aspects.</p> <p>Coverage/ Frequency: 100% Depth All the underlying implementation tools are defined et developed at family level.</p>	<p>Costs: estimation of cost of staff involved in the preparation and validation of the annual work programme and calls.</p> <p>Benefits: Only qualitative benefits. 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>Costs: costs of the staff involved in Family coordination activities</p>	<p>% of "over-subscription" proposals received/selected</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
framework	monitoring of the H2020's budget implementation		Benefits: Qualitative benefits: Optimised procedures, common approach on multiple issues (audits, fraud, legal aspects, reporting...); better reporting on the whole programme – better management of the programme. ¹⁴	

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

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
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	Selection and appointment of expert evaluators Assessment by independent experts Comprehensive IT system supporting the stage and allowing better monitoring of the process	100% vetting (including selecting) of experts for technical expertise and independence (e.g. conflicts of interests, nationality bias, ex-employer bias, collusion) 100% of proposals are	Costs: estimation of cost of staff involved in the evaluation and selection of proposals. Cost of the appointment of experts and of the logistics of the evaluation. Benefits:	% of number of (successful) redress challenges / total number of proposals received Average time to publication of selection results (FR 128.2 and/or Horizon 2020 limits)

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	How to estimate the costs and benefits of controls	Control indicators
programme and subsequent calls for proposals.	<p>Validation by the AOSD of ranked list of proposals. In addition, if applicable: opinion of advisory bodies; comitology; inter-service consultation and adoption by the Commission; publication</p> <p>Systematic checks on operational and legal aspects performed before signature of the grant agreement</p> <p>Evaluation review procedure</p>	<p>evaluated. Coverage: 100% of ranked list of proposals. Supervision of work of evaluators. 100% of contested decisions are analysed by redress committee</p>	<p>Qualitative benefits 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>	<p>% of time-to-inform on time</p> <p>cost of evaluating + selecting grants / value of grants contracted</p> <p>% of budget "over-subscription" from proposals received</p>

Stage 2: Contracting

Main control objectives: : Ensuring that the most promising projects for meeting the policy objectives are among the proposals contracted; SFM (optimal allocation of the budget available); Compliance; Prevention of fraud

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
<p>The description of the action in the grant agreement includes tasks which do not contribute to the achievement of the programme objectives. and/or that the budget foreseen overestimates the costs necessary to carry out the action.</p> <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 hasn't detected a potentially fraudulent proposal/beneficiary.</p>	<p>Project Officers implement evaluators' recommendations.</p> <p>Hierarchical validation of proposed adjustments.</p> <p>Validation of beneficiaries (operational and financial viability).</p> <p>Systematic checks on operational and legal aspects performed before signature of the GA</p> <p>Ad hoc anti-fraud checks for riskier beneficiaries</p> <p>Signature of the grant agreement by the AO.</p> <p>Financial verification where necessary</p> <p>Participant Guarantee Fund.</p>	<p>100% of the selected proposals and beneficiaries are scrutinised.</p> <p>Coverage: 100% of draft grant agreements.</p> <p>Depth may be differentiated; determined after considering the type or nature of the beneficiary (e.g. SMEs, joint-ventures) and/or of the modalities (e.g. substantial subcontracting) and/or the total value of the grant.</p> <p>Note that, given the constraints on the time to grant set out in the H2020 legislation, "negotiation" of projects is kept to a minimum, as far as possible the positively evaluated projects are accepted without modification.</p>	<p>Costs: estimation of cost of staff involved in the contracting process.</p> <p>Benefits: Qualitative benefits: The whole committed budget checked for quality (prevention of later errors). This stage should lead to a higher assurance on the achievement of the projects – and policy objectives.</p>	<p>Average Time to Sign (FR 128.2)</p> <p>% of Time-to-Sign on time</p> <p>Average time to grant (FR 128.2)</p> <p>% of Time-to-grant on time</p> <p>% cost over annual amount contracted</p>

Stage 3: 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	How to estimate the costs and benefits of controls	Control indicators
<p>The actions foreseen are not, totally or partially, carried out in accordance with the technical description and requirements foreseen in the grant agreement.</p> <p>The amounts paid exceed what is due in accordance with the applicable contractual and regulatory provisions.</p> <p>The cost claims are irregular or fraudulent .</p> <p>Lack of harmonised approach within the family with the consequence of unequal treatment of the beneficiaries</p>	<p>Kick-off meetings and "launch events" involving the beneficiaries in order to avoid project management and reporting errors</p> <p>Effective external communication about guidance to the beneficiaries</p> <p>Anti-fraud awareness raising training for the project officers</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</p>	<p>100% of the projects are controlled, including only value-adding checks. 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 control, the level of control at this stage is reduced to a minimum</p> <p>High risk operations identified by risk criteria. Red flags: suspicions raised by staff, audit results, EDES, individual or "population" risk assessment</p> <p>Audit certificates required</p>	<p>Costs: estimation of cost of staff involved in the actual management of running projects.</p> <p>Benefits: budget value of the costs claimed by the beneficiary, but rejected by staff Reductions in error rates identified by audit certificates.</p> <p>Benefits due to operational review of projects and consequent corrective actions imposed on projects</p>	<p>Average number & value of running projects managed 'per' staff FTE</p> <p>Time-to-pay: % of payments made on time</p> <p>Time-to pay: Average nb days net/gross + suspension days</p> <p>cost of control from contracting and monitoring the execution up to payment included/ amount paid (%)</p> <p>Average project mngt cost (staff FTE * standard staff cost) per running* project</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
	<p>the financial circuits. Operation authorisation by the AO For riskier operations, more in-depth ex-ante controls</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, Penalties or liquidated damages. Referring case to OLAF</p>	for any beneficiary claiming more than €375,000 (FP7)/€325,000 (H2020).		

Stage 4: Ex-post controls

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	How to estimate the costs and benefits of controls	Control indicators
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Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
<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 for the entire Research family (H2020), implemented by a central service (Common Support Centre, DG RTD):</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 - 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</p> <p>Validate audit results with beneficiary</p> <p>In case of systemic error detected, extrapolation to all the projects run by the audited beneficiary</p> <p>If needed: referring the case to OLAF</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. - RTD risk-based sample, determined in accordance with the selected risk criteria, aimed to maximise deterrent effect and prevention of fraud or serious error 	<p>Costs: estimation of cost of staff involved in the coordination and execution of the audit strategy. Cost of the appointment of audit firms for the outsourced audits.</p> <p>Benefits: budget value of the errors detected by the auditors.</p> <p>Non quantifiable benefits: Deterrent effect. Learning effect for beneficiaries. Improvement of ex-ante controls or risk approach in ex-ante controls by feeding back findings from audit. Improvement in rules and guidance from feedback from audit.</p>	<p>Representative error rate.</p> <p>Residual error rate in comparison to the materiality threshold.</p> <p>Amount of errors and corrections concerned.</p> <p>Number of audits finalised (+ % of beneficiaries & value coverage)</p> <p>cost of control ex post audits/ value of grants audited</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	How to estimate the costs and benefits of controls	Control indicators
The errors, irregularities and cases of fraud detected are not addressed or not addressed in a timely manner	<p>Systematic registration of audit / control results to be implemented and actual implementation.</p> <p>Validation of recovery in accordance with financial circuits.</p> <p>Authorisation by AO</p> <p>Notification to OLAF and regular follow up of detected fraud.</p>	<p>Coverage: 100% of final audit results <i>with a financial impact</i>.</p> <p>Depth: All audit results are examined in-depth in making the final recoveries. Systemic errors are extrapolated to all the non-audited projects of the same beneficiary</p>	<p>Costs: estimation of cost of staff involved in the implementation of the audit results.</p> <p>Benefits: budget value of the errors, detected by ex-post controls, which have actually been corrected (offset or recovered).</p> <p>Loss: budget value of recovery orders which are 'waived' or have to be cancelled.</p>	<p>Amounts being recovered and offset</p> <p>Number/value/% of audit results pending implementation</p> <p>Number/value/% of audit results implemented.</p>

ANNEX 5b: Internal Control Templates for budget implementation (ICTs)

Indirect entrusted management DG CONNECT

The ICT covers: (1) the executive agencies EACEA, INEA, REA and EASME (the two latter for H2020)¹⁵ (2) cross delegations to other Commission services (3) the ESCEL Joint Undertaking (4) Active and Assisted Living (AAL) Association, (5) Decentralised Agencies (BEREC Office & ENISA).

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

Main 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	How to estimate the costs and benefits of controls	Control indicators
<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>Costs: This stage implies several DGs, doesn't happen regularly and can be very different for each entity. A systematic cost calculation wouldn't give exploitable data</p> <p>Benefits: Benefits cannot be calculated in terms of budget.</p>	<p>Overall supervision cost per (type of) entrusted entity (%)</p>

¹⁵ The contribution of DG 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 – DG 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 2: Assessment and supervision of the entrusted entity's financial and control framework (towards "budget autonomy"; "financial rules").

Main 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	How to estimate the costs and benefits of controls	Control indicators
The financial and control framework deployed by the entrusted entity is not fully mature to guarantee achieving all 5 ICOs	Ex-ante assessment, conditional to granting budget autonomy Hierarchical validation within the authorising department Use of Model- or Framework- financial rules (MFR or FFR) Standard business processes and IT tools (EAs and JUs) Secondment or selection of key staff Continuous cooperation within the Research family (IC network, FAIR...) in order to harmonize the IC framework Review of audit reports (IAS, ECA)	Coverage/frequency: 100% of entrusted entities/once at the beginning and partial (problem focussed) for amendments or work arrangements Depth is determined after considering the type or nature of the entrusted entity, its form and/or the value of the budget concerned.	Costs: estimation of cost of staff involved in the ex-ante assessment process (which may include missions, if applicable). Benefits: The total budget amount entrusted to the entity,	Overall supervision cost per (type of) entrusted entity (%)

Stage 3: Operations: monitoring, supervision, reporting.

Main 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, anti-fraud strategy).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
<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 the Commission's governance reputation and quality of accountability reporting.</p> <p>The programme 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>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 (ECSEL – 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 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>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>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</p>	<p>Costs: estimation of cost of staff involved in the actual (regular or reinforced) monitoring of the entrusted entities.</p> <p>Benefits: The average annual budget amount entrusted to the entity.</p> <p>Costs: costs of the staff involved in Family coordination activities</p> <p>Benefits: Qualitative benefits: Optimised procedures, harmonised approach to beneficiaries on multiple issues (audits, fraud, legal)</p>	<p>Overall supervision cost per (type of) entrusted entity (%)</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
	The Common Support Centre provides all the members of the Research Family with harmonised procedures, guidance and IT tools. DG RTD centralises the budget planning and the monitoring of the H2020's budget implementation.	are defined et developed at family level.		

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

Main 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	How to estimate the costs and benefits of controls	Control indicators
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. Bad cash forecast leading to the Commission paying too much compared to the EE's needs In times of shortage of	Delegation Act/ Contribution agreement/etc specifying the control, accounting, audit, publication, etc related requirements – including reporting Management review of the supervision results. Standard procedures for the validation of all payments and recovery of non-used operating budget subsidy Good internal communication to ensure that issues are known and dealt with (see stage 3)	Coverage: 100% of the contribution payments. Frequency: following the rhythm of the payments There is a review before each payment is made. However, the depth will depend on identified issues and on the body involved.	Costs: estimation of cost of staff involved (part of the general supervision costs also linked to stage 3 above) Benefits: The average annual budget amount entrusted to the entity Qualitative benefit: optimised credit implementation	Overall supervision cost per (type of) entrusted entity (%)

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
credits, the budget appropriations are not optimised with the current needs within the family	Family level budget coordination in DG RTD			

Stage 5: Audit and evaluation, Discharge for Joint Undertakings

Main control objectives: Ensuring that assurance building information on the entrusted entity's activities is being provided through independent sources as well, which may confirm or contradict the management reporting received from the entrusted entity itself (on the 5 ICOs).

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
The Commission has not sufficient information from independent sources on the entrusted entity's management achievements, which prevents drawing conclusions on the assurance for the budget entrusted to the entity – which may reflect negatively on the Commission's governance reputation and quality of accountability reporting.	Delegation Act/Contribution agreement/etc specifying the control, accounting, audit, publication, etc related requirements – including independent audit function (where appropriate) and cooperation with IAS and ECA. The IAS is the internal auditor for all EAs and JUs. The ECA has access to all bodies for which recourse to new management modes has been done and gives a separate opinion (leading to separate discharge) for JUs and EAs for their administrative budget. Harmonised ex-post audits (common audit strategy for H2020), common audit service-	<p>Coverage: sample as needed (e.g. random/representative, value-targeted, risk-based).</p> <p>Frequency: whenever necessary.</p> <p>The depth depends on the type of entity and the level of risks assessed.,</p>	<p>Costs: estimation of cost of (DG CONNECT) staff involved in the supervision of this stage (goes together with the costs of supervision in stages 3 and 4).</p>	<p>Assurance being provided (via management/audit reporting); representative error rate, residual error rate within a tolerable range; Situation confirmed by audit opinions.</p> <p>Overall supervision cost per (type of) entrusted entity (%)</p>

Main risks It may happen (again) that...	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Control indicators
	<p>potential escalation of any major governance-related issues with entrusted entities</p> <p>- Exchange of relevant anti-fraud information about shared beneficiaries within the Research family</p> <p>Interim evaluations by independent experts of achievement of policy objectives</p>	Annual report of the ECA on all JUs.		

ANNEX 5c: Internal Control Templates for budget implementation (ICTs)

ICT for Financial Instruments: Cultural and Creative Sectors Guarantee Facility

IFI = (entrusted) International Financial Institution (eg EIB/EIF, etc); **FI** = (further entrusted) Financial Intermediaries;
"sub"-FI = (further) sub-delegated FI; **FR** = Final Recipient

Stage 1 – Set-up/design of the Financial Instrument and designation of International Financial Institution (IFI)

Main control objectives:

- Ensuring that the Financial Instrument is adequate for meeting the policy or programme objectives (effectiveness); Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy)
- Ensuring that the most promising International Financial Institution (IFI) is pre-determined or selected to ensure that the Financial Instrument is implemented effectively and efficiently; Sound financial management; Legality and regularity; Fraud prevention and detection

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
a) The actions supported through the Financial Instrument do not adequately reflect the policy objectives	a) Hierarchical validation (incl. at DG level) of the: 1) Regulation (approved by the Legislative Authority) ; 2) Delegation agreement , including notably an ex-ante evaluation (required by RAP art. 224); 3) Annual work programme for "Access to risk finance" (part of the H2020 WP) with an annual budget Inter-service consultation of relevant DGs (horizontal and operational) Consultation of the H2020 Advisory Group	If risk materialises, the Financial Instrument would be irregular. Theoretical impact 100% of the funds involved and significant reputational consequences. <u>Coverage /frequency:</u> 100%	<u>Costs:</u> Estimation of the total cost of monitoring and supervision by CNECT <u>Benefits:</u> The total value of the Financial Instrument (this is our maximum risk exposure if the basic acts are inadequate)	<u>Effectiveness:</u> Where applicable, opinions by advisory bodies (recommendations, actions taken)

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
	on Access to Risk Finance Formal adoption by the Legislative Authority (for the Regulation), by Commission decision (for the DA), and by the Budgetary Authority (for the WP and the annual budget). Regular evaluations (see Stage 3)			
b) The Delegation Agreement is inadequate in coverage of operational and management provisions (RAP art. 217 & 222-225)	b) The main principles were agreed with the IFI in the FAFAs (managed by ECFIN)			
c) The selection of the IFI is not in line with FR & RAP criteria, especially re: 'alignment of interests' (FR art 140.2e)	c) EIF was pre-determined in accordance with FR art. 58.1c.	(see above)		Findings in audit reports

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
d) The IFI (and the (sub)FI) does not have the experience and financial capacity / administrative & control capacity to ensure an effective & sound implementation of the Financial Instrument (FR art 60.2)	d) The Council asked the Commission to work with EIF.			
e) The RSM (Risk-Sharing Mechanism) is too generous to the IFI (risk of unbalanced risks)	e) <i>Same controls as for a) above</i> The EU's risk share is defined in the Delegation agreement. The risk sharing model was agreed in line with horizontal guidance for Financial instruments from DG BUDG and ECFIN. It was also subject to a formal Commission decision.			

Stage 2 – Implementation of the Financial Instrument by the International Financial Institution (IFI), via Financial Intermediaries (FIs)

Main control objectives:

- Ensuring that the funds allocation is optimal (best value for public money; effectiveness, economy, efficiency); ensuring that the most promising Financial Intermediaries (FI), Final Recipients (FR) are selected to meet the policy objectives (effectiveness)
- Ensuring that the remuneration paid to the IFI is adequate (cost-effectiveness)
- Compliance (legality & regularity); Prevention of fraud (anti-fraud strategy); Safeguarding of assets and information; Reliable reporting (true and fair view)

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
<p>a) The call for and selection of the <u>contracted FIs and FRs</u> is not in line with FR & RAP criteria for eligibility or exclusion, especially '<u>alignment of interests</u>' and '<u>no relations with offshore banking and tax havens</u>'</p>	<p>a) Responsibility for the call, for evaluating, proposing and selecting FIs, lies with the IFI (the FIs do not perform calls).</p> <p>Due diligence by the IFI, which checks as part of the evaluation that banks are not registered in tax havens etc.</p> <p>Redress procedure for FIs not selected (part of EIF's evaluation procedure)</p> <p>Implementation of various controls by the IFI/FIs in accordance with the FAFA and Delegation agreement</p> <p>EIB's control strategy is presented to the Commission</p> <p>Ex-ante controls by IFIs at "contracting" stage – EIF has a large department who check ex-ante that the proposed projects are eligible, excellent science and financially viable.</p> <p><u>On-the-spot</u> verifications by IFIs – a "monitoring team" visits FIs and FRs before project and after project finalisation</p>	<p><u>Coverage / frequency</u>: determined by the IFI/FIs in accordance with the Delegation agreement</p> <p><u>Depth</u>: determined by the IFI/FIs in accordance with the Delegation agreement</p>		<p><u>Effectiveness</u>:</p> <p>Number of appeals to the selection decision (redress procedure)</p> <p>Number of cases obtaining redress</p> <p><u>Efficiency</u>:</p> <p>Time to publication of selection results</p> <p>Time to contract</p> <p><u>Cost-effectiveness</u>:</p> <p>Total cost of monitoring and supervision by CNECT</p>

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
<p>b) The design of the accounting and reporting arrangements would not provide a True & Fair View</p> <p>c) the remuneration (structure and/or level) of the IFI¹⁶, the reimbursement of any exceptional costs and costs for technical assistance or additional tasks would not be in line with the SFM objective (e.g. admin fees unjustifiably high)</p>	<p>b) Separate records per Financial Instrument are to be kept by the IFI; and harmonised reporting has been required by the Commission.</p> <p>c) Fees and incentives are defined in the FAFA and the Delegation agreement, including an overall cap.</p>	<p>c) In-depth assessment of the statement of expenses</p>		<p>c) Remuneration and costs for actually managed funds (compared to benchmark)</p>

¹⁶ Remuneration may include administrative fees, treasury management fees and incentives as well as exceptional and unforeseen expenses.

Stage 3 - Monitoring and supervision of the Financial Instrument by the Commission, incl. ex-post control and assurance building

Main control objectives:

- Ensuring that the operational results (deliverables) from the Financial Instrument are of good value and meet the objectives and conditions (effectiveness & efficiency); ensuring that the related financial operations comply with regulatory and contractual provisions (legality & regularity); prevention of fraud (anti-fraud strategy); ensuring appropriate accounting of the operations (reliability of reporting, safeguarding of assets and information)
- Ensuring appropriate accounting of the repayments and assigned revenue made (reliability of reporting)
- Ensuring that the (audit) results from the ex-post controls lead to assurance for the accountable AOD (5 ICOs)

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
<p>a) The IFI (and the (sub)FI) provide support to activities which are not contributing to achieving the policy objectives and the implementation is not in compliance with applicable regulations and is not in accordance with the principle of sound financial management</p> <p>b) Internal control weaknesses, irregularities, errors and fraud are not</p>	<p>a, b) Monitoring and supervision of the IFI/FIs is organised formally through the Steering Committee.</p> <p>Regular reporting (quarterly, annually and ad hoc) by the IFI to the Commission "Designated Service" on operational and financial performance and administrative costs.</p> <p><u>Annual reporting:</u> Financial statements; Management declaration; Summary report of audits and controls; independent (external) audit opinion.</p> <p><u>In case of a key issue (weak reporting, negative audit opinion, high risk operations, etc):</u> Reinforced monitoring and supervision, If needed: The Commission has the right to suspend or interrupt payments, or even apply the exit strategy (winding-up)</p>	<p><u>Coverage:</u> 100% of the funding payments to the entrusted entity are controlled</p>	<p><u>Costs:</u> Estimation of the total cost of monitoring and supervision by CNECT (+ cost of contracted services, if any)</p> <p><u>Benefits:</u> value of the funding provided and leverage, as well as scientific excellence (innovation)</p> <p><u>Losses:</u> e.g. write-offs of guarantees called</p>	<p><u>Effectiveness:</u></p> <p>Success ratios and KPIs for policy objectives (e.g. "leverage", "co-risk taking", number of FRs supported by the Financial Instrument, disbursement rate)</p> <p>Internal control, auditing and monitoring "issues"; interventions; issues under reinforced internal control, auditing and monitoring; critical audit findings</p> <p><u>Cost-Effectiveness:</u></p> <p>Total cost of monitoring</p>

Main risks <i>It may happen (again) that...</i>	Mitigating controls	How to determine coverage, frequency and depth	How to estimate the costs and benefits of controls	Possible control indicators
<p>detected and corrected by the IFI (and the (sub)FI), resulting in the EU funds not achieving the policy objectives and not complying with applicable regulations</p> <p>c) The IFI does not report information that CNECT considers crucial</p> <p>d) The Financial Instrument transactions lead to contingent liabilities for the EU budget</p>	<p>Referring IFI/FI to OLAF</p> <p>c) Annual report has to be audited by an independent auditor, who also reports on the control system</p> <p>d) The legal base stipulates that the EU's liability (i.e. financial risk) is limited to the contribution it has paid, so there can be no contingent or off-balance sheet liabilities over this amount.</p>			<p>and supervision by CNECT over value delegated</p> <p>Management fees over value delegated</p> <p>The sum of the total cost of monitoring/supervision by CNECT and management fees, over value delegated</p>

ANNEX 6: Implementation through national or international public-sector bodies and bodies governed by private law with a public sector mission

This annex, which *applies only to indirect management*, includes information about implementing tasks entrusted to national or international public sector bodies and bodies governed by private law with a public sector mission. In practice, this includes "national agencies" and bodies governed by private law with a public sector mission including PPPs such as Joint Undertakings (but not executive agencies, regulatory agencies, EIB and EIF).

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
2. Annual budgetary amount entrusted / payments made	158 354 391 ¹⁷ / 263 579 179
3. Duration of the delegation:	27 June 2014 - 31 December 2024
4. Justification of recourse to indirect centralised management:	Required by the Council Regulation establishing ECSEL Joint Undertaking to implement a Joint Technology Initiative on Electronic Components and Systems for European Leadership ¹⁸
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 as a Union body

¹⁷ Commission Decision C(2016) 2131 of 15.4.2016 on the Union financial contribution to ECSEL Joint Undertaking in 2016.

¹⁸ Council Regulation (EU) No 561/2014 of 6 May 2014, OJ L 169, 7.6.2014, p. 152.

<p>6. Summary description of the implementing tasks entrusted.</p>	<p>The ECSEL JU shall carry out the following tasks:</p> <p>(a) support financially research and innovation indirect actions, mainly in the form of grants;</p> <p>(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:</p> <ul style="list-style-type: none"> - 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. <p>(c) ensure sustainable management of the ECSEL JU;</p> <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</p>
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	<p>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>
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Active and Assisted Living (AAL) Joint Programme

1. Programmes concerned:	<p>H2020</p> <p>Societal Challenges – Health, demographic change and well-being</p>
2. Annual budgetary amount entrusted /payments made	25 MEUR / 9,78 MEUR
3. Duration of the delegation:	2014-2027
4. Justification of recourse to indirect centralised	Required by co-decision ¹⁹ by the European Parliament and the Council concerning the

¹⁹ Decision 554/2014/EU of 15 May 2014

management:	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.	Implementation of the Union participation in the AAL Joint Programme

ANNEX 7: EAMR of the Union Delegations (not applicable)

ANNEX 8: Decentralised agencies

ENISA

Policy concerned	Annual budgetary amount entrusted
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 10.397.932

BEREC Office

Policy concerned	Annual budgetary amount entrusted
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 4.246.000

ANNEX 9: Evaluations and other studies finalised or cancelled during the year

Title	Reason ¹	Scope ²	Type ³	Associated DGs	Costs (EUR)	Comments ⁴	Reference ⁵
I. Evaluations finalised or cancelled in 2016							
a. Evaluations finalised in 2016							

REFIT Evaluation of the electronic communications regulatory framework	REFIT	The evaluation covers the following instruments: the Framework Directive 2002/21/EC as amended, the Authorisation Directive 2002/20/EC as amended, the Access Directive 2002/19/EC as amended, the Universal Service Directive 2002/22/EC as amended, the BEREC Regulation 1211/2009, the Radio Spectrum Decision 676/2002/EC, the Radio Spectrum Policy Group Decision 2002/622/EC, Decision 243/2012/EU establishing a multiannual radio	R	Members of the ISSG: SG, DG DIGIT, DG COMP, DG JUST, DG GROW, DG ECFIN, DG FISMA, DG TAXUD, DG TRADE, DG RTD, DG JRC, DG SANTE, DG EMPL, DG EAC, DG NEAR, DG ENV, LS, DG REGIO, DG HOME, DG ENER, DG AGRI, DG MOVE, EUROSTAT, EPSC.	The evaluation builds on two studies dedicated to the evaluation and review of the regulatory framework for electronic communications (see above related cost): - Regulatory, in particular access, regimes for network investment models in Europe (SMART 2015/0002) Cost : EUR 329 175 - Substantive issues for review in the areas of market entry, management of scarce resources and general consumer issues (SMART 2015/0003). Cost: EUR 250 000	1) SWD(2016) 313 final and SWD(2016) 305 final; 2) Regulatory, in particular access, regimes for network investment models in Europe (SMART 2015/0002): http://bookshop.europa.eu/en/regulatory-in-particular-access-regimes-for-network-investment-models-in-europe-pbKK0216677/ Substantive issues for review in the areas of market entry, management of scarce resources and general consumer issues (SMART 2015/0003) Other recent DG Connect studies in the area of electronic communication have been also used where appropriate: Support for the preparation of the impact assessment accompanying the review of the regulatory framework for e-communications (SMART 2015/0005): http://bookshop.europa.eu/en/support-for-the-preparation-of-the-impact-assessment-accompanying-the-review-of-the-regulatory-framework-for-e-communications-pbKK0116883/?CatalogCategoryID=CXoKABst5TsAAAEjepEY4e5L Review of the scope of universal service (SMART 2014/11): https://bookshop.europa.eu/en/review-of-the-scope-of-universal-service-pbKK0215984/ Study on future trends and business models in communications services and their regulatory impact (SMART 2013/0019): https://bookshop.europa.eu/en/study-on-future-trends-and-business-models-in-communication-services-pbKK0116599/
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		spectrum policy programme (RSPP)				<p>Identification and quantification of key socio-economic data for the strategic planning of 5G introduction in Europe (SMART 2014/0008): https://bookshop.europa.eu/en/identification-and-quantification-of-key-socio-economic-data-to-support-strategic-planning-for-the-introduction-of-5g-in-europe-pbKK0116481/</p> <p>Economic and Social Impact of repurposing the 700MHz band for wireless broadband services in the European Union (SMART 2015/0010): https://bookshop.europa.eu/en/economic-and-social-impact-of-repurposing-the-700-mhz-band-for-wireless-broadband-services-in-the-european-union-pbKK0116054/</p> <p>Impact of Traffic Offloading and Technological Trends on the Demand for Wireless Broadband Spectrum (SMART 2012/0015)28: https://bookshop.europa.eu/en/study-on-impact-of-traffic-off-loading-and-related-technological-trends-on-the-demand-for-wireless-broadband-spectrum-pbKK0113239/</p> <p>Spectrum Policy. Analysis of Technology Trends, Future Needs and Demand for Spectrum in line with Article 9 of the RSPP (SMART 2012/0005)27: https://bookshop.europa.eu/en/spectrum-policy-pbKK0113191/</p> <p>Survey and data gathering to support the Impact Assessment of a possible new legislative proposal concerning Directive 2010/13/EU (AVMSD) and in particular the provisions on media freedom, public interest and access for disabled people</p>
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REFIT Evaluation of Audio-visual Media Services Directive	REFIT	The scope of the REFIT was Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services in view of changing market realities.	R	Members of the ISSG: SG, RTD, GROW, JRC, COMP, ENV, EAC, JUST, TRADE, NEAR, SJ, SANTE	EUR 185 000		1) SWD(2016) 170 final and SWD(2016) 171 final 2) The supporting studies are not published in the EU bookshop but can be found at: https://ec.europa.eu/digital-single-market/en/news/avmsd-refit-commission-publishes-preparatory-documents
Evaluation of the level of progress in eGovernment policy in the EU in view of the planned new eGovernment Action Plan 2016-2020	CWP	The scope of the evaluation is the objectives and measures set out in the EU eGovernment Action Plan 2011 – 2015. It covers the level of progress in eGovernment policy in the EU in the	R	Members of the ISSG: SG, DG DIGIT, DG GROW, DG REGIO, DG ENV, DG JUST, DG EMPL			1) SWD(2016) 108 and SWD(2016) 109

		period starting from the beginning of 2011 (Action Plan was adopted 15 December 2010) until and including 2015, subject to the availability of most recent data.					
Horizon 2020 Interim evaluation, including SMART 2015/0060	L	The evaluation assessed DG CONNECT activities in H2020: LEIT ICT, FET (Open and Proactive), ICT topics within Societal Challenges, Open Disruptive Innovation Scheme implemented through the SME Instrument.	E	DG RTD	EUR 275 000	The evaluation is part of the overall H2020 Interim Evaluation carried out by DG RTD.	1) No SWD foreseen (see comments). 2) The support study has not been published yet.
Mid-term Evaluation of FET Flagships	O	The scope of the evaluation includes the Graphene and HBP FET Flagships, as well as their	E	DG RTD	EUR 67 923	The evaluation is part of the overall H2020 Interim Evaluation carried out by DG RTD.	1) No SWD foreseen (see comments). 2) The expert panel report has not been published yet.

		implementatio n and governance model.					
Review of the Satellite and Cable Directive, including SMART 2015/0075	CWP	Evaluation of Council Directive 93/83/EEC on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission .	R	Members of the ISSG: DG CONNECT, DG COMP, EAC, ECFIN, EMPL, ESTAT, GROW, JRC, JUST, LS, RTD and TRADE participated to the ISSG.	EUR 220 000		1) SWD(2016) 308 final and SWD(2016) 309 final 2) https://ec.europa.eu/digital-single-market/en/news/study-satellite-and-cable-directive

REFIT Evaluation of Directive on privacy and electronic communications	REFIT	Evaluation of Directive 2002/58/EC on privacy and electronic communications.	R	Members of the ISSG: DG COMP, DG JUST, DG GROW, DG ECFIN, DG FISMA, DG TAXUD, DG TRADE, DG RTD, DG JRC, DG EMPL, DG EAC, DG HOME, DG ENV, LS, DG REGIO, DG HOME, DG ENER, DG MOVE, EUROSTAT, EPSC.	EUR 288 000 (but the study was also covering an assessment of the policy options to review Directive 2002/58)	1) SWD(2017) 5 final and SWD/2017/06 final 2) https://ec.europa.eu/digital-single-market/en/news/evaluation-and-review-directive-200258-privacy-and-electronic-communication-sector
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b. Evaluations cancelled in 2016							
II. Other studies finalised or cancelled in 2016							
a. Other studies finalised in 2016							
Support for the preparation of the impact assessment accompanying the review of the regulatory framework for e-communications - SMART 2015/0005		The study is necessary to prepare an impact assessment supporting the Commission's legislative proposal for the review of the regulatory framework for e-comms			EUR 349 887.5		http://bookshop.europa.eu/en/support-for-the-preparation-of-the-impact-assessment-accompanying-the-review-of-the-regulatory-framework-for-e-communications-pbKK0116883/?CatalogCategoryID=CXoKABst5TsAAAEjepEY4e5L
Support for the preparation of an Impact Assessment to accompany the review of the Roaming Regulation - SMART 2015/0006		Roaming Regulation to allow the reflection of underlying costs in these maximum wholesale charges set by the Roaming Regulation			EUR 60 000		http://bookshop.europa.eu/en/assessment-of-the-cost-of-providing-wholesale-roaming-services-in-the-eu-pbKK0416463/?CatalogCategoryID=CXoKABst5TsAAAEjepEY4e5L

Review of approaches to estimate a reasonable rate of return for investments in telecoms networks in regulatory proceedings and options for EU harmonisation - SMART 2015/0007		Assess the methodologies used by NRAs in the regulatory measures notified to the Commission under Article 7 of the Framework Directive regarding the weighted average cost of capital (WACC).			EUR 57 000		http://data.europa.eu/doi/10.2759/84741
Growing a Digital Social Innovation Ecosystem for Europe - SMART 2012/0049		To integrate social innovation actors in DAE and to inform DG CNECT H2020 preparations			EUR 497 816		http://dx.publications.europa.eu/10.2759/448169
Inventory of case law in electronic communications - SMART 2013/0018		Develop concepts for and assess feasibility, and cost of setting up and maintaining a (multilingual) database of national appeal decisions and its management			EUR 86 658		http://dx.publications.europa.eu/10.2759/456997

Study on future trends and business models in communications services and their regulatory impact - SMART 2013/0019		Identify new trends and business models that are likely to emerge and analyse their potential impact on traditional telecoms and broadcasting business models.			EUR 249 500		http://bookshop.europa.eu/en/study-on-future-trends-and-business-models-in-communication-services-pbKK0116599/?CatalogCategoryID=CXoKABst5TsAAAEjepEY4e5L
Definition of a research and innovation policy leveraging Cloud Computing and IoT combination - SMART 2013/0037		Addresses a fully deployed and smart IoT including Machine-to-Machine (M2M) communication, enhanced by Cloud Computing services and advanced networks and also provide the ground for decision makers and entrepreneurs to take appropriate action for reaping the full benefits			EUR 150 000		http://bookshop.europa.eu/en/definition-of-a-research-and-innovation-policy-leveraging-cloud-computing-and-iot-combination-pbKK0215315/

Best practices for ICT procurement based on standards in order to promote efficiency and reduce lock-in - SMART 2013/0048		Provide guidance on the link between ICT standardisation and public procurement to help public authorities to use standards to promote efficiency and reduce lock-in"			EUR 209 800		http://bookshop.europa.eu/en/study-on-best-practices-for-ict-procurement-based-on-standards-in-order-to-promote-efficiency-and-reduce-lock-in-pbKK0416074/
Broadband coverage measurement in Europe in 2015 - SMART 2013/0054		Support policy and strategic work by collecting up to date and detailed data so as to give a complete picture of the coverage of fixed and mobile broadband networks in the enlarged EU			EUR 75 150		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublicationStart?PublicationKey=KK0116480
Broadband Internet Access Cost 2015 - SMART 2013/0055		Measure whether proper implementation of EU policies and regulation have an impact on broadband			EUR 144 900		http://bookshop.europa.eu/en/broadband-internet-access-cost-biac-autumn-2015-pbKK0216288/?CatalogCategoryID=CXoKABst5TsAAAEjepEY4e5L

		retail prices and thereby in broadband take-up					
Analysis of Broadband speed - SMART 2013/0056		Contribute to the implementation and governance of the DAE by contributing to the benchmarking and the annual publication of the DAE scoreboard			EUR 50 000		Only published in the newsroom: https://ec.europa.eu/digital-single-market/en/news/analysis-broadband-speed-december-2015
Identification and quantification of key socio-economic data for the strategic planning of 5G introduction in Europe - SMART 2014/0008		Provide a quantitative input, from a neutral/authoritative source, to the various stakeholders and to regulatory authorities to facilitate the strategic planning and wide coordination of the preparation of 5G in Europe		DG ENTR	EUR 300 000		Newroom item: https://ec.europa.eu/digital-single-market/en/news/eu-egovernment-report-2016-shows-online-public-services-improved-unevenly

Review of the scope of universal service - SMART 2014/0011		Provide essential input to decide on whether the Commission should propose to change the scope of universal service at the EU level			EUR 146 700		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0215984
Identification of the market of radio equipment operating in license-exempt frequency bands to assess medium and long-term spectrum usage densities - SMART 2014/0012		The results of the Study will be used for the implementation of the Radio Spectrum Policy Programme (RSPP), more concretely, in the inventory of existing uses of spectrum		DG ENTR	EUR 149 150		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0415774
Eurobarometer household survey on eCommunications - SMART 2014/0014		Keep abreast of markets trends in e-communications and assess how EU households and citizens benefit from EU telecoms		DG COMM	EUR 402 049		http://dx.publications.europa.eu/10.2759/388948

		policy					
Measuring the economic impact of cloud computing in Europe - SMART 2014/0031		Observe in a measurable, systematic and temporal way the growth in the cloud market, assess against the Metrics indicators and draw wider economic policy conclusions supporting future policy initiatives			EUR 147 500		https://bookshop.europa.eu/en/measuring-the-economic-impact-of-cloud-computing-in-europe-pbKK0616266/
Mobile broadband prices - SMART 2014/0049		Results will feed the Digital Agenda Scoreboard and should be used to develop policies and regulation in the mobile market			EUR 49 600		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0415853
Synergies between the civilian and the defence cybersecurity markets -		Find the complementarities between civilian and defence cybersecurity		DG ENTR, ENISA	EUR 189 275		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0116158

SMART 2014/0059		markets and the common R&D priorities.					
Monitoring methodologi es for web- accessibility in the European Union - SMART 2014/0061		Prepare the Implementing Act of the proposed directive on Web Accessibility			EUR 246 400		https://ec.europa.eu/digital-single-market/en/news/monitoring-methodologies-web-accessibility-european-union
Cost-benefit analyses of the new generation of eGovernmen t services and how public administrator s can become agents of innovation through ICT - SMART 2014/0066		Provide evidence for public administration s and policy makers to facilitate the emergence new generation eGovernment services and contribute to achieving several goals of the eGovernment Action Plan 2011-2015			EUR 283 330		https://bookshop.europa.eu/en/analysis-of-the-value-of-new-generation-of-egovernment-services-and-how-can-the-public-sector-become-an-agent-of-innovation-through-ict-pbKK0116970/

Large Scale Pilots for an Internet of Things - SMART 2014/0073		The results will be used to precisely dimension (both content wise and budget wise) the LSP's that should be supported by the next work programme (2016-17) of H2020.		DG RTD	EUR 100 000		http://bookshop.europa.eu/en/benchmark-study-for-large-scale-pilots-in-the-area-of-the-internet-of-things-pbKK0215314/
Access regimes for network investment and business models in Europe - SMART 2015/0002		Identify and assess the different access regimes most suited to support the various efficient public and private investment and business models in broadband network infrastructures within the Single Market.			EUR 329 175		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0216677

Economic and social impact of repurposing the 700MHz band for wireless broadband services in the European Union - SMART 2015/0010		Explore the economic and social implications of re-allocation of the 700 MHz band (694-790 MHz) to wireless broadband (WBB) services in the EU in a harmonised way		DG COMP, MARKT, ENTR	EUR 109 800		http://dx.publications.europa.eu/10.2759/298669
Facilitating Cross Border Data Flow in the Digital Single Market: study on data location restrictions - PHASE 1 - SMART 2015/0016		Provide input for future policy initiatives towards a connected Digital Single Market and for the public consultation on future cloud computing policy activities as committed in the Data-driven Economy		DG JUST	EUR 60 000		https://bookshop.europa.eu/en/facilitating-cross-border-data-flow-in-the-digital-single-market-pbKK0716026/

Mobile Broadband prices - SMART 2015/0025		Support policy and strategic work by collecting up to date and detailed information on mobile offers and packages in order to measure whether proper implementation of EU policies have an impact on prices and whether these can be compared across countries.			EUR 60 000		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0416510
eGovernment benchmark 2015 – Report - SMART 2015/0027		Assess Member States' progress in the area of public sector innovation for the horizontal fiches of Europe2020, to improve country knowledge in the Scoreboard, and represent a learning			EUR 60 000		https://bookshop.europa.eu/en/egovernment-benchmark-2016-pbKK0116859/

		environment for the public administrations					
Towards faster implementation and take-up of open government - SMART 2015/0041		Support the transformation of the public sector in Europe based on the open government approach and addressing the stakeholders' needs.			EUR 300 000		https://bookshop.europa.eu/en/towards-faster-implementation-and-uptake-of-open-government-pbKK0116953/
AVMSD Rules linked to freedom of information (Articles 5, 6, 7, 14, 15, 28, 30) - SMART 2015/0048		Assessment of the regulatory costs and benefits of the AVMSD rules in the area of media freedom and pluralism.			EUR 120 000		Not going to be published
AVMSD Rules on Protection of Minors (Articles 12, 27) - SMART 2015/0050		Assessment of the regulatory costs and benefits of the AVMSD rules concerning protection of minors			EUR 180 000		Not going to be published

Study on security model for Business Registers Interconnection System (BRIS) - SMART 2015/0052		The study results will be used for the preparation of the BRIS Digital Service Infrastructure in next CEF Telecom WP.		DG MARKT, DIGIT	EUR 200 000		Not going to be published
Facilitating Cross Border Data Flow in the Digital Single Market: study on data location restrictions - PHASE 2 - SMART 2015/0054		Provide input for future policy initiatives towards a connected Digital Single Market and for the public consultation on future cloud computing policy activities as committed in the Data-driven Economy Communication (COM(2014)442).		DG JUST	EUR 137 750		Not going to be published

Preliminary costing for new broadband targets - SMART 2015/0068		The results will provide evidence for the public consultation and the policy debate around the adoption of new broadband targets.			EUR 55 000		http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/en_GB/-/EUR/ViewPublication-Start?PublicationKey=KK0116744
Support for the analysis of the public consultation of the role of online platforms - SMART 2015/0077		The study will be part of the assessment of the role of online platforms as identified in the Digital Single Market Strategy of the Commission		DG GROW	EUR 14 950		http://bookshop.europa.eu/en/online-platforms-contrasting-perceptions-of-european-stakeholders-pbKK0416398/
The role of Online intermediaries - SMART 2015/0084		The study will be part of the assessment of the role of online platforms as identified in the Digital Single Market Strategy of the Commission.			EUR 14 975		http://bookshop.europa.eu/en/study-on-the-role-of-online-intermediaries-summary-of-the-public-consultation-pbKK0216472/

Analysis of the public consultation on Geo-blocking - SMART 2015/0085		The Commission published a public consultation on geo-blocking and other geographically based restrictions when shopping and accessing information in the EU. The contractor should summarise a subject of the replies provided			EUR 14 785		http://bookshop.europa.eu/en/analysis-of-part-of-the-public-consultation-on-geo-blocking-pbKK0416400/
Internationalisation of DESI - SMART 2015/0088		The I-DESI will be used to inform policymaking at DG level, to provide an international benchmarking of the digital development of the EU regarding the world leaders in digital, and to support the communication of the Commission's			EUR 50 000		Newsroom item: http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=15724

		policy initiatives concerning the Digital economy and society					
Study #2 on the remuneration of authors of books and scientific journals, translators, journalists and visual artists for the use of their works - SMART 2015/0094		deliver a legal and economic analysis of remuneration of authors of books and scientific journals, translators, journalists and visual artists in the EU which will enable the DG to develop sound evidence in this area for possible further reflection.		DG MARKT		Study signed MARKT in 2014 - only for Admin follow-up Budget line: 12.020100 "Implementation and development of the Internal Market"]	https://bookshop.europa.eu/en/remuneration-of-authors-of-books-and-scientific-journals-translators-journalists-and-visual-artists-for-the-use-of-their-works-pbKK0115968/

Eurobarometer on ePrivacy - SMART 2016/0079		The results of the study will be used to contribute to the evidence base for the review of the ePrivacy Directive (legislative proposal planned for Q2 2017).			EUR 298 816		Newroom item: http://ec.europa.eu/COMMFrontOffice/PublicOpinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2124
b. Other studies cancelled in 2016							
2.4 GHz WLAN Equipment - SMART 2016/0016		The study will provide input to the process of harmonisation of the 2.3-2.4 GHz band for terrestrial systems capable of providing electronic communications.				Cancelled, since a related technical study is being performed by JRC with results expected in June.	

Mapping the European video games industry - SMART 2016/0068		The study will allow for the identification of the main stakeholders of the sector throughout the European Union, and will therefore provide a database of actor to reach for in the context of the Creative Europe programm			EAC, GROW, RTD, EACEA	Cancelled by the unit in September 2016 because they no longer need it	
Measurement indicators for eGovernment - SMART 2016/0075		The indicators should enable to measure not just the impact of the new action plan but should enable to measure the real transformation of the public administration and the real impact that has on the business and citizens.				The study got cancelled and the budget transfer to another study : SMART 2016/0049 - Collection of data for the eGovernment benchmarking exercise 2015	

Support for the preparation of an impact assessment to accompany Commission's implementing act on roaming fair use policy and the sustainability mechanism - SMART 2016/0012		The results will enable the EC to better shape policy decisions related to the internal market and the DSM in specific				Cancelled due to time constraints	
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ANNEX 10: DG CONNECT activities covered by cross sub-delegation in 2016

Sub-delegations given BY DG CNECT

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.03	09.0301	CNECT/AGRI	10/6/2016	unlimited	Promoting interoperability, sustainable deployment, operation and upgrading of trans-European digital service infrastructures, as well as coordination at European level	appropriation authorised	9/2/2017	6/2	716016	B5

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.04	09.040201	CNECT/DIGIT	29/4/2013	unlimited	Leadership in information and communications technology	appropriation authorised	31/1/2017	31/1	487762	F4

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.01	09.010503	CNECT/EMPL	24/11/2015	unlimited	Other management expenditure for Research and Innovation programmes — Horizon 2020	appropriation authorised	3/2/2017	6/2	613036	R3
09.03	09.0303	CNECT/EMPL	24/11/2015	unlimited	Promoting interoperability, sustainable deployment, operation and upgrading of trans-European digital service infrastructures, as well as coordination at European level	appropriation authorised				D1
Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.03	09.0301	CNECT/ENER	4/7/2016	unlimited	Promoting interoperability, sustainable	appropriation authorised	26/1/2017	26/1	414104	F4

					deployment, operation and upgrading of trans-European digital service infrastructures, as well as coordination at European level					
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Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.04	09.040201	CNECT/ESTAT	12/12/2013	unlimited	Leadership in information and communications technology	appropriation authorised	6/2/2017	6/2	643416	F4
09.04	09.045301	CNECT/ESTAT	12/12/2013	unlimited	Completion of Competitiveness and Innovation Framework Programme — Information and Communication Technologies Policy Support Programme (ICT PSP) (2007 to 2013)	appropriation authorised				

Chapter	Article	Fund Mgt	Date of	Period	Heading	Amount	Date	Verified	Ares	Respo
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		Center	signature				DG's answer	by R2		nsible
09.04	09.040201	CNECT/GROW	23/3/2015	unlimited	Leadership in information and communications technology	appropriation authorised	16/1/2017	16/1	218745	R4

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.04	09.040201	CNECT/JUST	6/8/2015	unlimited	Leadership in information and communications technology	100.000	6/2/2017	6/2	646722	F1.

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.01	09.010503	CNECT/OIB	6/5/2013 confirmed on 16/12/14	unlimited	Other management expenditure for Research and Innovation programmes — Horizon 2020	appropriation authorised	31/1/2017	31/1	511333	R2

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
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09.04	09.04510 0	CNECT/OP	13/12/201 3	unlimited	Completion of previous research framework programme — Seventh Framework Programme (2007 to 2013)	appropriation authorised	30/1/201 7	30/1	482941	F4
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Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
09.01	09.010503	CNECT/RTD	14/4/2015	unlimited	Other management expenditure for Research and Innovation programmes — Horizon 2020	appropriation authorised	2/2/2017	6/2	599764	D1
09.04	09.040302	CNECT/RTD	14/4/2015	unlimited	Fostering inclusive, innovative and reflective European societies	appropriation authorised				
09.04	09.045100	CNECT/RTD	14/4/2015	unlimited	Completion of previous research framework programme — Seventh Framework Programme (2007 to 2013)	appropriation authorised				
09.04	09.040201	CNECT/RTD	14/4/2015	unlimited	Leadership in information and communication s technology	appropriation authorised				

Sub-delegations given TO DG CNECT

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
16.01	16.010402	COMM/CNECT	27/3/2015	COM=>31/12/15 PMT=>liquidation	Support expenditure for communication actions	125.000	6/2/2017	31/1	655190	I3

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
26.01	26.030101	DIGIT/CNECT	2/12/2015	31/12/2015	Interoperability solutions for European public administrations, (ISA 2)	appropriation authorised	6/2/2017 16/3/2017	31/1 1/3	640593 1391615	R3 R2

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
01.02	01.020100	ECFIN/CNECT	30/11/2015	unlimited	Coordination and surveillance of, and communication on, the economic and monetary union, including the euro	400.000 CA 550.000 PA	6/2/2017	31/1	655023	I3

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
04.01	04.010401	EMPL/CNECT	10/3/2015	unlimited	Support expenditure for European Social Fund and non-operational technical assistance	250.000	6/2/2017	31/1	655067	I3

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
32.04	32.040301	ENER/CNECT	3/6/2014	unlimited	Social challenge: Making the transition to a reliable, sustainable and competitive energy system	appropriation authorised	3/2/2017	23/1	625236	H5

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
19.06	19.060100	FPI/CNECT	22/12/2014	unlimited	Information outreach on the Union's external relations	appropriation authorised	16/2/2017	6/2	863272	I3

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's	Verified by R2	Ares	Responsible
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							answer			
33.02	33.0201	JUST/CNECT	12/12/2016	unlimited	Ensuring the protection of rights and empowering citizens	appropriation authorised	6/2/2017	2/2	654187	G1

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
13.03	13.036501	REGIO/CNECT	23/12/2014	unlimited	European Regional Development Fund (ERDF) — Operational technical assistance	appropriation authorised	6/2/2017	31/1	655112	Closed in July 2016 13
13.04	13.046101	REGIO/CNECT	23/12/2014	unlimited	Cohesion Fund — Operational technical assistance	appropriation authorised				

Chapter	Article	Fund Mgt Center	Date of signature	Period	Heading	Amount	Date DG's answer	Verified by R2	Ares	Responsible
08.02	08.020202	RTD/CNECT	27/2/2015	unlimited	Enhancing access to risk finance for investing in research and innovation	appropriation authorised	no transaction in 2016			F3
08.02	08.020304	RTD/CNECT	27/2/2015	unlimited	Achieving a European transport system that is resource-efficient, environmentally friendly, safe and seamless	appropriation authorised	6/2/2017	1/2	641025	H2

ANNEX 11: Specific annexes related to "Assessment of the effectiveness of the internal control systems" (not applicable)

ANNEX 12: Performance tables

General objective A Connected Digital Single Market				
Impact indicator 1: Number of Member States above the value 0.6 in Digital Economy and Society Index Definition: The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness. The closer the value is to 1, the better. Source of the data: https://digital-agenda-data.eu/datasets/desi/visualizations				
Baseline	Interim Milestone		Target	Latest known results
2014	2017	2019	2020	2016
13	20	24	28	23
Specific objective 1.1: Digital goods and services are available to consumers and businesses across Europe			Related to spending programme Creative Europe MEDIA	
Result indicator 1: Increased portability of online content service. Source of data: Impact assessment accompanying the proposal of Regulation on portability. Measurement every 2 years, as part of the monitoring of the impact of the legislation, comprehensive assessment 5 years after the start of application; data sources will be existing ones (e.g. European Audio-visual Observatory), data provided by online content service providers or right holders and possible specific studies or Eurobarometer				
Baseline	Target			Latest known results
2015	2017			2016
Substantial number of online content services remain locked in national territories.	100% paid-for subscriptions for online content services portable across borders 1 year after the adoption of the Regulation on portability (start of application in 2017)			Political agreement reached in February 2017.
Result indicator 2: New legislation to tackle unjustified geo-blocking is in place. Source of data: Roadmap for completing the DSM				
Baseline	Interim Milestone		Target	Latest known results
2015	2016	2017	2017	2016
DSM Strategy adopted by the Commission.	Legislative proposal to tackle unjustified geo-blocking.	Adoption of the legislation by EP and Council.	Entry into force of the legislation and transposition in national law in all	Proposal adopted.

			Member States.	
Planned evaluations: Assuming that the new legislation will enter into force in 2017, the first assessment has to be made in 2020 and then every three years. The Commission will need to present an evaluation report and propose an update if changes in the legislative or the technological environment warrant it.				
Main outputs in 2016:				
Policy-related outputs				
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)	
Legislative proposals to review the EU copyright legal framework including possible measures stemming from the review of the satellite and cable directive.	Adoption of Commission proposal.	Q4 2016 (2016/CNECT/009) (2016/CNECT/019)	Proposals adopted.	
Legislative proposals on the implementation of the Marrakesh Treaty (to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled).	Adoption of Commission proposal.	Q4 2016 (2015/CNECT/025)	Proposals adopted.	
Legislative proposals to prevent unjustified geo-blocking on the DSM.	Adoption of Commission proposal.	Summer 2016 (2016/CNECT+/002)	Proposal adopted.	
Main expenditure outputs				
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)	
Creative Europe MEDIA Work programme 2017 launching accompanying measures in 2015 Copyright Communication.	Adoption.	Q2 2016	Implementation of WP 2017 has been launched.	
Strategic stakeholder dialogue through European Film Forum and national Film Funds on accompanying measures.	Holding 6 events in film festivals in 2016.	Q4 2016	11 events in film festivals were held. The 2016 programme of dialogue through the European Film Forum and national	

			film funds has been successfully completed.	
Specific objective 1.2: Electronic communications networks and services, digital content and innovative services benefit from favourable conditions and compete on a level playing field.				
Result indicator 1: Future-friendly regulatory framework for electronic communications is in place in Member States.				
Source of data: Roadmap for completing the DSM.				
Baseline 2015	Interim Milestone		Target 2020	Latest known results 2016
	2016	2018		
Public Consultation	Adoption of the legislative proposal by the Commission	Adoption of legislation by EP and Council	Transposition in national law in all Member States by 2020	Proposal adopted on 14.9.2016..
Result indicator 2: Number of connected devices in the EU, impacting the IoT market size.				
Source of data: Global System for Mobile Association (GSMA), industry analysis (International Data Corporation) ²⁰				
Baseline 2016	Interim Milestone	Target	Latest known results 2016	
	2018	2020 (Target is based on industrial forecasts)		
500 million phones and 100 million machine to machine devices	2 billion connected devices	Multiplication by 10 in 2020, about 5 billion connected devices in Europe, 5 devices average per citizen.	According to GSMA's October 2016 report, the connected device explosion will continue worldwide, albeit at a slower speed than forecast in 2015. This means the consumer will have a greater variety of connected devices – on average 3 by 2020 versus 1.5 in 2015.	
Result indicator 3: European agreement of at least 1 GHz identified above 6 GHz for 5G IMT 2020 allocation in 2019.				
Source of data: International Telecommunication Union, World Radio communication Conference decisions, work programme of the European Conference of Postal and Telecommunications Administrations, EU research.				
Baseline 2015		Target 2019: Based on running research and use case as e.g.		

²⁰ <https://www.gsmaintelligence.com/research/?file=357f1541c77358e61787fac35259dc92&download>

	developed in project Mobile Enablers for 2020 Information Society (METIS) flagship 5G initiative, in the context of WRC 2019 preparatory actions			
0 MHz available for 5G above 6 GHz.	1 GHz minimum			
Latest known results (2016) The 2016 5G Action Plan singled out the identification of 5G spectrum above 6 GHz as a priority action. Subsequently, the RSPG produced an opinion in November 2016 identifying pioneer bands for 5G, notably at 26 GHz with a spectrum width of more than 3 GHz. This opinion has formed the basis to the definition of a mandate to the CEPT, adopted by the RSC end of 2016. The CEPT will perform the technical analysis in view of defining the technical conditions for usage of this band, in line with later conclusive milestones to be reached at ITU level in 2019				
Result indicator 4: Policy instruments available for the public and private sector actors to invest in Open Service Platforms (OSP). Market actors consolidated by the use of FIWARE and supported by a number of significant industrial companies to reach an appropriate penetration in several markets. Source of data: Open Service Platforms study, FIWARE Core Industry Group. Continuous assessment will be carried out by projects selected under the WP 2016 in collaboration with the FIWARE foundation (in-house assessment based on the data sources listed above).				
Baseline 2015	Interim Milestone		Target 2020	Latest known results 2016
	2017	2019		
- No Member States programmes on Open Service Platforms (OSP) - 4 large Telco companies, - 5000 people in the FIWARE ecosystem.	- At least one Member State programme on OSP - 6 large companies - 5000 people in the FIWARE ecosystem	- Increase in Member States programmes on OSP - 6 large companies - Increase beyond 5000 people in the FIWARE ecosystem	Streamlining European OSP industry policy across all Member States, including innovation funding actions	- German "Service Welten Programm" initiated - New FIWARE Foundation with 5 global industry actors and several dozen industrial members - 1017 Start-ups, 11K twitter followers
Result indicator 5: Entry into force of a new legal framework for Audio-visual Media Services Directive (AVMSD) Source of data: Roadmap for completing the DSM.				
Baseline 2015	Interim Milestone		Target 2019	Latest known results 2016
	2016	2017		
Public consultation	Adoption of the legislative proposal by EC	Adoption of legislative proposal by EP	All Member States have transposed	Proposal adopted on 25.5.2016.

		& Council	directive	
Result indicator 6: Transposition of legislative acquis in Network Information Security (NIS) and e-Privacy. Source of data:				
Baseline 2015	Interim Milestone		Target 2022	Latest known results 2016/2017
	2016	2018		
Political agreement on NIS Directive	Adoption of the NIS Directive by EP and Council	1) All Member States have transposed NIS Directive 2) Adoption of the revised ePrivacy Directive	2) All Member States have transposed revised ePrivacy Directive	1) Adoption of NIS Directive on 6.7.2016. 2) Proposal for a Regulation on Privacy and Electronic Communications adopted on 10.01.2017.
Result indicator 7: Notified Electronic identifications (eIDs) by Member States to the Commission: Number of Member States that notify an eID scheme to the Commission under the eIDAS Regulation. Source of data: Electronic identification and trust services (eIDAS) Regulation				
Baseline Q4 2015	Interim Milestone		Target 2018	Latest known results 2016
	Q4 2016	Q4 2017		
0	7	13	All Member States must recognise the notified schemes under the eIDAS Regulation)	Member States will start notifying in 2017.
Main outputs in 2016:				
Policy-related outputs				
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)	
Legislative proposal for a future-friendly regulatory framework for electronic communications networks and services.	Adoption of Commission proposal.	Q4 2016 (2015/CNECT/007)	Proposal adopted.	
Review of the functioning of the wholesale roaming market (Commission proposal for a legislative measure by the European Parliament and Council).	Adoption of Commission proposal.	June 2016 (2015/CNECT/018)	Proposal adopted on 15.6.2016.	
Commission implementing regulation on the	Adoption by the Commission.	Q4 2016 (2016/CNECT/011)	Implementation Regulation adopted	

application of roaming fair use policy and sustainability mechanism.		subject to validation by the First VP)	on 15.12.2016.
Establishment of a Cybersecurity public-private partnership (Cybersecurity cPPP)	Commission decision and signature of the contractual agreement.	Q3 2016 (2015/CNECT/004) (2016/CNECT/003 subject to validation by the First VP)	cPPP launched on 6.7.2016.
Implementing decision of the eIDAS Regulation laying down standards for the security assessment of information technology products.	Adoption by the Commission.	Q2 2016 (2016/CNECT/012)	Implementing decision adopted on 25.4.2016.
Extensive assessment report on Online platforms. The Commission's conclusions following the comprehensive assessment will be adopted in the summer of 2016 in the form of Communication and Staff Working Document.	Publication of Commission report.	Summer 2016	Commission Communication and SWD adopted on 25.5.2016.
Legislative proposal on the review of the Audiovisual Media Services Directive and Staff Working Document on REFIT evaluation of the Directive.	Adoption of Commission proposal.	Q2 2016 (2015/CNECT/006) (2015/CNECT/024)	Proposal adopted on 25.5.2016.
Network Information Security (NIS) Directive.	1) Final adoption of the NIS Directive. 2) Setup of a NIS cooperation network at European level. 3) Setup of a Computer Security Incident Response Team network at European level.	1) 01/06/2016 2) 31/08/2016 3) 31/08/2016	1) Adoption on 06.07.2016 2) 09.02.2017 3) 09.02.2017.
Legislative proposal on the review of the ePrivacy Directive.	Adoption of Commission proposal.	Q4 2016 (2016/CNECT/007 subject to validation by the First VP)	Proposal for a Regulation on privacy and electronic

			communications adopted on 10.1.2017.
Main expenditure outputs			
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)
Connecting Europe Facility (CEF) Safer Internet Digital Service Infrastructure (DSI) core platform hotlines.	DSI of hotlines supporting notice and takedown of illegal child abuse material.	Q2/Q3 2016	The DSI was launched and rolled out to EU hotlines in Q1 2016.
CEF DSI Cybersecurity: Contract for the establishment of a Core Service Platform between participating Member States and operation of cooperation mechanisms for Computer Emergency Response Teams.	Signature of the contract.	Q2 2016	Contract signed in November 2017.

Specific objective 1.3: The digital economy can develop to its full potential underpinned by initiatives enabling full growth of digital and data technologies.			
Result indicator 1: Actions to digitise European industry			
Source of data:			
Baseline 2015		Target 2020	
European industry not prepared for the challenges posed by digitalisation		Roll-out of actions and establishing digital innovation hubs in every region	
Latest known results (2016): <ul style="list-style-type: none">- 200 M€ funding in 2016-17 with 134 hubs supported and another 300 M€ committed for 2018-20- Following outreach events, several additional Member States are considering investing in the concept			
Result indicator 2: Number of TOP10 supercomputers installed in the EU by 2020			
Source of data: http://www.top500.org			
Baseline 2015	Interim Milestone 2018	Target 2020	Latest known results 2016
1	2 in TOP10	3 in Top 10	0 in Top 10
Planned evaluations: Horizon 2020 ex-post evaluation of the Research Infrastructure			

part in 2022.			
Result indicator 3: Removal of legislative and regulatory obstacles at Member States' level to the free flow of data.			
Source of data: Two studies on "Facilitating cross-border data flow in the DSM"			
Baseline 2016	Interim Milestone		Target 2020
	2016	2018	
As identified by the two studies on "Facilitating cross-border data flow in the DSM" – data available in Q4 2016.	Adoption of the legislative proposal by EC.	Adoption of legislative proposal by EP and Council	Removal of legislative and regulatory obstacles at Member States' level to the free flow of data by 2020
Latest known results (2016) The initiative planned for Q4 2016 was moved to January 2017 for College agenda planning reasons. Following a negative opinion of the Regulatory Scrutiny Board, it was decided not to table a legislative proposal. Instead, the Communication on Building a European Data Economy, adopted on 10.01.2017, states that the Commission will first gather further evidence on the extent and nature of data localisation restrictions and their impacts. Following this, the Commission will, where needed, launch infringement procedures to address unjustified or disproportionate data location measures, and, if necessary, take further initiatives on the free flow of data.			
Result indicator 4: Interoperable IoT solutions developed for automotive market.			
Source of data: European Road Transport Research Advisory Council, 5G PPP, industry			
Baseline 2015	Interim Milestone 2016		Target 2020: Target conforms to automotive industry plans
6 early pilots for connected and autonomous cars.	Large-scale pilots showcasing Society of Automotive Engineers autonomy level 4 or higher in at least 10 Member States ...		Availability of infrastructure for connected cars; e.g. Long-Term Evolution (LTE)-V 5G upgradable.
Latest known results (2016) Five large-scale pilots were launched under the IoT Focus Area of H2020 in Q4 2016 with a starting date 1 January 2017. One of these pilots is on connected and autonomous cars. The overall objective of the large-scale pilots is to bring together relevant knowledge and technology from the sectorial (e.g. automotive) and the IoT value chains in order to develop interoperable IoT solutions, architectures and platforms.			
Result indicator 5: New Data framework for connected automated driving and energy efficient smart homes.			

Source of data: Support action from 2015 Transport call or 2014 Smart cities call.		
Baseline 2015	Target 2020	
None	The framework is used by 10 major companies in at least 5 different countries.	
Latest known results (2016) On connected and automated driving, a relevant data framework will be deployed in cross-border test-beds with experimentation work planned to start in 2017. A relevant automotive-telecom alliance was formed for this purpose. On smart homes (release of the relevant ETSI/OneM2M standard – SAREF - in 2015), ETSI provided final draft versions of new technical specifications for a modified core SAREF ontology and new SAREF modules on energy, environment, buildings, etc. A study for alignment of standards for the full demand-response chain and SAREF extension is to be launched in January 2017. Other developments include the launch of the first commercial products using SAREF. SAREF won also the best vocabulary award at the SEMANTiCS 2016 conference.		
Result indicator 6: Citizens and businesses can access eGovernment services in any country of the EU, regardless of their country of origin. Source of data: CEF Digital.		
Baseline 2014/2015	Interim Milestone 2016	Target 2020: as listed in CEF Digital and defined in annual Work Programmes
CEF Work Programmes 1 and 2 adopted.	Launch of 4 sectoral Digital Service Infrastructures (DSIs) reusing building block DSIs (eProcurement, Business Registers Interconnection Systems, Electronic Exchange of Social Security Information, eJustice).	All CEF building block DSIs (eID, eDelivery, eSignature, eInvoicing, Automated Translation) are effectively reused by all Member States and integrated in all CEF-funded domain-specific DSIs.
Latest known results (2016) While both eProcurement, Business Registers Interconnection system (BRIS), the Electronic Exchange of Social Security Information and eJustice have committed to use more than one building block and are presently incorporating these, only eJustice is operational eID and eTranslation with eSignature and eDelivery to be added.		

Main outputs in 2016:			
Policy-related outputs			
Description	Indicator (e.g. adoption by the Commission; completion)	Target date	Latest known results (situation on 31/12/2016)
DSM technologies and public services	Adoption by the Commission.	Q2 2016 (subject to	Communication on European Cloud

modernization package, including a Communication on a European Cloud initiative (accompanied by two Staff Working Documents: High Performance Computing and Quantum Technology), a strategy on ICT standards accompanied by a Staff Working Document on Internet of Things and the e-Government Action Plan (2016-2020)		validation of individual elements by the First VP)	Initiative adopted on 19.4.2016.
Legislative proposal and a Communication on the free flow of data and data ownership within the EU.	Adoption by the Commission.	Q4 2016 (2016/CNECT+/001)	Target partly reached (see explanation below).
Better Digital Skills for all Europeans, accompanied by H2020 support.	Re-launch of Grand Coalition for Digital Jobs.	Q4 2016	The Digital Skills and Jobs Coalition was launched on 1.12.2016.
Digital embedded in national policies and reform programmes (European semester) – First "Europe's Digital Progress Report" (Staff Working Document)	Adoption of the SWD	Q2 2016 (2016/CNECT/004)	The first edition of the Digital Progress Report was presented in May 2016.
Connected automated driving.	Cross-sectorial agreement on actions to be taken to improve Europe's competitiveness in this domain.	Q4 2016	Telecom and automotive industry have formed an alliance to initiate deployment projects and to address cross-cutting digital issues.
Legislative proposal and a Communication on the free flow of data and data			

ownership within the EU

The initiative planned for Q4 2016 was moved to January 2017 for College agenda planning reasons. A Communication on Building a European Data Economy was adopted on 10.01.2017. It explores the free flow of data; the issues of access and transfer in relation to machine generated data; liability and safety in the context of emerging technologies; portability of non-personal data, interoperability and standards. Together with the Communication the Commission has launched a public consultation. Following a negative opinion of the Regulatory Scrutiny Board, it was decided not to table a legislative proposal. Instead, the Communication on Building a European Data Economy states that the Commission will first gather further evidence on the extent and nature of data localisation restrictions and their impacts. Following this, the Commission will, where needed, launch infringement procedures to address unjustified or disproportionate data location measures, and, if necessary, take further initiatives on the free flow of data.

Main expenditure outputs

Description	Indicator	Target date	Latest known results (situation on 31/12/2016)
Pilot projects for Open Government activities under H2020 Societal Challenge (transparency, eParticipation, collaborative production of services, etc.), including the use of emerging technologies and SME actions (mobile eGov apps).	Launch of pilots.	Q4 2016	3 projects were launched in 2016 under the topic CULT-COOP-11
GEANT – the pan-European data network for the research and education community interconnects national research and education networks across Europe, enabling collaboration between researchers irrespectively of their location.	Signature of specific grant agreements for: 1) connectivity to Latin America 2) GEANT – Research and Education networking.	Q4 2016	1) a grant for the connectivity to Latin America was signed on 29.11.2016. 2) a grant to fund GEANT's main activities under its FPA was signed on 17.11.2016
High-performance computing strategy.	Signature of grant for the next PRACE implementation phase.	Q4 2016	The proposal was evaluated in November 2016. Grant to be signed in early 2017.

Validation of emerging standards frameworks, testing of innovative business models through implementation and usage of IoT technology.	Launch of 5 IoT large scale pilots for EU wide technology and business validation that involve demand and supply side.	Q4 2016	5 IoT large-scale pilots were signed in Q4 2016 with a starting date on 1.1.2017.
Acceleration of the implementation of the "once only principle"	Launch of a Large Scale Pilot with Member States.	Q4 2016	The H2020 grant (TOOP) was signed in December 2016.

Specific objective 1.4: All Europeans enjoy effective world-class connectivity through future-proof and ubiquitous digital networks and service infrastructures as underlying basis for the digital society and data economy.			Related to spending programmes: CEF/EFSI/ESIF
Result indicator1: Ensure favourable conditions towards full deployment of 5G networks, notably by a 5G PPP investment reaching 700 M€ matched by 5 times private investment.			
Source of data: Industry roadmaps			
Baseline 2015	Interim Milestone		Target
	2017	2020	2022: This is in line with industry roadmaps
Availability of 4 G networks based on "Long term evolution (LTE)" standards in all Member States 129 M€ committed as per phase 1 of 5G PPP investment	283 M€ committed after implementation of phase 2.	First 5G service introduction in at least 1 Member State	Availability of 5G full solutions including operations of bands above 6GHz in at least 5 Member States. 520 M€ committed for Phase 3 implementation.
Latest known results (2016): Implementation of phase 2 is ongoing. The budget for phase 3 (419 M€ under H2020 work programme 2018-20) is in line with the target budget of 700 M€. The early analysis available for the 5G PPP phase 1 shows that 5G investments by the industry are at least 5 times what the PPP provides, and more likely in the order of 10 times the amount of public money.			
Result indicator 2: Deploying of network infrastructure enabling the Gigabit society to socio-economic drivers			
Source of data: DESI Index /scoreboard and industry reports			
Baseline June 2015	Interim Milestone	Target 2022	Latest known results 2016

	2020		
- 71 % coverage at 30 Mbps (Digital Agenda Europe (DAE) target) - 10% Take-up at 100 Mbps (DAE target)	- 100% coverage at 30 Mbps (EU citizens, DAE target) - 50% take-up at 100 Mbps (households, DAE target)	Coverage of socio economic drivers with Gigabit connectivity allowing 1 Gbps download, 100 Mbps upload and very low latency. The targets for coverage will be determined in 2016 in the context of the Telecoms review.	- 76 % coverage at 30 Mbps (DAE target) - 11 % take-up at 100 Mbps (DAE target) The coverage of socio economic drivers with Gigabit connectivity has been set by the Communication "Connectivity for a Competitive Digital Single Market – Towards a European Gigabit Society"

Main outputs in 2016:			
Policy-related outputs			
Description	Indicator (e.g. adoption by the Commission; completion)	Target date	Latest known results (situation on 31/12/2016)
Connecting Europe Broadband Fund.	Signing of key legal documentation establishing the fund.	Q3 2016	Due to delays with the selection of the fund manager, only the first phase of the fund was announced and signed in December 2016.
Ultra High Frequency (UHF) Decision on access to the 700 MHz band for wireless broadband and safeguards for audiovisual below 700 MHz.	Adoption of the harmonisation decision by the Commission.	Q2 2016 (2015/CNECT/008)	Commission Implementing decision adopted on 27.4.2016.
Proposal for a Decision of the EP and the Council on the use of the 470-790 MHz frequency band in the EU.	Adoption of Commission proposal.	Q1 2016 (2015/CNECT/017)	Commission proposal adopted on 2.2.2016
Identification of	5G	Q3 2016	Target partly reached.

core 5G standards for global interoperability with international partners.	Standardisation roadmap delivering by 2019 a full standard package including complementary standardisation e.g. in relation to vertical sectors.		The 5G standardisation roadmap for the first phase of the standard has been stabilised in 2016. The actual content of the standard development (Work Item) will be identified in March 2017
EU-Brazil joint declarations towards a common global vision for 5G, complementing the ones with South Korea, Japan and China.	Signature of 5G joint declaration with US and Brazil	Q4 2016	Target partly reached. A 5G joint declaration of cooperation was signed with Brazil early 2016. A declaration with the US was not possible due to the lack of interest from the US administration and diverging EU-US views on 5G priorities.
Continued European industrial commitment to 5G.	Reinforcing 5G Private Public Partnerships (PPP) governance model securing strong European voice in relevant bodies (standardisation, spectrum, international cooperation).	Q3 2016	The 5G-PPP governance structure was reinforced at two levels: 1) On the private side, the Board of Directors, the 5G Infrastructure Association, became independent from the ETP NetWorld 2020 to be more focussed on core EU industry interests. Own financial resources were increased significantly through private contributions and a professional support office was set up. 2) The Working Groups have been strengthened to ensure more impactful joint contributions of companies and projects in the most relevant standards and spectrum bodies; and to support more actively the international cooperation on 5G.
CEF Telecom Work Programme 2016 for Digital Service Infrastructures.	Adoption of the CEF Telecom Work Programme.	Q1 2016 (2015/CNECT/026)	Work programme adopted on 8.2.2017.

Main expenditure outputs			
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)
CEF Financial Instruments financing.	100 M€ to launch the Connecting Europe Broadband Fund.	Q3 2016	100 M€ contribution to the fund has been approved, with 10 M€ committed to the fund in December 2016.

Specific objective 1.5: A modern, open and pluralistic society building on Europe's cultural diversity, creativity and respect of creators' rights and its values in particular democracy, freedom of expression and tolerance		Related to spending programme: H2020, Multimedia Actions, Creative Europe MEDIA
Result indicator 1: Share of European works in linear broadcast services.		
Source of data: Second report on the application of Articles 16 and 17 of the AVMSD for the period of 2011-12.		
Baseline 2012	Target 2020	Latest known results 2016
64,1% (average share on European level).	65% (average share on European level) A mature market that seems to have reached its level of saturation, so stability to be expected with a potential minor increase.	No data available until update of the study expected by the end of 2017.
Result indicator 2: Share of European films in the catalogue of on-demand services.		
Source of data: European Audio-visual Observatory – Report on the origin of Films in Video on Demand catalogues in the EU (November 2015).		
Baseline 2015	Target 2020	Latest known results 2016
27% (average share)	30% (average share)	23%
At first sight, the diversity of on demand catalogues has decreased between 2015 and 2016. Actually, the main reasons for this drop are methodological: <ul style="list-style-type: none"> - the 2016 figures cover Microsoft catalogues in 14 countries and 20 additional Netflix catalogues (<u>Netflix</u> rolled their services across the whole EU only in 2016) which both have a low average of EU content (13% and 16%). - there are less national services (Yomvi, Kinoplex...) which usually have a high share of EU 		

content. This change is a sound methodological approach as these smaller services tended to artificially inflate the total share of EU works in the Member States although they actually account for a very small share of the on demand market.

The methodology is now stable. The update due in 2017 will give an accurate view of the trend in the diversity of on demand services catalogues.

Result indicator 3: Share of non-national European works in linear broadcast services.

Source of data: Study on the implementation of the provisions of the Audio-visual Media Services Directive concerning the promotion of European works. Next study on the promotion of European works.

Baseline 2010	Target 2020	Latest known results 2016
8,1% (average share)	10% (average share)	No data available until update of the study expected by the end of 2017.

Result indicator 4: Share of non-national European films in the catalogues of on-demand services.

Source of data: European Audio-visual Observatory – Report on the origin of Films in Video on Demand catalogues. Next study on the promotion of European works

Baseline 2015	Target 2020	Latest known results 2016
21% (average share)	25% (average share)	18 % (2016)

Result indicator 5: New legislation for web accessibility in place in Member States.

Source of data: Roadmap for completing the DSM.

Baseline 2015	Interim Milestone 2016	Target 2019	Latest known results 2016
Proposal for a Directive on the Accessibility of Public Sector Bodies' Websites adopted in 2012.	Adoption of Directive by EP and Council.	Transposition in national law in all Member States	Directive adopted on 26.10.2016.

Main outputs in 2016:

Policy-related outputs			
Description	Indicator	Target date	Latest known results
Consolidating the creative industries and establishing an industrial R&I roadmap for the future needs of the CCIs.	Strategic research and innovation agenda submitted by the New European Media European Technology Platform (ETP).	Q2 2016	New European Media Vision Research and Innovation Agenda received on 18.11.2016.
Strengthening the EUROPEANA network.	Sustainable funding model in place for EUROPEANA	Q2 2016	An independent evaluation of Europeana following adoption of Council on 31.05.2016 was launched.
Main expenditure outputs			
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)
Strategic support to Euronews channel.	Signature of new Framework Partnership Agreement.	Q4 2016	The procedure was launched but changes in the composition of Euronews and ensuing debate at College level led to a postponement of the decision on the signature till February 2017.
Facilitating a European Centre for Press and Media Freedom.	Launch of the preparatory action.	To start after end of pilot project expected in Q2	The preparatory action was launched on 1.5.2016 and will run until the end of April 2017.
Creative Europe MEDIA Work programme 2017	Adoption.	Q2 2016	WP 2017 adopted.
Launch of Creative Sectors Guarantee Facility (under the Creative Europe Cross-sectoral strand).	Signature of Delegation Agreement with EIF	Q3 2016	Signature signed in June 2016 and calls published in Q3 2016. By end 2016, three guarantee agreements with financial intermediaries from ES, FR and RO were signed.

General objective A New Boost for Jobs, Growth and Investment				
Impact indicator 1: Europe 2020 target: Percentage of EU GDP invested in R&D (combined public and private investment). Source of data: Eurostat ²¹				
Baseline 2012	Target (2020) Europe 2020 target		Latest known results 2014 provisional	
2.01%	3%		2.03 %	
Bookmark				
Specific objective 2.1: Europe maintains its position as a world leader in the digital economy, where European companies can grow globally, drawing on strong digital entrepreneurship and performing start-ups and where industry and public services master the digital transformation.				
Related to spending programme(s): Horizon 2020				
Result indicator 1: H2020 to become an important source of innovation for young companies and dynamic SMEs in pursuit of excellence by maintaining at least the current percentage of H2020 ICT budget dedicated to innovation activities Source: internal DG CONNECT statistics.				
Baseline 2015	Interim Milestone 2017		Target 2020	Latest known results 31.12.2016
		2019		
45% in 2015	45%	45%	45%	50%
Result indicator 2: Established platform for national cybersecurity industry to cooperate at European level Source of data:				
Baseline	Interim Milestone 2017		Target 2020	
None	Contractual Public-Private Partnership on cybersecurity established and working on Research and Innovation implementation		Industrial cooperation extended to all industrial aspects (standardisation, certification, investment, skills...).	
Latest known results (2016):				
• The first association gathering cybersecurity industry established - European Cybersecurity Organisation (180 members representing small, big business, national associations, academia, public administration)				

²¹ Please note that Eurostat periodically revises its published data to reflect new or improved information, also for previous years. The latest published data is available by clicking on "bookmark". The "latest known value" column reflects the data that was available at the time of the preparation of the AARs 2016 and it is the reference point for the AARs of Commission services.

- Contractual arrangement for PPP signed with the industry association
- Governance structure of the cPPP (Partnership Board) operational
- 6 working groups created, including a group on certification and standardisation, sectoral demand, education training and awareness, investment and support for SMEs, research and innovation.
- Cybersecurity Strategic Research and Innovation Agenda for cybersecurity developed

Result indicator 3: Number of cities involved in replication and /or dissemination of solutions developed under the European Innovation Partnership on Smart Cities and Communities (EIP SCC) and/or H2020.

Source of data: The value of this indicator will be monitored by a support action from the 2014 Smart Cities call.

Baseline 2015	Target 2020	Latest known results 2016
0 cities.	50 cities: based on the requested replication rate in H2020 Smart Cities lighthouse projects.	90 cities have committed via the signing of an Letter of Intent (LoI) under the urban platform sub-cluster of the EIP SCC to implement open standard interoperable platforms developed by the sub-cluster, the project Espresso, and the lighthouse projects. Many of the cities that signed the above LoI are involved in the lighthouse smart cities projects as well.

Result indicator 4: Number of pilot projects launched for Open Government activities (including eParticipation, co-creation) and Once Only Large Scale Pilot (according to DSM).

Source of Data: H2020 WP SC6. In 2018 (midterm review of OOP pilot) and 2019 (assessment of the need for legal measures).

Baseline 2015	Interim Milestone		Target 2019	Latest known results 2016
	2016	2019		
Adoption of H2020 WP 2016-17 with relevant Open Government objectives and calls.	Launch of 4-5 Open Government projects (H2020 WP 2016/17) and 1 large-scale pilot to test implementation of Once-Only Principle (OOP) for businesses across borders (H2020 WP 2016/17).	Midterm review of pilots and OOP pilot.	20 projects launched. Assessment of necessity for legal measures of OOP completed.	All H2020 grants foreseen in 2016 were signed.

Planned evaluations: The two kinds of the 2016 projects will undergo annual reviews. In addition, the second review in 2018 will be a midterm review that will allow carrying out an

assessment of the need to undertake some legal / legislative measure regarding the OOP in 2018-19.

Main outputs in 2016:

Policy-related outputs

Description	Indicator	Target date	Latest known results
Staff Working Document (SWD) on the Intermediate evaluation of the eHealth Action Plan.	Adoption of the SWD.	Q4 2016	The SWD on the intermediate evaluation of the eHealth Action Plan has been postponed until 2017, further to the postponement of a public consultation on this matter, in view of a possible new, wider strategic initiative on digital innovation for health and care.
Blueprint on Digital Innovation for Active and Healthy Ageing. Collection of commitments from regional authorities to invest in the deployment and implementation of digitally-enabled solutions for ageing within the 2016-2018 timeframe.	Publication of the cross-EU blueprint.	Q4 2016	The first version of the Blueprint for Digital Transformation of Health and Care as developed by the Blueprint Champions published on 7.12.2016.
European Smart Cities Framework (ESCF).	ESCF developed	Q4 2016	The ESCF constitutes of the establishment of an Urban Platforms Framework, which is supported under the EIP on Smart Cities and Communities (co-funded by H2020). At the core of the initiative is the cooperation of industry and cities, which is formalised through an MoU (signed so far by 49 industrial partners) and a Letter of Intention (signed so far by 90 cities, including city networks) and the joint production of deliverables, of which 3 have been finalised for the demand and 2 for the supply side.

H2020 to be a centre of innovation for young companies and dynamic SMEs in pursuit of excellence.	Percentage of H2020 ICT budget dedicated to innovation activities (base line 2014: 45%)	50% of work programme by Q4 2016.	Target of 50% reached.
Main expenditure outputs			
Description	Indicator	Target date	Latest known results (situation on 31/12/2016)
StartupEurope Club.	Number of network nodes participating.	18 by Q4 2016.	The stakeholders in 17 European cities were connected through the Startup Europe H2020 projects. Total reads of One Stop Shop website at 13.01.2017 is 391784 and total visitors 210615.
H2020 – Societal challenges calls	Timely launch of 10 calls (budget: 123,7 M€)	Q4 2016	Target reached.

Specific objective 2.2: Europe's research finds investment opportunities for potential technology breakthroughs and flagships, in particular through the Horizon 2020 programme and using Private Public Partnerships.		Related to spending programme: Horizon 2020
Result indicator 1: Future and Emerging Technologies: Number of publications in peer-reviewed high-impact journals per 10 M€ of EU funding (defined in H2020 Specific Programme Regulation). Source of data: Reporting done by H2020 beneficiaries via Common Grant Management System (SYGMA) available through CORDA (RTD/CSC).		
Baseline N/A	Target 2020: The target was set on the basis of FP7 data for overall number of publications and estimating the share of publications in high-impact journals)	Latest known results 2016
N/A new approach adopted under H2020	25 per 10 M€.	6
Planned evaluations: Horizon 2020 mid-term and ex-post evaluations in 2017 and 2022; Horizon 2020		
Result indicator 2: Reinforcing industrial partnerships and strengthened cloud and software research that will enable technological capacity building and wide take up of cloud		

in Europe. Source of data: Strategic Research and Innovation Agenda to be developed by stakeholders by mid-2016			
Baseline 2014	Interim Milestone 2018	Target 2020	Latest known results 2016
174 M€ investment from H2020 calls 2014/16	314 M€ (cumulative)	384 M€ (cumulative). Further leveraging public funding to secure additional private investments and potential ESIF funding.	Target reached. Further to seven calls (2014-2016) related to cloud, software, technology and strengthening research and industrial partnerships, a total of 58 grants were signed. The total funding is 192.5 M€.
Result indicator 3: Leveraging private investment through Contractual Private Public Partnerships. Source of data: Internal Commission plans and contractual arrangement signed with the associations.			
Baseline 2014	Interim Milestone 2017	Target 2020: target agreed at the inception of the cPPPs	Latest known results 2016
Level of private funding in Research and Development*	Additional private funding matching at least EU funding (i.e. 1.3 billion €)	Private investment at least 3 times the total EU funding for the cPPPs	The contractual arrangements between the Commission and the private counterpart foresee different leverage factors for each cPPP. Information on 2016 leverage is not yet available, but does form part of the annual monitoring exercise carried out for each cPPP.
Planned evaluations: A mid-term review for the H2020 cPPPs (except Cybersecurity established only in 2016) will be prepared together with a group of experts in 2017.			
Result indicator 4: Increase development of networks beyond 5G technologies, exploit spectrum above 90 Ghz up to 1Thz for mobile communications, and invent novel architectures and systems for wireless communications. Source of data: H2020 Future Internet WP2016/17, Network technologies consultations for WP2016/17, Network2020 beyond 5G white paper, WP2016/17.			
Baseline 2015	Interim Milestone 2017	Target 2025	Latest known results 2016
18 M€ for Networking research Beyond 5G; Long term R&D to support the 1000+ constituency that forms the European	72 M€ (cumulative)	200 M€ (cumulative) to be commensurate with required efforts to develop technologies beyond	About 20 M€ to be provided in the context of the implementation of the 2016 ICT 9 call.

Technology Platform		5G		
Planned evaluations: Horizon 2020 mid-term and ex-post evaluations in 2017 and 2022.				
Result indicator 5: Industrial strategy for Next Generation Internet. Maximise the impact of the current PPPs by integration of the key outcomes into a Next Generation Internet objective. As a very large innovation policy initiative it is a project of important European value beyond 2020.				
Source of data: FIWARE ecosystem and others.				
Baseline	Interim Milestone		Target	Latest known results
2016	2017	2019	2020	2016
Concept development	Start developing the industrial strategy and policy support ecosystem. Allocation of funds.	Interim outcomes European industry policy impact	Adoption of the industrial strategy for the Next Generation Internet.	<ul style="list-style-type: none">• Completion of vision and mission of the Next Generation Internet initiative• Online consultation and stakeholder engagement closed, report published• Inclusion in Work Programme 2017 (objective 41)• Inclusion in Work Programme 2018-20• International dialogue building a collaboration with the NSF and other US actors
Result indicator 6: Patent applications and patents awarded as a result of H2020 grants for Future and Emerging Technologies (FET) and Leadership in Enabling and Industrial Technologies (LEIT).				
Source of data: CORDA data warehouse (data collected by CSC).				
Baseline N/A	Target (2020: as defined in the Horizon 2020 Specific Programme)			Latest known results 2016
This is a new approach under Horizon 2020.	3 patent applications per 10 M€ funding.			LEIT-ICT: 23 patents applications (0.1/10 M€ funding), 3 patents awarded (0.01/10 M€ funding). FET: 0
Planned evaluations: Horizon 2020 mid-term and ex-post evaluations in 2017 and 2022; Horizon 2020.				
Result indicator 7: Leveraged investment from SMEs, industry, public bodies and Non-Governmental Organisations in the Active & Assisted Living Programme and H2020 Societal Challenge 1 topics.				
Source of data: Cordis+ Active & Assisted Living Programme funding reports.				
Baseline 2015	Target 2020			Latest known results 2016
28 M€	160 M€			45 M€ AAL + 18 M€ H2020 totalling 63 M€
Planned evaluations: Horizon 2020				

Main outputs in 2016:			
Policy-related outputs			
Description	Indicator (e.g. adoption by the Commission; completion)	Target date	Latest known results (situation on 31.12.2016)
H2020 Interim assessment of the FET Flagships.	Completion.	Q4 2016	The work of the interim assessment panel is completed. The final report is expected in early 2017.
Establishment of an industry legal association representative of the EU stakeholders to pilot core EU developments in the IoT domain.	Stabilisation of AIOTI as a legal industrial structure to pilot IoT deployments in Europe.	Q3 2016	AIOTI has been legally established as a formal Association (non-profit organisation) under Belgian Law on 22.9.2016.
European deployment strategy for 5G networks and creation of a 5G Advisory Board to Commissioner Oettinger.	Creation of the 5G Advisory Board and release of the strategy	Q4 2016	The Advisory Board was not created as the Commissioner relied on the more informal forum of the 5G Round Tables of CEOs and which were instrumental for the development of the 2016 5G Action Plan.
FIWARE foundation.	Setup of the FIWARE foundation.	Q4 2016	Beyond the 4 founding organisations, one more top-level partner has subscribed in addition to dozens of fee-paying member companies.
Active and Assisted Living Joint Programme Initiative to support the transition of "Innovation to Market" in the field of Active and Healthy Ageing.	Launch of the initiative.	Q4 2016	The AAL Programme has launched the tender for an AAL market observatory, which will provide an overview of the availability and dynamics of the emerging AAL market. The AAL to business supporting action has been renewed, helping SMEs develop their business plans and reach investors for scaling up. An AAL inducement prize was awarded during the AAL 2016 Forum and a high profile Silver Economy inducement prize scheme was launched through Horizon 2020 which will offer annual awards.

Main expenditure outputs			
Description	Indicator	Target date	Latest known results (situation on 31.1.2016)
H2020 - Excellent Science calls.	Timely launch of 5 calls (budget: 132 M€).	Q4 2016	Target reached.
H2020 - Industrial Leadership calls.	Timely launch of 23 calls (budget: 611,5 M€).	Q4 2016	Target reached.
H2020 - Cross-cutting activities (Focus Areas) calls.	Timely launch of 2 calls (budget: 68 M€).	Q4 2016	Target reached.