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European Commission

2018 DIRECTORATE GENERAL INFORMATICS ANNUAL ACTIVITY REPORT

Annexes

DIGIT

Informatics

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ANNEXES

ANNEX 1: Statement of the Resources Director

"I declare that in accordance with the Commission's communication on the internal control framework[1], I have reported my advice and recommendations on the overall state of internal control in the DG to the Director-General.

I hereby certify that the information provided in the present Annual Activity Report and in its annexes is, to the best of my knowledge, accurate and complete."

Brussels, 22 March 2019

e-signed

Petra KNEUER

1 C(2017)2373 of 19.04.2017.

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

This annex is the annex of section 2.2 "Other organisational management dimensions".

Human Resource Management.

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 1: Percentage of female representation in middle management *Source of data: Targets for female representations in management functions in the European Commission for the years 2015-2019 [SEC(2015)336]*			
Baseline (2015)	**Target** (decided at Commission level) (2019)		**Latest known results** (2018)
22.7%	35%		28%
Indicator 2: Percentage of staff who feel that the Commission cares about their well-being *Source of data: Commission staff survey*			
Baseline (2014)	**Target** (2019)		**Latest known results** (2018)
34%	40%		51%
Indicator 3: Staff engagement index *Source of data: Commission staff survey*			
Baseline (2014)	**Target** (2019)		**Latest known results** (2018)
65.7%	69%		68%
Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results** (2018)
HR-1 Ensuring a smooth delivery HR processes through continued consolidation of procedures within the new HR Delivery Model (in collaboration	Regular bilateral meetings and exchanges with DG HR for clarifying roles and responsibilities in HR procedures. More regular contacts with AMC and DG HR central services for the implementation of DIGIT HR specifics (Digital Pole, ICT…).	Full consolidation and repartition of HR procedures by Mid-2018.	Target met. Monitoring meetings between the HR BC team and DG HR take place every two weeks.

with DG HR)			
HR-2 Increase of overall staff satisfaction & productivity	a) Staff Engagement: Continued implementation of the DIGIT Staff Survey 2016 Action Plan aimed at improving overall Staff Engagement Index (Staff Survey 2016: 63%).	a) 2018: 68% (+5%).	a) Target met. Staff Engagement Index for DIGIT is 68% (+5) Measures to increase staff engagement were implemented as set out in the designated action plan following the 2016 Staff Survey: - L&D; Equal opportunities: Drafting and implementation strategy (Female & Male talent development initiatives) - Management: Workshops on dealing with underperformance; 360 feedback of Senior & Middle Management; introduction of induction path for newly appointed HoU & DHoU
	b) Wellbeing: Support of DG HR in putting into practice the Fit@Work Strategy and Action Plan as well as continued wellbeing related actions specified in the DIGIT Staff Survey Action Plan 2016 with the aim of increasing the wellbeing index score (Staff Survey 2016: 55%).	b) 2018: 60% (+5%).	b) Target partially met: “Wellbeing and Work-Life Balance”: 58% (+3%) Regular support for fit@work activities, taking place throughout the year. Targeted events organised (e.g. breakfast with the Director General, “Kick-Off to a sporty Spring” event). Targeted sessions for DIGIT management at all levels are organised regularly to raise awareness on good practices for the management of long-term absences and

			underperformance
	c) Telework: Adapting and communicating DIGIT's teleworking guidelines to promote a liberal teleworking policy improving working condition satisfaction & productivity in the open space environment This included providing every member of staff with state of the art IT (laptop PC, Unified Communication System, etc.) that simplifies telework. This will be part of the broader DIGIT strategy of leading "Digital transformation" and being a role model for the "Workplace of the Future".	c) It was decided not to publish specific TW rules but to adopt a flexible and inclusive approach	c) Target met - Staff Survey 2018: "I achieve a good balance between my work life and my private life" = 66% (+6%) Teleworking rules are flexible in order to ensure as much as possible a fair work/life balance while at the same time ensuring adequate business continuity. Regarding the lack of office space in Luxembourg, a detailed logistical plan was implemented to tackle the issue.
HR-3 Planning and execution of a comprehensive Learning & Development Plan	a) External Training Budget Optimal planning and execution of DIGIT's training needs.	a) Full coverage of identified learning needs of DIGIT staff by external training budget of DG HR in 2018.	a) Target met: Learning needs fully covered using +90% of allocated L&D budget. A Strategic leadership seminar took place in May. Approximately 50 participants. Very positive feedback.
	b) In close cooperation with DG HR, encourage and support career development opportunities of staff through career guidance,	*b)* Increase of staff survey L&D related indicators	b) Targets met. Staff Survey 2018 – "My Job": 65% (+1); "Current Job": 43% (+10); "I have the opportunity to become more effective [...]":

	targeted coaching, workshops, mobility, etc. (Staff Survey 2016 “Current Job”: 64% / “Professional Future”: 33% /“I have the opportunity to become more efficient and effective in my job via learning on the job, self-learning, and participation in a variety of learning and development activities”: 59%)		70% (+11)
HR-4 Launching and implementation of a DIGIT HR Strategy aimed to sustain the delivery of DIGIT’s priorities in the coming years	a) Digital Pole Luxembourg Implementation of strategic paper on planned execution of targets set out for DIGIT in setting up Digital Pole and execution of involved resource reallocations and promotive measures, in cooperation with DG HR.	a) Strategy to be implemented in the course of 2018.	a) The strategy implemented allowed to increase the number of posts allocated to Lux-based units as well as a slight increase in net headcount.
	b) Female Representation in Middle Management: Implementation of strategic paper outlining the measures promoting the identification of potential female	b) Strategy implemented in the course of 2018, and 5/5 female MM appointments reached in 2018**.**	b) Target met: 5/5 female MM appointments reached. DIGIT HR Strategy was implemented in 2018. A Talent scheme launched for all AD women in DIGIT (involving approximately 20 colleagues).

	talents and career development to middle management positions (2017: 3/5 female MM appointments).		Monthly in-house lunch sessions were organised between January and June to address specific areas and promote networking. Two training sessions were organised by AMC. Talent scheme launched for male administrators in June. Open to approximately 50 colleagues working as team leaders, Heads of Sector or Deputies. New induction path launched in April for newly appointed HoUs and Deputies. New format of welcome session for newcomers to DIGIT was implemented as from January 2018.

Financial Management: Internal control and Risk management

Objective 1: Effective and reliable internal control system giving the necessary guarantees concerning the legality and the regularity of the underlying transactions			
Main outputs in 2018:			
Output	**Indicator**	**Target**	**Latest known results** (2018)
Detection of error rate in terms of legality and regularity of underlying transactions	% of error rate detected.	Error rate below 2% threshold.	Error rate = below 2% threshold

Objective 2: Effective and reliable internal control system in line with sound financial management.			
Main outputs in 2018:			
Output	**Indicator**	**Target**	**Latest known results** (2018)
Overall Costs of Controls	Overall costs of controls in %.	Maintain the average level as in Annual Activity Report 2017.	Levels have been maintained
IC-1 Simplify financial circuits (see 11-2 b)	a) Number of financial circuits reviewed. b) Availability of documentation.	a) Main financial circuits reviewed and related simplification proposals identified. b) Up-to-date documentation and an action plan with measures and their implementation	see Annexe 11 point 11-2 b
IC-2 Revision and implementation of DIGIT's control strategy to adapt it to different levels of risk	Revised control strategy delivered and implemented.	Planned activities implemented.	Control Strategy has been reviewed and implemented. A more comprehensive re-draft will take place

			in 2019.
IC-3 Ensure dynamic risk management in DIGIT: Ensure the coordination of risk management activities within the DG and ensure that risks are updated and documented in DIGIT's risk register.	Risk register up to date.	Major risks identified are timely reflected in the risk register. Risk register updated at least annually. Cost of controls remain stable or decrease, except is duly justified based on risk assessment and revised control strategy.	In-depth Risk management exercise performed end 2018 in view of MP 2019. This included risks related to fraud.

Objective 3: Minimisation of the risk of fraud through application of effective anti-fraud measures, integrated in all activities of the DG, based on the DG's anti-fraud strategy (AFS) aimed at the prevention, detection and reparation of fraud.

Main outputs in 2018:

Output	Indicator	Target	Latest known results (2018)
Implementation of an up-to-date anti-fraud strategy	% of implementation of actions planned for 2018 in the Anti-fraud strategy.	100%	100%
Update of the AFS	Updated AFS.	Anti-fraud strategy updated and actions foreseen in the strategy timely implemented by 31/12/2018.	DIGIT will revise its anti-fraud strategy in 2019 to take into account the new Commission anti-fraud strategy to be adopted by mid-2019 and take advantage of the enhanced support offered by OLAF, for example regarding fraud-awareness trainings/actions. More actions might be developed on issues such as conflict of interests, handling of sensitive information, use of insider information, and risk of collusion.

Information management aspects

Document management is a mature process in DIGIT, which is compliant with the corporate procedures. The latest results of the below indicators are promising, and show the improvement expected in 2018. As regards the third indicator, the percentage of HAN files shared with other DGs has increased in the course of the past year, a positive consequence of the decision taken by the Director-General of DIGIT. Please note that – following a slight decrease of the values of latest known results for indicators number 1 and 2, DIGIT will adopt appropriate measures in order to raise awareness amongst its staff concerning the importance of proper document filing.

Concerning DIGIT's information management actions, please consult section 2.2.2 and output 1-13 in Annex 12 of DIGIT's 2018 Annual Activity Report.

Objective: Information and knowledge in your DG is shared and reusable by other DGs. Important documents are registered, filed and retrievable		
Indicator 1: Percentage of registered documents that are not filed (ratio) *Source of data: Hermes-Ares-Nomcom (HAN)[2] statistics*		
Baseline (2015)	**Target** (2020)	**Latest known results** (2018)
2.28%	0%	0.93%
Indicator 2: Percentage of HAN files readable / accessible by all units in the DG *Source of data: HAN statistics*		
Baseline (2015)	**Target** (2020)	**Latest known results** (2018)
73.93%	80%	72.88%
Indicator 3: Percentage of HAN files shared with other DGs *Source of data: HAN statistics*		
Baseline (2015)	**Target** (2020)	**Latest known results** (2018)
0.25%	2%	26.01%

Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results** (2018)
IM-1 Maintain effective document management system (mature procedure in DIGIT)	Overall compliance with the composite indicator published annually by the Secretariat General.	Compliance maintained.	Compliance maintained

[2] Suite of tools designed to implement the e-Domec policy rules.

If/where appropriate, review procedures in place with a view to optimise the process.			

External communication activities

In the first semester of 2018, DIGIT actively communicated about its work on interoperability. It held two successful conferences under the ISA² programme (the SEMIC 2018 in Sofia named 'Linked Digital Public Administration' and the ISA² 2018 Conference in Brussels) and organised the DIGITEC Conference, a major event jointly prepared with the European Parliament and the Council.

A broader description of DIGIT main activities in terms of external communication is available in section 2.2.3.

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 : Percentage of EU citizens having a positive image of the EU *Source of data: Standard Eurobarometer (DG COMM budget) [monitored by DG COMM here].*			
Baseline (November 2014)	**Target** (2020)		**Latest known results** (2018)
Total "Positive": 39% Neutral: 37% Total "Negative": 22%	Positive image of the EU ≥ 50%		Total "Positive": 40% Neutral: 37% Total "Negative": 21%
Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results** (2018)
EC-1 Promotion of the ISA² programme: Constantly promote the use of the programme's outcomes through conferences,	Number of events attended with an active contribution (i.e. presentation, speech, moderation or ISA² stand) such as high level conferences, interoperability related events and events that are of relevance to the individual policy areas and topics addressed by	a.1) At least 40 events attended with an active participation.	**Target Met** a.1) We attended 42 events all around Europe during 2018, promoting the ISA² programme and the different outputs and solutions proposed. a.2) We have organised 2

workshops, meetings, presentations, electronic and paper publications, using a proper Communication strategy on Interoperability as the guiding instrument.	the programme.	a.2) ISA² events organised: - at least two major events organised p.a. - at least 5 web conferences organised.	conferences (SEMIC2018 in Sofia in June called 'Linked Digital Public Ad-ministrations' and ISA2Conf18 in November 29th in Brussels). We have organised 11 workshops /webinars on different subjects such as NIFO, core vocabularies, Base Registries and Catalogue of Services (CPSV-AP webinar on 18/03/2018; CPSV-AP workshop, 15/06/2018; Workshop on ICT implications, 28/08/2018; EIF workshop, 28/09/2018; Workshop on Sharing and Reuse in Infofest, Montenegro, 01/10/2018; Workshop on ISA2, SRSS and administrative capacity at EURegionsWeek 2018, 10/10/2018; Workshop at Inspire 2018, 18/09/2018; 5 Webinars on eGovernment beyond 2020 with different stakeholders: cities and regions, businesses, private sectors, wrap up

			webinar, held between October and November 2018)
EC–2 Connecting Europe Facilities - Provide interoperable solutions to Member States: a) Publication of news and relevant event around the CEF building blocks on the CEF Digital portal[3]; b) High-level event promoting the building blocks, with the objective of showcasing the use of CEF Building Blocks in different domains and application areas.	a) Number of Publications. b) Number of registered participants	a) Minimum 3 publications per month. b) 200-300 registered participants.	a) 100 publications between July 2018 -January 2019 (articles and success stories); 8 bulletins (2 each for July & August, and one each for September, December and January 2019) b) Number of registered participants reached the target, with the following results: • 7 December: New CEF Building Blocks launch event with 19 speakers, 240 registrations, 130+ participants from 35 countries • 4 December: eInvoicing Event: four months until European standard deadline, 100 registrations • 4 October: CEF eInvoicing Webinar #12 - Learn from other countries' eInvoicing implementations, 50 registrations

[3] The CEF Digital portal is the one-stop-shop for stakeholders to discover all they need to reuse the CEF building blocks. Ensuring relevant publications on the building blocks and related issues is fundamental to making the portal relevant.

			• 13 July: CEF eInvoicing Webinar #11 - Latest policy updates on IPR and guidance for eInvoicing, 60 registrations
EC–3 DIGITEC Conference: DIGIT and the IT departments of the European Parliament and the Council of EU are jointly organising the conference for the IT communities in the European institutions in 2018	• Number of speakers • Number of registered and actual participants • Number of web streaming viewers • Number of stands and demo sessions • Number of tweets and internal social media interactions • Number of participants taking the feedback survey	• 30 speakers • 1400 registered participants, 1200 actual participants • 600 webstream viewers • 15 stands • 10% of participants filling the feedback survey	The DIGITEC 2018 conference, jointly organised by the IT departments of the Commission, Parliament and the Council of the EU, took place in Brussels on 20th November 2018. with over 1000 participants in attendance and upward of 600 following the live webstreaming. 50 speakers gave inspiring talks and presentations in 23 sessions. 15 expo stands and project presentations in the Innovation Space sessions. Participants feedback was analysed, lessons learned summarised and shared between the partner organisations. The next edition of DIGITEC conference will take place in 2020.
EC–4 PM² Open Conference: a joint event sponsored by 5 major EU			Target met: the Open PM² Conference was successfully organised on 1st and 2nd February in

Institutions (European Commission, Council of the European Union, Committee of the Regions, European Central Bank, European External Action Service).	• n° of Conference participants • n° of web streaming views of the Conference/Trainings presentations • Increased number of new registrations on the JoinUp platform	• 300 participants • 200 web stream viewers • 100 new registrations	Brussels. Next PM² Conference planned for 2020. • 538 participants attended the Conference. • Over the 2 days of the Conference, we counted more than 1800 connections to the web streamings with peaks of 86 simultaneous views. • The new registration on the JoinUp platform significantly increased to reach a total of 231 members in July.
EC–5 EU FOSSA – Free and Open Source Software Auditing: DIGIT is implementing this programme and will launch several communication campaigns and one big event.	a.1) Coverage of the programme in specialist journals	a.1) Coverage in at least 5 major online publications per quarter of activity a.2) An event,	Target partially met a.1) The communication strategy was presented by the contractor and is now being fine-tuned, expected to start in March to a general audience although many actions have already began (redesign of logo, creation of visual guidelines and brand activation at conferences) a.2) The events

	a.2) Event organised	targeting one of the open source communities organised with participation of the community's key contributors	planned for 2018 were delayed (after the end of the tendering process and the choice of contractor was finalized) and now 3 hackathons have been scheduled for 6/7 April, 4/5 May and 5/6 October 2019.
	a.3) Sufficient advertising of the bug bounties	a.3) Active participation of researchers in the bug bounties.	a.3) 12 bug bounties have been launched (the last 3 will be in early March) with great participation rates. Over 330 reports already received and over 100 hits in the media (including specialised outlets)

For external communication overall spending:

Annual communication spending (based on estimated commitments in €):				
	Baseline (2017):	**Target (Year n):**	**Total amount spent**	**Total of FTEs working on external communication**
EC-1: ISA² Programme	630.000	1.000.000	640.000	1 FTE
EC–2: Connecting Europe Facilities	Covered by DG CNECT, operational budget for CEF appropriations	Covered by DG CNECT, operational budget for CEF appropriations	Covered by DG CNECT, operational budget for CEF appropriations	Covered by DG CNECT, operational budget for CEF appropriations
EC–3: DIGITEC Conference	0	60.000	47.000 (DIGIT finally contributed with 50.000 but will receive back 3.000 which was not spent	2 FTE plus 1 external consultant
EC–4: PM²	80.000 (plus	50.000	68.000 paid by	Ad hoc support provided

Open Conference	85.000 as contribution from other EU Institutions)		DIGIT to SCIC.	by key staff when the event took place. No FTE directly involved in the preparation of the conference
EC–5: EU FOSSA	0	750.000	no payment made in 2018, but 476.000 committed.	No FTEs used in 2018, as the project was outsourced
Total	actual payments made in 2018: 755.000			

ANNEX 3: Draft annual accounts and financial reports

Annex 3 Financial Reports - DG DIGIT - Financial Year 2018

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

Additional comments

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2018 (in Mio €)					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
Title 01 Economic and financial affairs					
01	01 02	Economic and monetary union	0,18	0,18	100,00 %
Total Title 01			0,18	0,18	100,00%
Title 02 Internal market, industry, entrepreneurship and SMEs					
02	02 01	Administrative expenditure of the 'Internal market, industry, entrepreneurship and SMEs' policy area	0,84	0,84	99,95 %
	02 02	Competitiveness of enterprises and small and medium-sized enterprises (COSME)	0,27	0,27	100,00 %
	02 03	Internal market for goods and services	1,18	1,18	99,97 %
Total Title 02			2,29	2,29	99,96%
Title 04 Employment, social affairs and inclusion					
04	04 01	Administrative expenditure of the 'Employment, social affairs and inclusion' policy area	0,43	0,43	99,77 %
	04 02	European Social Fund	0,08	0,08	99,88 %
	04 03	Employment, Social Affairs and Inclusion	1,42	1,42	100,00 %
Total Title 04			1,94	1,94	99,94%
Title 05 Agriculture and rural development					
05	05 01	Administrative expenditure of the 'Agriculture and rural development' policy area	0,08	0,08	99,84 %
	05 04	Rural development	0,3	0,3	100,00 %
	05 08	Policy strategy and coordination of the 'Agriculture and rural development' policy area	0,16	0,16	100,00 %
Total Title 05			0,55	0,55	99,98%
Title 06 Mobility and transport					
06	06 01	Administrative expenditure of the 'Mobility and transport' policy area	0,33	0,33	99,96 %
	06 02	European transport policy	1,01	1,01	99,98 %
Total Title 06			1,34	1,34	99,98%
Title 07 Environment					
07	07 01	Administrative expenditure of the 'Environment' policy area	0,24	0,24	99,98 %
Total Title 07			0,24	0,24	99,98%
Title 08 Research and innovation					
08	08 01	Administrative expenditure of the 'Research and innovation' policy area	9,02	9,02	100,00 %
Total Title 08			9,02	9,02	100,00%
Title 09 Communications networks, content and technology					
09	09 01	Administrative expenditure of the 'Communications networks, content and technology' policy area	1,55	1,55	99,99 %
	09 03	Connecting Europe Facility (CEF) - Telecommunications networks	18,18	18,18	100,00 %

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TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2018 (in Mio €)					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
Total Title 09			19,73	19,73	100,00%
Title 10 Direct research					
10	10 01	Administrative expenditure of the 'Direct research' policy area	3,11	3,11	100,00 %
Total Title 10			3,11	3,11	100,00%
Title 11 Maritime affairs and fisheries					
11	11 01	Administrative expenditure of the 'Maritime affairs and fisheries' policy area	0,08	0,08	99,97 %
	11 06	European Maritime and Fisheries Fund (EMFF)	0,69	0,69	100,00 %
Total Title 11			0,76	0,76	100,00%
Title 12 Financial stability, financial services and capital markets union					
12	12 02	Financial services and capital markets	0,03	0,03	99,87 %
Total Title 12			0,03	0,03	99,87%
Title 13 Regional and urban policy					
13	13 01	Administrative expenditure of the 'Regional and urban policy' policy area	1,36	1,36	99,98 %
	13 03	European Regional Development Fund and other regional operations	0,32	0,32	100,00 %
Total Title 13			1,68	1,68	99,98%
Title 14 Taxation and customs union					
14	14 02	Customs	2,97	2,97	100,00 %
	14 03	Taxation	1,1	1,1	100,00 %
Total Title 14			4,07	4,07	100,00%
Title 15 Education and culture					
15	15 01	Administrative expenditure of the 'Education and culture' policy area	1,36	1,36	99,96 %
	15 02	Erasmus+	0,09	0,08	86,01 %
	15 05	European Solidarity Corps	0,42	0,42	100,00 %
Total Title 15			1,87	1,86	99,29%
Title 16 Communication					
16	16 01	Administrative expenditure of the 'Communication' policy area	0,54	0,54	100,00 %
	16 03	Communication actions	6,36	6,36	100,00 %
Total Title 16			6,9	6,9	100,00%
Title 17 Health and food safety					
17	17 01	Administrative expenditure of the 'Health and food safety' policy area	0,79	0,79	99,95 %
	17 03	Public health	0,78	0,78	100,00 %
	17 04	Food and feed safety, animal health, animal welfare and plant health	1,28	1,28	100,00 %
Total Title 17			2,85	2,85	99,99%
Title 18 Migration and home affairs					

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2018 (in Mio €)					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
18	18 01	Administrative expenditure of the 'Migration and home affairs' policy area	0,59	0,59	99,91 %
	18 03	Asylum and migration	0,11	0,11	100,00 %
	18 04	Fostering European citizenship	0,2	0,2	100,00 %
Total Title 18			0,9	0,9	99,94%
Title 19 Foreign policy instruments					
19	19 01	Administrative expenditure of the 'Foreign policy instruments' policy area	0,61	0,61	99,93 %
Total Title 19			0,61	0,61	99,93%
Title 20 Trade					
20	20 02	Trade policy	0,3	0,3	100,00 %
Total Title 20			0,3	0,3	100,00%
Title 21 International cooperation and development					
21	21 01	Administrative expenditure of the 'International cooperation and development' policy area	10,47	10,47	99,99 %
	21 08	Development and cooperation worldwide	0,06	0,06	100,00 %
Total Title 21			10,52	10,52	99,99%
Title 22 Neighbourhood and enlargement negotiations					
22	22 01	Administrative expenditure of the 'Neighbourhood and enlargement negotiations' policy area	4,33	4,33	100,00 %
Total Title 22			4,33	4,33	100,00%
Title 23 Humanitarian aid and civil protection					
23	23 01	Administrative expenditure of the 'Humanitarian aid and civil protection' policy area	0,11	0,11	99,97 %
	23 03	The Union Civil Protection Mechanism	0,41	0,41	100,00 %
	23 04	EU Aid Volunteers initiative	0,27	0,26	99,96 %
Total Title 23			0,78	0,78	99,98%
Title 24 Fight against fraud					
24	24 01	Administrative expenditure of the 'Fight against fraud' policy area	0,4	0,4	99,99 %
Total Title 24			0,4	0,4	99,99%
Title 25 Commission's policy coordination and legal advice					
25	25 01	Administrative expenditure of the 'Commission's policy coordination and legal advice' policy area	7,91	7,91	99,99 %
Total Title 25			7,91	7,91	99,99%
Title 26 Commission's administration					
26	26 01	Administrative expenditure of the 'Commission's administration' policy area	46,03	42,13	91,54 %
	26 03	Services to public administrations, businesses and citizens	29,65	29,59	99,80 %
Total Title 26			75,68	71,72	94,78%

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

TABLE 1: OUTTURN ON COMMITMENT APPROPRIATIONS IN 2018 (in Mio €)					
			Commitment appropriations authorised	Commitments made	%
			1	2	3=2/1
Title 27 Budget					
27	27 01	Administrative expenditure of the 'Budget' policy area	0,42	0,42	99,88 %
Total Title 27			0,42	0,42	99,88%
Title 28 Audit					
28	28 01	Administrative expenditure of the 'Audit' policy area	0,13	0,13	99,18 %
Total Title 28			0,13	0,13	99,18%
Title 29 Statistics					
29	29 01	Administrative expenditure of the 'Statistics' policy area	0,15	0,15	100,00 %
	29 02	The European statistical programme	5,38	5,38	100,00 %
Total Title 29			5,53	5,53	100,00%
Title 31 Language services					
31	31 01	Administrative expenditure of the 'Language services' policy area	0,81	0,81	99,94 %
Total Title 31			0,81	0,81	99,94%
Title 32 Energy					
32	32 01	Administrative expenditure in the 'Energy' policy area	0,29	0,29	99,97 %
	32 02	Conventional and renewable energy	0,3	0,3	99,96 %
	32 03	Nuclear energy	0,06	0,06	99,29 %
	32 04	Horizon 2020 - Research and innovation related to energy	0,02	0,02	100,00 %
Total Title 32			0,67	0,67	99,90%
Title 33 Justice and consumers					
33	33 01	Administrative expenditure of the 'Justice and consumers' policy area	0,44	0,44	99,86 %
	33 02	Rights, Equality and Citizenship	0,16	0,16	99,97 %
	33 03	Justice	0,54	0,54	100,00 %
	33 04	Consumer programme	0,6	0,6	100,00 %
Total Title 33			1,73	1,73	99,96%
Title 34 Climate action					
34	34 01	Administrative expenditure in the 'Climate action' policy area	1,1	1,1	99,90 %
Total Title 34			1,1	1,1	99,90%
Title XX Administrative Expenditure allocated to policy areas					
XX	XX 01	Administrative Expenditure allocated to policy areas	171,26	164,76	96,21 %
Total Title XX			171,26	164,76	96,21%
Total DG DIGIT			339,65	329,18	96,92 %

** 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).*

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

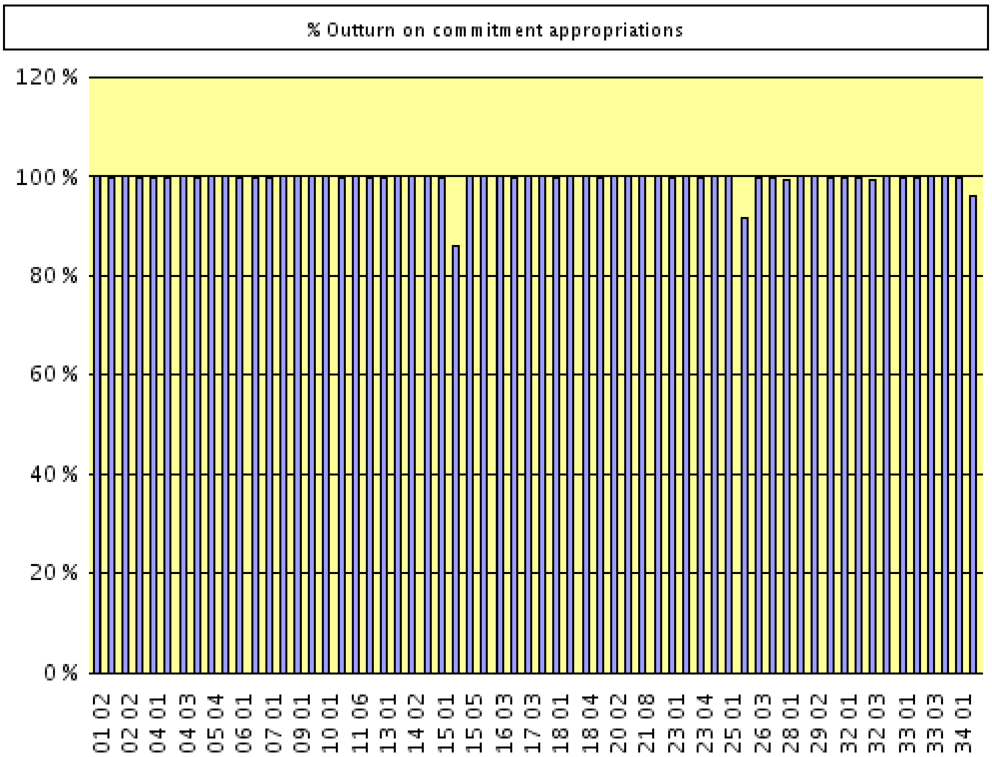
% Outturn on commitment appropriations
120 %
100 %
80 %
60 %
40 %
20 %
0 %
01 02
02 02
04 01
04 03
05 04
06 01
07 01
09 01
10 01
11 06
13 01
14 02
15 01
15 05
16 03
17 03
18 01
18 04
20 02
21 08
23 01
23 04
25 01
26 03
28 01
29 02
32 01
32 03
33 01
33 03
34 01

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2018 (in Mio €)					
Chapter			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Title 01 Economic and financial affairs					
01	01 02	Economic and monetary union	0,22	0,18	83,49 %
	01 04	Financial operations and instruments	0,05	0,05	100,00 %
Total Title 01			0,27	0,23	86,62%
Title 02 Internal market, industry, entrepreneurship and SMEs					
02	02 01	Administrative expenditure of the 'Internal market, industry, entrepreneurship and SMEs' policy area	1,27	0,6	47,32 %
	02 02	Competitiveness of enterprises and small and medium-sized enterprises (COSME)	0,49	0,26	53,49 %
	02 03	Internal market for goods and services	1,22	1,22	100,00 %
Total Title 02			2,98	2,08	69,84%
Title 04 Employment, social affairs and inclusion					
04	04 01	Administrative expenditure of the 'Employment, social affairs and inclusion' policy area	0,57	0,29	50,16 %
	04 02	European Social Fund	0,07	0,07	100,00 %
	04 03	Employment, Social Affairs and Inclusion	1,12	1,12	100,15 %
Total Title 04			1,76	1,48	83,84%
Title 05 Agriculture and rural development					
05	05 01	Administrative expenditure of the 'Agriculture and rural development' policy area	0,15	0,13	84,96 %
	05 04	Rural development	0,42	0,35	82,35 %
	05 08	Policy strategy and coordination of the 'Agriculture and rural development' policy area	0,29	0,13	43,54 %
Total Title 05			0,86	0,6	69,84%
Title 06 Mobility and transport					
06	06 01	Administrative expenditure of the 'Mobility and transport' policy area	0,51	0,19	37,30 %
	06 02	European transport policy	1,34	0,9	67,41 %
Total Title 06			1,85	1,09	59,07%
Title 07 Environment					
07	07 01	Administrative expenditure of the 'Environment' policy area	0,66	0,52	79,34 %
Total Title 07			0,66	0,52	79,34%
Title 08 Research and innovation					
08	08 01	Administrative expenditure of the 'Research and innovation' policy area	13,72	7,85	57,23 %
Total Title 08			13,72	7,85	57,23%
Title 09 Communications networks, content and technology					
09	09 01	Administrative expenditure of the 'Communications networks, content and technology' policy area	2,98	2,3	77,09 %
	09 03	Connecting Europe Facility (CEF) - Telecommunications networks	12,92	12,63	97,77 %
	09 04	Horizon 2020	0,26	0,26	100,00 %
Total Title 09			16,16	15,19	93,99%
Title 10 Direct research					

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2018 (in Mio €)					
Chapter			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
10	10 01	Administrative expenditure of the 'Direct research' policy area	4,55	1,52	33,37 %
Total Title 10			4,55	1,52	33,37%
Title 11 Maritime affairs and fisheries					
11	11 01	Administrative expenditure of the 'Maritime affairs and fisheries' policy area	0,11	0,05	45,01 %
	11 06	European Maritime and Fisheries Fund (EMFF)	0,6	0,6	99,72 %
Total Title 11			0,71	0,65	91,17%
Title 12 Financial stability, financial services and capital markets union					
12	12 02	Financial services and capital markets	0,04	0,15	360,83 %
Total Title 12			0,04	0,15	360,83%
Title 13 Regional and urban policy					
13	13 01	Administrative expenditure of the 'Regional and urban policy' policy area	2,8	2,11	75,63 %
	13 03	European Regional Development Fund and other regional operations	0,03	0,03	100,00 %
Total Title 13			2,82	2,14	75,85%
Title 14 Taxation and customs union					
14	14 02	Customs	2,76	2,76	100,00 %
	14 03	Taxation	0,81	0,81	100,00 %
	14 04	Policy strategy and coordination	0,21	0,21	100,00 %
Total Title 14			3,78	3,78	100,00%
Title 15 Education and culture					
15	15 01	Administrative expenditure of the 'Education and culture' policy area	2,57	1,26	49,21 %
	15 02	Erasmus+	0,11	0,11	100,00 %
Total Title 15			2,68	1,38	51,36%
Title 16 Communication					
16	16 01	Administrative expenditure of the 'Communication' policy area	0,68	0,25	37,27 %
	16 03	Communication actions	5,23	5,07	97,05 %
Total Title 16			5,9	5,32	90,21%
Title 17 Health and food safety					
17	17 01	Administrative expenditure of the 'Health and food safety' policy area	0,96	0,19	19,94 %
	17 03	Public health	0,36	0,36	100,00 %
	17 04	Food and feed safety, animal health, animal welfare and plant health	0,57	0,75	130,15 %
Total Title 17			1,89	1,29	68,61%
Title 18 Migration and home affairs					
18	18 01	Administrative expenditure of the 'Migration and home affairs' policy area	0,97	0,47	48,22 %
	18 02	Internal security	0,38	0,38	100,00 %
	18 03	Asylum and migration	0,38	0,26	68,99 %
	18 04	Fostering European citizenship	0,18	0,18	100,00 %

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2018 (in Mio €)					
Chapter			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
Total Title 18			1,9	1,28	67,50%
Title 19 Foreign policy instruments					
19	19 01	Administrative expenditure of the 'Foreign policy instruments' policy area	0,61	0,06	10,19 %
Total Title 19			0,61	0,06	10,19%
Title 20 Trade					
20	20 02	Trade policy	0,31	0,31	100,00 %
Total Title 20			0,31	0,31	100,00%
Title 21 International cooperation and development					
21	21 01	Administrative expenditure of the 'International cooperation and development' policy area	14,26	7,56	52,97 %
Total Title 21			14,26	7,56	52,97%
Title 22 Neighbourhood and enlargement negotiations					
22	22 01	Administrative expenditure of the 'Neighbourhood and enlargement negotiations' policy area	6,55	4,93	75,26 %
Total Title 22			6,55	4,93	75,26%
Title 23 Humanitarian aid and civil protection					
23	23 01	Administrative expenditure of the 'Humanitarian aid and civil protection' policy area	0,17	0,07	38,80 %
	23 03	The Union Civil Protection Mechanism	0,35	0,34	97,95 %
	23 04	EU Aid Volunteers initiative	0,2	0,2	97,51 %
Total Title 23			0,72	0,61	83,73%
Title 24 Fight against fraud					
24	24 01	Administrative expenditure of the 'Fight against fraud' policy area	0,95	0,68	71,28 %
Total Title 24			0,95	0,68	71,28%
Title 25 Commission's policy coordination and legal advice					
25	25 01	Administrative expenditure of the 'Commission's policy coordination and legal advice' policy area	13,54	7,99	59,04 %
Total Title 25			13,54	7,99	59,04%
Title 26 Commission's administration					
26	26 01	Administrative expenditure of the 'Commission's administration' policy area	63,58	30,46	47,91 %
	26 03	Services to public administrations, businesses and citizens	31,19	29	92,98 %
Total Title 26			94,77	59,46	62,75%
Title 27 Budget					
27	27 01	Administrative expenditure of the 'Budget' policy area	1,9	1,49	78,18 %
Total Title 27			1,9	1,49	78,18%
Title 28 Audit					
28	28 01	Administrative expenditure of the 'Audit' policy area	0,35	0,26	74,50 %
Total Title 28			0,35	0,26	74,50%
Title 29 Statistics					

TABLE 2: OUTTURN ON PAYMENT APPROPRIATIONS IN 2018 (in Mio €)					
Chapter			Payment appropriations authorised *	Payments made	%
			1	2	3=2/1
29	29 01	Administrative expenditure of the 'Statistics' policy area	0,35	0,25	69,38 %
	29 02	The European statistical programme	5,49	5,49	100,00 %
Total Title 29			5,85	5,74	98,15%
Title 31 Language services					
31	31 01	Administrative expenditure of the 'Language services' policy area	2,62	1,73	66,28 %
Total Title 31			2,62	1,73	66,28%
Title 32 Energy					
32	32 01	Administrative expenditure in the 'Energy' policy area	0,5	0,21	42,62 %
	32 02	Conventional and renewable energy	0,26	0,22	87,99 %
	32 03	Nuclear energy	0,05	0,05	100,00 %
	32 04	Horizon 2020 - Research and innovation related to energy	0	0	0,00 %
Total Title 32			0,81	0,49	60,49%
Title 33 Justice and consumers					
33	33 01	Administrative expenditure of the 'Justice and consumers' policy area	0,79	0,51	64,81 %
	33 02	Rights, Equality and Citizenship	0,25	0,25	99,37 %
	33 03	Justice	0,52	0,52	100,00 %
	33 04	Consumer programme	0,23	0,23	100,00 %
Total Title 33			1,79	1,51	84,38%
Title 34 Climate action					
34	34 01	Administrative expenditure in the 'Climate action' policy area	2,71	1,61	59,42 %
	34 02	Climate action at Union and international level	0,01	0,01	101,79 %
Total Title 34			2,72	1,62	59,51%
Title XX Administrative Expenditure allocated to policy areas					
XX	XX 01	Administrative Expenditure allocated to policy areas	248,01	161,14	64,97 %
Total Title XX			248,01	161,14	64,97%
	Total DG DIGIT		458,3	302,15	65,93 %

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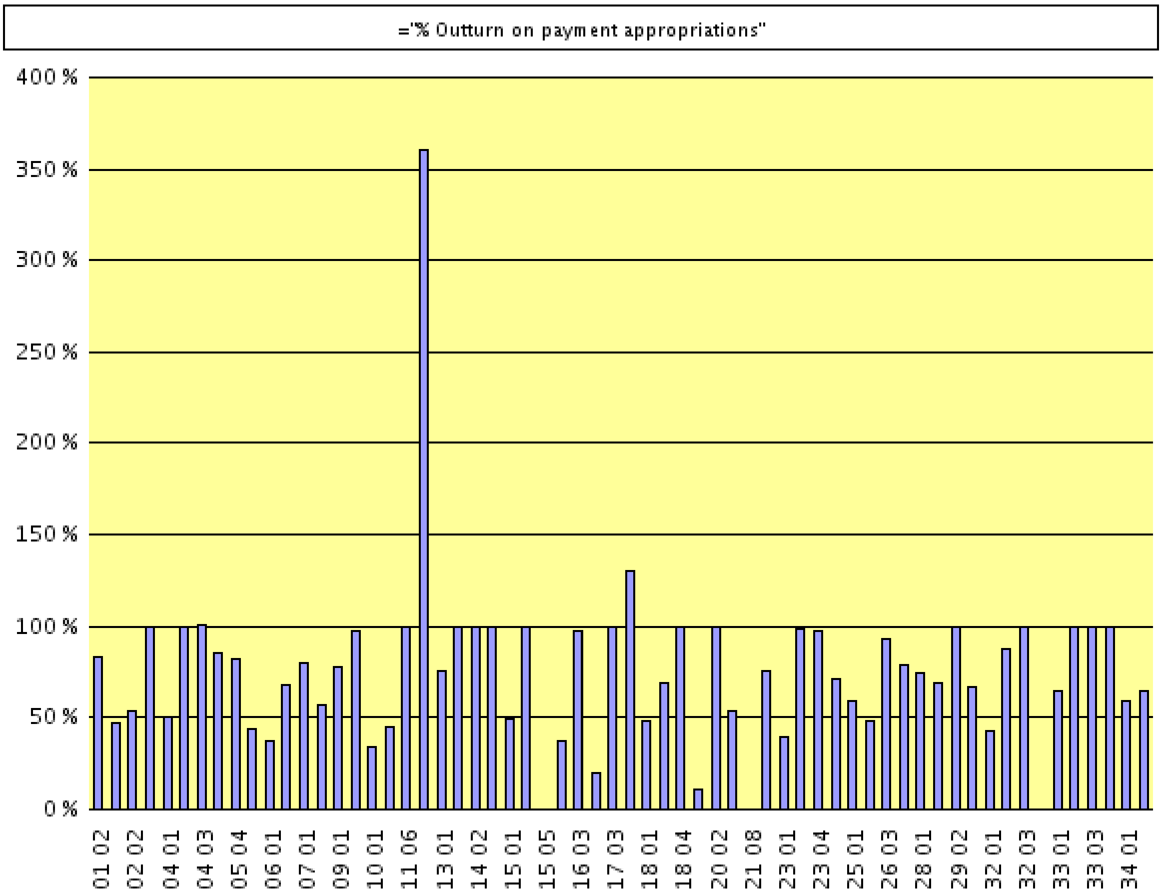

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TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
Title 01 : Economic and financial affairs									
01	01 02	Economic and monetary union	0,18	0,07	0,12	63,16 %	0,00	0,12	0,11
	01 04	Financial operations and instruments	0	0,00	0	0,00 %	0,00	0,00	0,05
Total Title 01			0,18	0,07	0,12	63,16%	0	0,12	0,17
Title 02 : Internal market, industry, entrepreneurship and SMEs									
02	02 01	Administrative expenditure of the 'Internal market, industry, entrepreneurship and SMEs' policy area	0,84	0,19	0,65	77,54 %	0,00	0,65	0,43
	02 02	Competitiveness of enterprises and small and medium-sized enterprises (COSME)	0,27	0,03	0,24	88,57 %	0,00	0,24	0,23
	02 03	Internal market for goods and services	1,18	0,27	0,91	77,39 %	0,09	1,00	1,04
Total Title 02			2,29	0,49	1,8	78,77%	0,09	1,89	1,7
Title 04 : Employment, social affairs and inclusion									
04	04 01	Administrative expenditure of the 'Employment, social affairs and inclusion' policy area	0,43	0,15	0,29	66,16 %	0,00	0,29	0,14
	04 02	European Social Fund	0,08	0,00	0,08	100,00 %	0,00	0,08	0,07
	04 03	Employment, Social Affairs and Inclusion	1,42	0,88	0,55	38,33 %	0,00	0,55	0,24
Total Title 04			1,94	1,02	0,91	47,19%	0	0,92	0,46
Title 05 : Agriculture and rural development									
05	05 01	Administrative expenditure of the 'Agriculture and rural development' policy area	0,08	0,06	0,02	27,36 %	0,00	0,02	0,07

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
05	05 04	Rural development	0,3	0,09	0,22	71,29 %	0,00	0,22	0,26
	05 08	Policy strategy and coordination of the 'Agriculture and rural development' policy area	0,16	0,00	0,16	100,00 %	0,00	0,16	0,13
Total Title 05			0,55	0,15	0,4	73,16%	0	0,4	0,46
Title 06 : Mobility and transport									
06	06 01	Administrative expenditure of the 'Mobility and transport' policy area	0,33	0,00	0,32	98,81 %	0,00	0,32	0,19
	06 02	European transport policy	1,01	0,20	0,81	79,91 %	0,02	0,82	0,72
Total Title 06			1,34	0,21	1,13	84,51%	0,02	1,15	0,9
Title 07 : Environment									
07	07 01	Administrative expenditure of the 'Environment' policy area	0,24	0,10	0,14	56,88 %	0,00	0,14	0,42
Total Title 07			0,24	0,10	0,14	56,88%	0	0,14	0,42
Title 08 : Research and innovation									
08	08 01	Administrative expenditure of the 'Research and innovation' policy area	9,02	3,17	5,85	64,84 %	0,00	5,85	4,70
Total Title 08			9,02	3,17	5,85	64,84%	0	5,85	4,7
Title 09 : Communications networks, content and technology									
09	09 01	Administrative expenditure of the 'Communications networks, content and technology' policy area	1,55	0,88	0,67	43,02 %	0,00	0,67	1,43
	09 03	Connecting Europe Facility (CEF) - Telecommunications networks	18,18	1,45	16,73	92,02 %	4,03	20,76	15,22
	09 04	Horizon 2020	0	0,00	0	0,00 %	0,08	0,08	0,34
Total Title 09			19,73	2,33	17,4	88,17%	4,11	21,51	16,99

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TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
Title 10 : Direct research									
10	10 01	Administrative expenditure of the 'Direct research' policy area	3,11	0,13	2,98	95,89 %	0,00	2,98	1,44
Total Title 10			3,11	0,13	2,98	95,89%	0	2,98	1,44
Title 11 : Maritime affairs and fisheries									
11	11 01	Administrative expenditure of the 'Maritime affairs and fisheries' policy area	0,08	0,02	0,06	80,23 %	0,00	0,06	0,03
	11 06	European Maritime and Fisheries Fund (EMFF)	0,69	0,22	0,47	68,62 %	0,31	0,78	0,69
Total Title 11			0,76	0,23	0,53	69,77%	0,31	0,84	0,73
Title 12 : Financial stability, financial services and capital markets union									
12	12 02	Financial services and capital markets	0,03	0,01	0,02	74,96 %	0,00	0,02	0,14
Total Title 12			0,03	0,01	0,02	74,96%	0	0,02	0,14
Title 13 : Regional and urban policy									
13	13 01	Administrative expenditure of the 'Regional and urban policy' policy area	1,36	0,70	0,66	48,72 %	0,00	0,66	1,43
	13 03	European Regional Development Fund and other regional operations	0,32	0,00	0,32	100,00 %	0,00	0,32	0,03
Total Title 13			1,68	0,70	0,98	58,42%	0	0,98	1,46
Title 14 : Taxation and customs union									
14	14 02	Customs	2,97	0,99	1,98	66,71 %	0,30	2,27	2,07
	14 03	Taxation	1,1	0,27	0,84	75,83 %	0,00	0,84	0,55
	14 04	Policy strategy and coordination	0	0,00	0	0,00 %	0,01	0,01	0,21

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Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
Total Title 14			4,07	1,25	2,82	69,19%	0,3	3,12	2,83
Title 15 : Education and culture									
15	15 01	Administrative expenditure of the 'Education and culture' policy area	1,36	0,10	1,27	92,79 %	0,00	1,27	1,20
	15 02	Erasmus+	0,08	0,03	0,05	57,52 %	0,00	0,05	0,08
	15 05	European Solidarity Corps	0,42	0,00	0,42	100,00 %	0,00	0,42	0,00
Total Title 15			1,86	0,13	1,73	92,92%	0	1,73	1,29
Title 16 : Communication									
16	16 01	Administrative expenditure of the 'Communication' policy area	0,54	0,12	0,42	78,07 %	0,00	0,42	0,14
	16 03	Communication actions	6,36	0,19	6,17	96,95 %	0,54	6,71	5,43
Total Title 16			6,9	0,31	6,59	95,48%	0,54	7,13	5,56
Title 17 : Health and food safety									
17	17 01	Administrative expenditure of the 'Health and food safety' policy area	0,79	0,02	0,76	97,18 %	0,00	0,76	0,17
	17 03	Public health	0,78	0,03	0,75	96,12 %	0,00	0,75	0,33
	17 04	Food and feed safety, animal health, animal welfare and plant health	1,28	0,00	1,28	99,94 %	0,00	1,28	0,75
Total Title 17			2,85	0,05	2,8	98,13%	0	2,8	1,24
Title 18 : Migration and home affairs									
18	18 01	Administrative expenditure of the 'Migration and home affairs' policy area	0,59	0,10	0,48	82,29 %	0,00	0,48	0,38
	18 02	Internal security	0	0,00	0	0,00 %	0,31	0,31	0,69

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TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
18	18 03	Asylum and migration	0,11	0,00	0,11	100,00 %	0,12	0,23	0,38
	18 04	Fostering European citizenship	0,2	0,00	0,2	100,00 %	0,04	0,24	0,22
Total Title 18			0,9	0,10	0,8	88,49%	0,47	1,27	1,67
Title 19 : Foreign policy instruments									
19	19 01	Administrative expenditure of the 'Foreign policy instruments' policy area	0,61	0,06	0,54	89,80 %	0,00	0,54	0,00
Total Title 19			0,61	0,06	0,54	89,80%	0	0,54	0
Title 20 : Trade									
20	20 02	Trade policy	0,3	0,10	0,2	66,13 %	0,00	0,20	0,21
Total Title 20			0,3	0,10	0,2	66,13%	0	0,2	0,21
Title 21 : International cooperation and development									
21	21 01	Administrative expenditure of the 'International cooperation and development' policy area	10,47	3,81	6,66	63,62 %	0,00	6,66	3,80
	21 08	Development and cooperation worldwide	0,06	0,00	0,06	100,00 %	0,00	0,06	0,00
Total Title 21			10,52	3,81	6,72	63,82%	0	6,72	3,8
Title 22 : Neighbourhood and enlargement negotiations									
22	22 01	Administrative expenditure of the 'Neighbourhood and enlargement negotiations' policy area	4,33	2,75	1,58	36,51 %	0,00	1,58	2,21
Total Title 22			4,33	2,75	1,58	36,51%	0	1,58	2,21
Title 23 : Humanitarian aid and civil protection									
23	23 01	Administrative expenditure of the 'Humanitarian aid and civil protection' policy area	0,11	0,01	0,09	88,87 %	0,00	0,09	0,07

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TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
23	23 03	The Union Civil Protection Mechanism	0,41	0,11	0,29	71,90 %	0,00	0,29	0,23
	23 04	EU Aid Volunteers initiative	0,26	0,00	0,26	100,00 %	0,01	0,27	0,20
Total Title 23			0,78	0,13	0,65	83,78%	0,01	0,66	0,5
Title 24 : Fight against fraud									
24	24 01	Administrative expenditure of the 'Fight against fraud' policy area	0,4	0,13	0,26	66,32 %	0,00	0,26	0,55
Total Title 24			0,4	0,13	0,26	66,32%	0	0,26	0,55
Title 25 : Commission's policy coordination and legal advice									
25	25 01	Administrative expenditure of the 'Commission's policy coordination and legal advice' policy area	7,91	2,40	5,5	69,62 %	0,00	5,50	5,79
Total Title 25			7,91	2,40	5,5	69,62%	0	5,5	5,79
Title 26 : Commission's administration									
26	26 01	Administrative expenditure of the 'Commission's administration' policy area	42,13	13,43	28,71	68,13 %	0,00	28,71	18,36
	26 03	Services to public administrations, businesses and citizens	29,59	2,72	26,87	90,81 %	12,28	39,15	38,80
Total Title 26			71,72	16,15	55,58	77,49%	12,28	67,86	57,16
Title 27 : Budget									
27	27 01	Administrative expenditure of the 'Budget' policy area	0,42	0,00	0,42	100,00 %	0,00	0,42	1,48
Total Title 27			0,42	0,00	0,42	100,00%	0	0,42	1,48
Title 28 : Audit									
28	28 01	Administrative expenditure of the 'Audit' policy area	0,13	0,10	0,03	21,73 %	0,00	0,03	0,22

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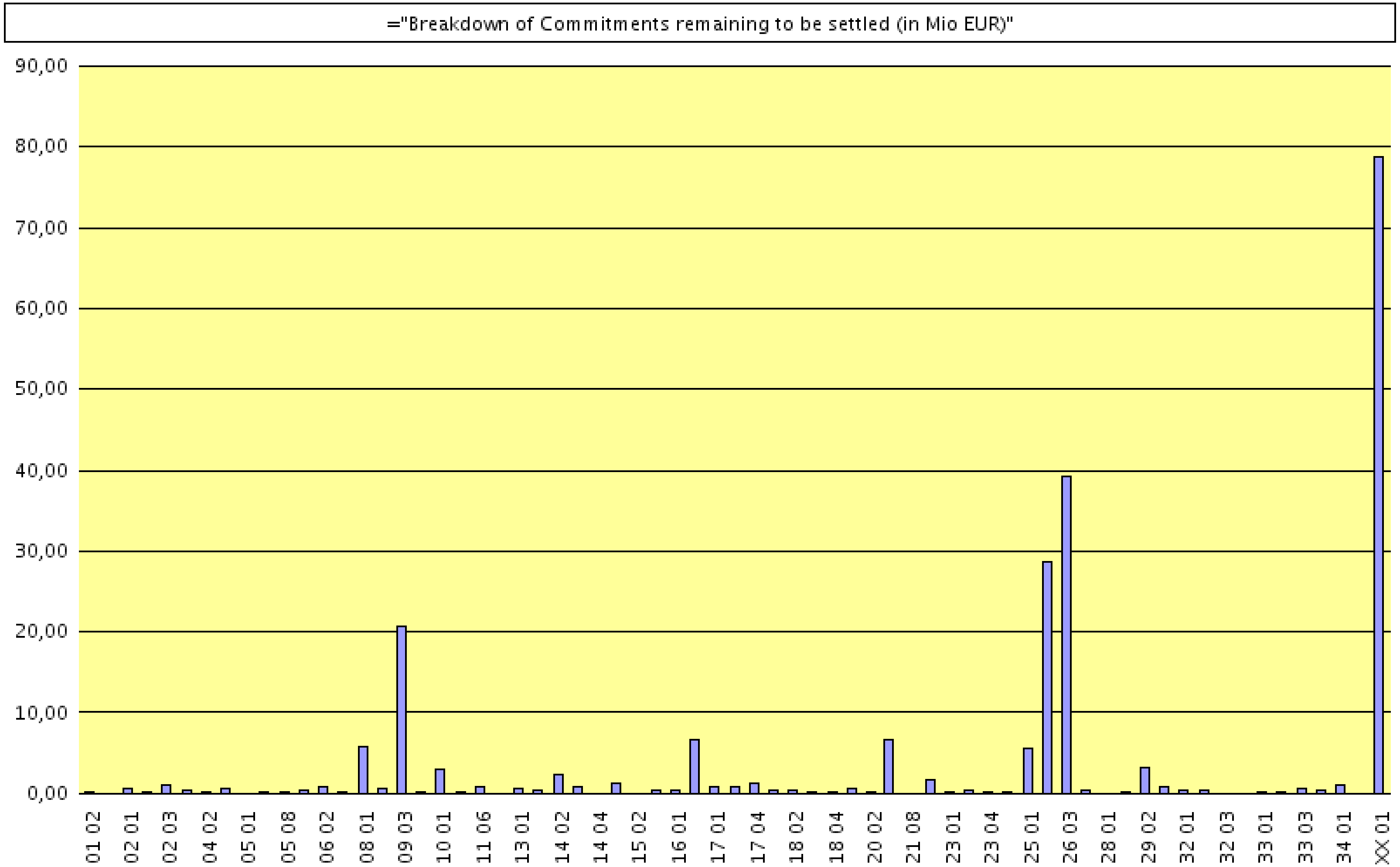
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
Total Title 28			0,13	0,10	0,03	21,73%	0	0,03	0,22
Title 29 : Statistics									
29	29 01	Administrative expenditure of the 'Statistics' policy area	0,15	0,04	0,11	73,06 %	0,00	0,11	0,21
	29 02	The European statistical programme	5,38	2,41	2,98	55,30 %	0,13	3,11	3,22
Total Title 29			5,53	2,45	3,09	55,77%	0,13	3,21	3,42
Title 31 : Language services									
31	31 01	Administrative expenditure of the 'Language services' policy area	0,81	0,02	0,79	98,05 %	0,00	0,79	1,81
Total Title 31			0,81	0,02	0,79	98,05%	0	0,79	1,81
Title 32 : Energy									
32	32 01	Administrative expenditure in the 'Energy' policy area	0,29	0,00	0,29	98,71 %	0,00	0,29	0,21
	32 02	Conventional and renewable energy	0,3	0,01	0,28	95,62 %	0,01	0,29	0,22
	32 03	Nuclear energy	0,06	0,00	0,06	100,00 %	0,00	0,06	0,05
	32 04	Horizon 2020 - Research and innovation related to energy	0,02	0,00	0,02	100,00 %	0,00	0,02	0,00
Total Title 32			0,67	0,02	0,66	97,51%	0,01	0,66	0,48
Title 33 : Justice and consumers									
33	33 01	Administrative expenditure of the 'Justice and consumers' policy area	0,44	0,18	0,26	58,92 %	0,00	0,26	0,35
	33 02	Rights, Equality and Citizenship	0,16	0,07	0,09	55,60 %	0,01	0,10	0,18
	33 03	Justice	0,54	0,02	0,52	96,77 %	0,04	0,56	0,54

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

TABLE 3 : BREAKDOWN OF COMMITMENTS TO BE SETTLED AT 31/12/2018 (in Mio €)									
Chapter			2018 Commitments to be settled				Commitments to be settled from financial years previous to 2018	Total of commitments to be settled at end of financial year 2018	Total of commitments to be settled at end of financial year 2017
			Commitments 2018	Payments 2018	RAL 2018	% to be settled			
			1	2	3=1-2	4=1-2/1	5	6=3+5	7
33	33 04	Consumer programme	0,6	0,18	0,42	70,41 %	0,00	0,42	0,06
Total Title 33			1,73	0,45	1,29	74,28%	0,05	1,34	1,13
Title 34 : Climate action									
34	34 01	Administrative expenditure in the 'Climate action' policy area	1,1	0,00	1,1	99,66 %	0,00	1,10	1,61
	34 02	Climate action at Union and international level	0	0,00	0	0,00 %	0,00	0,00	0,01
Total Title 34			1,1	0,00	1,1	99,66%	0	1,1	1,61
Title XX : Administrative Expenditure allocated to policy areas									
XX	XX 01	Administrative Expenditure allocated to policy areas	164,76	86,06	78,71	47,77 %	0,00	78,71	76,75
Total Title XX			164,76	86,06	78,71	47,77%	0	78,71	76,75
	Total DG DIGIT		329,18	125,08	204,1	62,00 %	18,32	222,42	199,29

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors



Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

TABLE 4 : BALANCE SHEET DIGIT

BALANCE SHEET	2018	2017
A.I. NON CURRENT ASSETS	40.725.925,11	43.888.347,65
A.I.1. Intangible Assets	6.543.571,31	7.106.850,44
A.I.2. Property, Plant and Equipment	34.182.353,80	36.781.497,21
A.II. CURRENT ASSETS	242.544,82	749.565,92
A.II.3. Curr Exch Receiv &Non-Ex Recoverables	240.828,15	741.903,02
A.II.6. Cash and Cash Equivalents	1.716,67	7.662,90
ASSETS	**40.968.469,93**	**44.637.913,57**
P.I. NON CURRENT LIABILITIES	-6.813.131,63	-6.060.780,28
P.I.3. Non-Current Financial Liabilities	-6.813.131,63	-6.060.780,28
P.II. CURRENT LIABILITIES	-9.630.551,87	-2.978.366,77
P.II.3. Current Financial Liabilities	-5.174.502,21	-2.880.600,32
P.II.4. Current Payables	-4.445.249,66	-97.766,45
P.II.5. Current Accrued Charges &Defrd Income	-10.800,00	0,00
LIABILITIES	**-16.443.683,5**	**-9.039.147,05**
NET ASSETS (ASSETS less LIABILITIES)	**24.524.786,43**	**35.598.766,52**

P.III.2. Accumulated Surplus/Deficit	971.557.050,97	734.073.179
Non-allocated central (surplus)/deficit*	-996.081.837,40	-769.671.945,52
TOTAL	**0,00**	**0,00**

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

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

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

TABLE 5 : STATEMENT OF FINANCIAL PERFORMANCE DIGIT

STATEMENT OF FINANCIAL PERFORMANCE	2018	2017
II.1 REVENUES	-21.365.157,92	-24.928.597,86
II.1.1. NON-EXCHANGE REVENUES	-581.753,82	-185.222,24
II.1.1.5. RECOVERY OF EXPENSES	-27.632,44	
II.1.1.6. OTHER NON-EXCHANGE REVENUES	-554.121,38	-185.222,24
II.1.2. EXCHANGE REVENUES	-20.783.404,1	-24.743.375,62
II.1.2.2. OTHER EXCHANGE REVENUE	-20.783.404,10	-24.743.375,62
II.2. EXPENSES	298.307.496,71	262.412.469,83
II.2. EXPENSES	298.307.496,71	262.412.469,83
II.2.10.OTHER EXPENSES	266.316.922,34	237.771.194,70
II.2.2. EXP IMPLEM BY COMMISS&EX.AGENC	32.266.482,49	24.789.503,22
II.2.6. STAFF AND PENSION COSTS	-525.200,00	-420.050,00
II.2.8. FINANCE COSTS	249.291,88	271.821,91
STATEMENT OF FINANCIAL PERFORMANCE	**276.942.338,79**	**237.483.871,97**

Explanatory Notes (facultative):
Please enter the text directly (no copy/paste of formatted text which would then disappear when saving the document in pdf), use \\\"ctrl+enter\\\" to go to the next line and \\\"enter\\\" to validate your typing.

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TABLE 5bis : OFF BALANCE SHEET DIGIT

OFF BALANCE	2018	2017
OB.1. Contingent Assets	13.928.843,5	13.928.843,5
GR for performance	13.928.843,50	13.928.843,50
OB.3. Other Significant Disclosures	-4.118.065,59	-446.769,21
OB.3.5. Operating lease commitments	-4.118.065,59	-446.769,21
OB.4. Balancing Accounts	-9.810.777,91	-13.482.074,29
OB.4. Balancing Accounts	-9.810.777,91	-13.482.074,29
OFF BALANCE	**0,00**	**0,00**

Explanatory Notes (facultative):
Please enter the text directly (no copy/paste of formatted text which would then disappear when saving the document in pdf), use \\\"ctrl+enter\\\" to go to the next line and \\\"enter\\\" to validate your typing.

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.

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TABLE 6: AVERAGE PAYMENT TIMES FOR 2018 - DG DIGIT

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)
30	7705	7587	98,47 %	10,97	118	1,53 %	47,37
60	163	163	100,00 %	7,57			
Total Number of Payments	**7868**	**7750**	**98,50 %**		**118**	**1,50 %**	
Average Net Payment Time	**11,45**			**10,9**			**47,37**
Average Gross Payment Time	**12,95**			**12,24**			**59,47**

Suspensions

Average Report Approval Suspension Days	Average Payment Suspension Days	Number of Suspended Payments	% of Total Number	Total Number of Payments	Amount of Suspended Payments	% of Total Amount	Total Paid Amount
0	46	256	3,25 %	7868	27.355.839,72	9,28 %	294.725.117,80

Late Interest paid in 2018			
DG	**GL Account**	**Description**	**Amount (Eur)**
DIGIT	65010000	Interest expense on late payment of charges	253,81
DIGIT	65010100	Interest on late payment of charges New FR	11 244,58
			11 498,39

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

TABLE 7 : SITUATION ON REVENUE AND INCOME IN 2018

Chapter		Revenue and income recognized			Revenue and income cashed from			Outstanding balance
		Current year RO	Carried over RO	Total	Current Year RO	Carried over RO	Total	
		1	2	3=1+2	4	5	6=4+5	7=3-6
55	REVENUE FROM THE PROCEEDS OF SERVICES SUPPLIED AND WORK CARRIED OUT	19.310.810,51	258.211,09	19.569.021,6	19.030.770,51	258.211,09	19.288.981,6	280.040
57	OTHER CONTRIBUTIONS AND REFUNDS IN CONNECTION WITH THE ADMINISTRATIVE OPERATION OF THE INSTITUTION	1.845.550,91	298.469,69	2.144.020,6	1.845.550,91	298.469,69	2.144.020,6	0
60	CONTRIBUTIONS TO UNION PROGRAMMES	3.762,5	0	3.762,5	3.762,5	0	3.762,5	0
90	MISCELLANEOUS REVENUE	550.358,88	185.222,24	735.581,12	550.358,88	185.222,24	735.581,12	0
Total DG DIGIT		**21.710.482,8**	**741.903,02**	**22.452.385,82**	**21.430.442,8**	**741.903,02**	**22.172.345,82**	**280.040**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors

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

Year of Origin (commitment)	Total undue payments recovered		Total transactions in recovery context (incl. non-qualified)		% Qualified/Total RC	
	Nbr	RO Amount	Nbr	RO Amount	Nbr	RO Amount
2015			1	2.980,04		
2016			1	9.350		
2017			2	25.691,98		
2018			4	54.158,32		
No Link			353	19.290.320,93		
Sub-Total			**361**	**19.382.501,27**		

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												
NON ELIGIBLE IN COST CLAIMS												
CREDIT NOTES			43	1.329.753,77			**43**	**1.329.753,77**	338	5.985.936,84	12,72%	22,21%
Sub-Total			**43**	**1.329.753,77**			**43**	**1.329.753,77**	**338**	**5.985.936,84**	**12,72%**	**22,21%**

GRAND TOTAL			**43**	**1.329.753,77**			**43**	**1.329.753,77**	**699**	**25.368.438,11**	**6,15%**	**5,24%**

Note : The figures are those related to the provisional accounts and not yet audited by the Court of Auditors. The provisional closure will be based on the recovery context situation at 31/01/2017.

TABLE 9: AGEING BALANCE OF RECOVERY ORDERS AT 31/12/2018 FOR DIGIT

	Number at 1/01/2018	Number at 31/12/2018	Evolution	Open Amount (Eur) at 1/01/2018	Open Amount (Eur) at 31/12/2018	Evolution
2017	15		-100,00 %	744.713,45		-100,00 %
2018		7			280.040,00	
	15	7	-53,33 %	744.713,45	280.040,00	-62,40 %

TABLE 10 : RECOVERY ORDER WAIVERS IN 2018 >= EUR 60.000						
	Waiver Central Key	Linked RO Central Key	RO Accepted Amount (Eur)	LE Account Group	Commission Decision	Comments

Total DG DIGIT	

Number of RO waivers	

There are no waivers below 60 000 €

None of your Recovery Order Waivers (if any) reaches EUR 60.000

TABLE 11 : CENSUS OF NEGOTIATED PROCEDURES - DG DIGIT - 2018

Internal Procedures > € 60,000

Negotiated Procedure Legal base	Number of Procedures	Amount (€)
Art. 134.1(b) (Without prior publication) Technical or artistic reasons, or reasons connected with the protection of exclusive rights	1	83.495.293,00
Art. 134.1(e) (Without prior publication) New services or works consisting in the repetition of similar services or works	1	60.750.000,02
Total	**2**	**144.245.293,02**

JUSTIFICATION FOR DG DIGIT'S INTENSIVE RECOURSE TO NEGOTIATED PROCEDURES

The following considerations justify the fact that the recourse by DG DIGIT to negotiated procedure without prior publication of a contract notice above the Directive thresholds (the negotiated procedures) is distinctly higher than the average recorded for the Commission:
DIGIT plays a pivotal role providing digital services in order to give support to other Commission departments in many areas (business, workplace, and infrastructure solutions). DIGIT therefore provides a contractual framework that caters, among others, for the needs of the Commission's central infrastructure, as well as the implementation of the digital workplace initiative. DIGIT's role as facilitator and service provider vis-à-vis other DGs and other EU Institutions imposes on it the obligation as chef de file to conduct negotiated procedures (NPs) on behalf of other entities or the results of which would benefit other entities. In particular, with regard to the procedures for continued use of proprietary software and associated services (Article 134(1)(b) RAP), DIGIT has to ensure contractual coverage for the software and associated services needs for all the DGs and, where appropriate, other EU Institutions. It has therefore to protect the investments made in relation to proprietary licenses, necessary upgrades, support and developments while ensuring the continuity of the existing applications in compliance with the applicable procurement rules. With this objective in mind, DIGIT has to conclude negotiated procedures in areas where the services or supplies can only be provided by a single economic operator, either because competition is absent for technical reasons and/or because the protection of exclusive rights including the protection of intellectual property rights must be ensured.
Compared to the previous year a positive evolution is observed concerning DIGIT's recourse to negotiated procedures: while in 2018 the proportion of the negotiated procedures of all procedures with value above EUR 60 000 was still higher than the average of the Commission (by approximately 5%), compared to 2017 there is a decrease both in absolute numbers (from 6 negotiated procedures in 2017 to 2 in 2018) and as a proportion (down by 28 percentage points). Furthermore, in 2018 the average volume of DIGIT's negotiated procedures as a proportion of the volume of all awarded contracts is under 5%, which is below the average of the Commission and is down by 30 percentage points compared to 2017.

CORRECTIVE MEASURES TAKEN TO REDUCE THE NUMBER OF NEGOTIATED PROCEDURES

In order to avoid or limit the resort to negotiated procedures, DIGIT is systematically applying mitigating and corrective measures along the following lines:
Since the key condition to replace negotiated procedures with open calls for tenders is to ensure sufficient time for preparation before launching the procedure, since 2015 in DIGIT operates a dedicated body at senior management level - DIGIT Procurement Board (DPB), which is responsible to define DIGIT's procurement strategy and to monitor its implementation. Strategic files and related strategy papers are presented to the DPB at least two years in advance and this allows to assess thoroughly the strategic dimension of procurement, including the choice of the best suited procurement procedure and the measures envisaged to gradually reduce captivity and increase competition, including in the cases of acquisition of proprietary software licenses and associated services.
Concerning the procedures for provision of new services consisting in the repetition of similar services (ceiling increases of existing service contracts), in order to avoid unplanned negotiated procedures, DIGIT carefully prepares and conducts through the EUSurvey platform detailed surveys among the participating DGs and EU Institutionss, aiming at achieving as precise as possible estimations on the volume and the structure of the services and products to be procured. After the introduction of the LCK (Legal Commitments Kernel) in the late 2017, for newly signed FWCs DG DIGIT has been encoding systematically the ceiling not only per EU Institution, but also per DG. This allows close monitoring by DG DIGIT of the ceiling expenditure and will help in the next years to prevent the depletion of the budgetary ceiling too fast after the contract signature and the need to resort to negotiated procedures for ceiling increases. The effect of the taken measures should become evident in the forthcoming years, when the contracts signed before the start of the use of the new features of the LCK will reach their end.

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

Internal Procedures > € 60,000

Procedure Legal base	Number of Procedures	Amount (€)
Exceptional Negotiated Procedure without publication of a contract notice (Art. 134 RAP)	2	144.245.293,02
Negotiated procedure middle value contract (Annex 1 - 14.2)	2	271.988,00
Open Procedure (Art. 104(1) (a) FR)	5	2.868.359.508,53
Total	**9**	**3.012.876.789,55**

Additional Comments:

TABLE 13 : BUILDING CONTRACTS

Legal base	Contract Number	Contractor Name	Description	Amount (€)

TABLE 14 : CONTRACTS DECLARED SECRET

LC Responsible Organi	LC Contract/Grant Type	LC Date	Legal base	Contract Number	Contractor Name	Description	Amount (€)

TABLE 15 : FPA duration exceeds 4 years - DIGIT

None of your FPA (if any) exceeds 4 years

ANNEX 4: Materiality criteria

DIGIT has assessed that it would be adequate to apply the standard quantitative materiality threshold of 2% for expenditure, i.e. when the value of the transactions affected by the deficiency represents more than 2% (“at risk”/"exposure") of the budget of the ABB activity for the DG concerned.

The qualitative criteria applied when assessing the significance of any reputational event take into account:

- the extent of the event (number of affected stakeholders)
- consequences of the event (measured directly as the severity of impact on other EC Institutions, Member States administrative bodies, external suppliers/beneficiaries or the general public)
- the duration of the event (number of months until the situation is restored to business as usual and the effects of the event have been corrected).

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

Relevant Control System : Procurement			
Stage 1: Ex-ante - Planning **Main internal control objectives: Effectiveness, efficiency and economy. Compliance (legality and regularity).**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
The needs are not well defined (operationally and economically) and the decision to procure was inappropriate to meet the operational objectives	Publication of intended procurements / Work programme.	100% of the forecast procurements (open procedures with prior notification) are published in the OJEU (Prior Information Notice) and justified in a note addressed to the AO(S)D	**Effectiveness:** Number of projected procurement procedures cancelled Benefits (qualitative): Better value for money, deterrent effects, efficiency gains, system improvements, compliance with regulatory provisions, no litigation **Efficiency:** average cost per procurement procedure **Economy (costs):** estimation of cost of staff involved and the related contract values
	Validation by AO(S)D of the justification (economic, operation) for launching a procurement process	100%of the forecast procurements	
	General orientation, objectives of the procurement and means are discussed in Management Meetings	All major (above 144 000 EUR) procurement procedures are discussed at the DIGIT Procurement Board chaired by the Director General	
The best offer/s are not submitted due to the poor definition of the tender specifications.	AOSD supervision and approval of specifications.	100% of the specifications are scrutinised	**Effectiveness:** Number of 'open' or procedures where only one or no offers were received ? / Number of requests for clarification Benefits: limit the risk of litigation, limit the risk of cancellation of a tender. **Efficiency:** Estimated average cost of a procurement procedure. **Economy (costs):** Estimation of cost of staff involved and the related contract values

	All pending legal challenges are closely monitored.	100% of litigation cases.	
	Publication of intended procurements / Work programme.	100% of the forecast procurements (open procedures with prior notification) are published in the OJEU (Prior Information Notice)	
the most economically advantageous offer not being selected, due to a biased, inaccurate or 'unfair' evaluation process	Formal evaluation process: Opening committee and Evaluation committee Consultation of the DIGIT procurement Board and GAMA advisory body. Exclusion criteria documented Standstill period, opportunity for unsuccessful tenderers to put forward their concerns on decision.	of the offers a Random selection by the GAMA body. 100% checked 100% when conditions are fulfilled	**<u>Effectiveness:</u>** Numbers of 'valid' complaints or litigation cases filed. <u>Benefits:</u> Potential irregularities/ inefficiencies prevented Avoid contracting with excluded economic operators Amount of procurements successfully challenged during standstill period. **<u>Efficiency:</u>** Estimate average cost of procurement procedure **<u>Economy (costs):</u>** estimation of costs involved

Relevant Control System : Procurement			
Stage 2: Ex-ante - Financial transactions **Main internal control objectives: Ensuring that the implementation of the contract is in compliance with the signed contract**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
The products / services / works foreseen are not, totally or partially, provided in accordance with the technical description and requirements foreseen in the contract and/or the amounts paid exceed that due in accordance with the applicable contractual and regulatory provisions. Business discontinues because contractor fails to deliver	Operational and financial checks in accordance with the financial circuits Operation authorisation by the AO(S)Ds Management of sensitive functions	100% of the contracts (SCs) are controlled 100 % of financial transactions controlled ex-ante (this includes : commitments and payments) Each year	**<u>Effectiveness</u>:** % error rate prevented (amount of errors/irregularities averted over total payments) Number of irregularities found ? NC events related ? <u>Benefits:</u> Amount of irregularities, errors and overpayments prevented by the controls **<u>Efficiency</u>:** Average cost per transaction % cost over annual amount disbursed Time-to- payment Late interest payment and damages paid (by the Commission) **<u>Economy (costs):</u>** estimation of cost of staff involved

Relevant Control System : Procurement			
Stage 3: Ex-Post – Supervisory measures **Main internal control objectives: Ensuring that any weakness in the procedures (procurement and financial transactions) is detected and corrected**			
Main risks ***It may happen (again) that...***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
An error or non-compliance with regulatory and contractual provisions, including technical specifications, or a fraud is not prevented, detected or corrected by ex-ante control, prior to payment.	Supervisory desk review financial transactions & procurement procedures (ex-post control)	Sample in line with ex-post procedures in place (for financial transactions & procurement procedures)	**<u>Effectiveness:</u>** Amounts associated with errors detected (related to fraud, irregularities and error). In % over total checked. Number system improvements made. <u>Benefits:</u> Amounts detected associated with fraud & error Deterrents & systematic weaknesses corrected Preventing unauthorized access to financial systems **<u>Efficiency:</u>** Costs of the ex post controls and supervisory measures with respect to the 'benefits'. Average cost of an ex-post control Average cost of financial systems access rights control **<u>Economy (costs):</u>** estimation of cost of staff involved
	Review of ex post results	Any systemic problem in procurement procedures and in financial transaction procedures are reported and analysed	
	Review of exceptions and non-compliance reports	At least once a year: Evaluation of non-compliance and exception reports	
	Review of incidents occurred during procurement procedures	Corrective measures taken if appropriate (cost -effectiveness criteria). Revision of procedures and/or checklists.	
	Close monitoring of physical and IT access rights to financial systems	Yearly control on financial systems access rights	

Relevant Control System : Revenues (Chargeback)			
Stage 1 : Recognition: establishment of the Commission's rights **Main internal control objectives: Ensuring that the Commission establishes its revenue entitlements correctly and sets up its management reporting and information security; Compliance (legality & regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Reliable Reporting (true and fair view).**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
The MOUs / SLAs embed weaknesses that would undermine the Commission's legal rights in terms of revenue entitlements	Information on the IT services and their costs are available on line on DIGIT web pages as well as on request. Specific information on the IT services delivered can be found in specific technical (SLAs, hosting proposals, etc.) and administrative (MoUs) documents. Hierarchical validation of the operation with legal & financial circuits, within the authorising department	All services	**Effectiveness:** value of the charge-back amount Benefits: The pooling of resources in order to achieve better services at a lesser cost **Efficiency:** know-how, capacities and resources developed can be made available for a fraction of the cost of what it would cost developing them internally or procuring them in the open market the goods and services may not be available off-the-shelf **Economy (costs):** Cost of control of charge-back activities in this phase / Amount charged-back.
Recognition of the revenues are not done at the right moment (e.g. when they become due) or not for the right amount	Services, costs and performance indicators are defined and described in technical documents (services catalogues, Service Level Agreements (SLAs), hosting proposals, etc.) and administrative and budgetary provisions are set up in memoranda of understanding (MoUs) approved by the Customer and by DIGIT, service supplier.	All services	

<table>
<tr><th colspan="4">Relevant Control System : Revenues (Chargeback)</th></tr>
<tr><th colspan="4">Stage 2 : Protection: recording, follow-up and accounting of the Commission's rights

Main internal control objectives: Ensuring that the Commission establishes its revenue entitlements correctly and sets up its management reporting and information security; Compliance (legality & regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Reliable Reporting (true and fair view).</th></tr>
<tr><th>Main risks
It may happen (again) that...</th><th>Mitigating controls</th><th>Coverage frequency and depth of controls</th><th>Possible Cost-effectiveness indicators (3Es)</th></tr>
<tr><td>The implementation of the MOUs / SLAS entails weaknesses, which lead to the Commission's legal rights in terms of revenue entitlements not being duly protected and/or registered and/or reliably reported</td><td>For sub delegated budget lines DIGIT provides the Authorising Officer by Delegation (AOD) with a report to be annexed to the AAR.

Checking & filing of supporting documents</td><td>100%

100%</td><td><u>Effectiveness:</u>
value of the charge-back amount

<u>Benefits :</u> The pooling of resources in order to achieve better services at a lesser cost

<u>Efficiency:</u>
know-how, capacities and resources developed can be made available for a fraction of the cost of what it would cost developing them internally or procuring them in the open market
the goods and services may not be available off-the-shelf

<u>Economy (costs):</u>
Cost of control of charge-back activities / Amount charged-back.</td></tr>
</table>

Relevant Control System : Revenues (Chargeback)			
Stage 3 : Ex-post – Supervisory measures **Main internal control objectives: Ensuring that any weakness in the procedures (chargeback) is detected and corrected**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
An error or non-compliance with regulatory and contractual provisions, including technical specifications, or a fraud is not prevented, detected or corrected by ex-ante control, prior to payment	Supervisory measures : regular follow-up of the Master Table Reconciliation for ROs : DWH ABAC with the Master Table Reconciliation of co-delegated budget lines in ABAC Workflow with the Master Table	100%	**Effectiveness:** value of the charge-back amount Benefits : Amounts detected associated with error corrected **Efficiency:** estimation of cost of staff involved **Economy (costs):** Cost of control of charge-back activities / Amount charged-back

Relevant Control System : Non-expenditure items : (In)tangible Assets			
Stage 1 : Recognition: establishment of the Commission's rights **Main internal control objectives: Ensuring that the Commission establishes its assets ownership and liabilities correctly and sets up its management reporting and information security; Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Assets (incl. accounting); Reliable Reporting (true and fair view).**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
Recognition of the assets, is not done at the right moment (e.g. when they become due, when the ownership is transferred, when they become certain) or not for the right amount	Hierarchical validation of the operation with legal & financial circuits, within the authorising department AccO verifying that AO(S)Ds establish inventory and information flow into ABAC (cf. validation of local systems)	100% 100%	**Effectiveness:** Value of the assets concerned Benefits: The (average annual) total value of the significant errors detected/avoided - and thus prevented in terms of the Commission's rights **Efficiency:** Value of assets in relation to the cost of staff involved **Economy (costs):** estimation of cost of staff involved

Relevant Control System : Non-expenditure items : (In)tangible Assets			
Stage 2 : Protection: recording, follow-up and accounting of the Commission's rights **Main internal control objectives: Ensuring that the Commission registers and protects its assets ownership and liabilities correctly, reports transparently ; Compliance (legality & regularity); Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Assets (incl. accounting); Reliable Reporting (true and fair view).**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
Assets- EU accounting rules are not respected	Clear procurement, accounting, inspection, depreciation and disinvestment rules; EU accounting rules (In)tangible assets and inventories follow formal procedure for disposal of assets	For 100% of the assets. Close follow up of inventory and depreciation	**<u>Effectiveness:</u>** Value of the assets concerned number of findings about incorrect registration of items <u>Benefits:</u> Avoid the wrong imputation in accounting system and compliance with regulatory provisions. **<u>Efficiency:</u>** Value of assets in relation to the cost of staff involved **<u>Economy (costs):</u>** estimation of cost of staff involved
Failing to prevent, detect and correct negligence, irregularities, errors, losses or attempted fraud.	Controls aiming at safeguarding the assets it purchases and manages on behalf of all the DGs and services of the Commission: • Physical check of all assets and non-assets • Itemised checks when writing off obsolete, lost or damaged goods, as well as on-going registration in ABAC Assets of all logistical movements (deliveries, moves, swaps, withdrawals, etc.)	100% during the life-cycle of the items Physical check at least every two years	

Relevant Control System : Non-expenditure items : Information & IT security			
Stage 1 : Protection: recording & follow-up of the Commission's rights **Main internal control objectives: Sound Financial Management (effectiveness, efficiency, cost-effectiveness); Prevention of fraud (anti-fraud strategy); Safeguarding Information ; Reliable Reporting (true and fair view)**			
Main risks ***It may happen (again) that…***	**Mitigating controls**	**Coverage frequency and depth of controls**	**Possible Cost-effectiveness indicators (3Es)**
sensitive information is 'lost' (abused, made public) or its integrity breached (data altered)	Internal rules on data protection in line with Commission's rule, and internal rules on treatment of sensitive information Close monitoring of physical and IT access rights to financial systems	100% Yearly control on financial systems access rights	**Effectiveness:** Nr of events during the reporting year Benefits: Avoid the non-compliance with regulatory provisions and loss of information / preventing Commission's exposure No unauthorised access **Efficiency:** no reputational events damaging Commission **Economy (costs):** estimation of cost of staff involved
sabotage, destruction of critical documents, damage to equipment, theft of high-value equipment or sensitive information by external parties / contractors	Organisation of meetings with HR/DS to standardise and reinforce the access security measures for external staff (use of a single Information system….) Security clearance for contractors when needed Close monitoring of physical and IT access rights to financial systems	security rules and culture to be adjusted in view of latest technical developments and 'possibilities' Right to clearance 100% checked Yearly control by ICC on financial systems access rights	

Politically or economically motivated computer crime (hacking) to conduct sabotage or espionage against the Commission's IT systems.	increase the Commission's capability for detection, preventive and responsive measures ensure that key IT security processes are implemented consistently across the Commission for main corporate IT systems. improve global IT infrastructure security level through network and endpoint securisation and security oversight of key corporate systems	Application of IT security governance rules Commission wide	**Effectiveness:** Nr of events during the reporting year Benefits : the number avoided breaches (annually) and thus preventing Commission's exposure **Efficiency:** no reputational events damaging Commission **Economy (costs):** estimation of cost of staff involved (DIR S of DIGIT + all various stakeholders (end-users, technical staff, decision makers)

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

ANNEX 7: EAMR of the Union Delegations (non applicable)

ANNEX 8: Decentralised agencies (non applicable)

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

Id	Study project ID	Title of the study	Study internal ID	Study overview	Study reason	Associated services	Note (status of studies in 2018: started, not started, reported, cancelled, completed)	Title of the deliverable
7065	7065	Access to base registries	MFF	Based on the action of base registries. The action will propose to publish a set of guidelines for setting up registries.	General study		started	
7067	7067	State of play of interoperability in Europe	MFF	This study is part of the National Interoperability Observatory ISA² action.	General study		not started (reported in 2019)	
7069	7069	Digital technologies for innovative Public Services	MFF	This study is part of the action on innovative public services which will identify the novel technologies which could be used by Public Services and will assess their impact.	General study		reported (contractual issues, will start after March 2019)	
7071	7071	Future of User experience design	MFF	The future trends of Use experiences design for public administration a practical roadmap up to 2021. Which technology and process we should embrace to improve the efficiency of our users (Voice user interface, Bots, virtual reality, facial authentication, IA etc..) which we should avoid?	General study		Not started, reported to 2019	
7066	7066	Catalogue of services	MFF	Guidelines and recommendations on how to build a catalogue of public services.	General study		started	
7073	7073	Optimize and monitor our financial and contractual process	MFF	How we can optimize and monitor our financial and contractual process. How to recruit faster and better and within budget? Tools and techniques in the context of a public administration.	General study		Not started, reported to 2019	

Id	Study project ID	Title of the study	Study internal ID	Study overview	Study reason	Associated services	Note (status of studies in 2018: started, not started, reported, cancelled, completed)	Title of the deliverable
7074	7074	How to improve the usage of Community of Practice for our IT competences centre? Tools and techniques	MFF	How to improve the usage of Community of Practice for our IT competences centre? Tools and techniques	General study		Not started, reported to 2019	
7068	7068	Sharing and Reuse pilot study	MFF	Pilot study on the current situation as regards the existence/integration of the SRF's recommendations in other EU programmes.	General study		not started, reported in 2019)	
7070	7070	Future of IT development	MFF	What is the future of Software development in the next 5 years, which development framework we should invest in, which will become the new standard of development? Which one we should stop?	General study		Not started, reported to 2019	
7072	7072	Benchmarking of DIGIT's new delivery model	MFF	Benchmarking of our new delivery model and how to constantly improve and measure the efficiency of our software factory?	General study		Not started, reported to 2019	
7024	7024	Open Source Software (OSS) Strategy Evaluation	O	Evaluation of the situation of OSS in administrations in the world and in member states, evaluation of the impact of the OSS strategy iteration 2014-2017 and its action plan, interview of prominent stakeholders in EU institutions, proposals for adaptation of the strategy for 2018-2020	Evaluation		Started	
3466	3466	Final Evaluation of the ISA2 programme	L	Final evaluation of the ISA2 programme as per article 13 para 3 of the Legal Basis (Decision (EU) 2015/2240 of 25 November 2015) with purpose to assess the performance of the Programme in meeting its objectives according to the evaluation criteria such as relevance, effectiveness, efficiency, utility, including, where relevant, business and citizen satisfaction, and the sustainability and coherence of programme's actions.	Evaluation		n/a in 2018	

Id	Study project ID	Title of the study	Study internal ID	Study overview	Study reason	Associated services	Note (status of studies in 2018: started, not started, reported, cancelled, completed)	Title of the deliverable
7022	7022	Evaluation assessing the implementation level of the European Interoperability Framework (EIF)	O	As foreseen in section 6 of the Communication on the "European Interoperability Framework – Implementation Strategy" COM(2017) 134, the Commission planned to evaluate the implementation of the European interoperability framework by the end of 2019. In the course of 2018 it became however evident that running this evaluation in 2019 would be premature. In agreement with the Secretariat-General of the Commission the evaluation has been postponed by end 2021.	Evaluation		n/a in 2018	
7023	7023	Interim Evaluation of the ISA² Programme	L	Interim evaluation of the ISA2 programme as per article 13 para 3 of the Legal Basis (Decision (EU) 2015/2240 of 25 November 2015) with purpose to assess the performance of the Programme in meeting its objectives according to the evaluation criteria such as relevance, effectiveness, efficiency, utility, including, where relevant, business and citizen satisfaction, and the sustainability and coherence of programme's actions.	Evaluation		started	
3468	3468	Impact assessment and recommendations to introduce OSS in EC Enterprise SEARCH		Impact of Idol replacement by elastic-search in the Search project	General study		Completed	

ANNEX 10: Specific annexes related to "Financial Management"

Table Y Overview of the estimated cost of controls at Commission (EC) level:

Relevant Control System : Procurement							
Ex ante controls			Ex post controls			Total***	
EC total costs (in EUR)	Funds managed (in EUR)*	Ratio (%)[4]:	EC total costs (in EUR)	Total value verified and/or audited (in EUR)	Ratio (%)[5]:	EC total estimated cost of controls (in EUR)	Ratio (%)[6]:
4 573 465	3 644 201 050	0,13%	16 790	8 509 304	0,20%	4 590 255	0,13%

* Funds managed = EUR 3 012 876 789,53 procurements made + EUR 631 324 260,51 payments procedures
** Total = total costs of ex ante + ex post controls divided by total amount of funds managed + amount verified = Ratio in %

Relevant Control System : Revenues (Chargeback)							
Ex ante controls			Ex post controls			Total**	
EC total cost (in EUR)	funds managed (in EUR)*	Ratio (%)[7]:	EC total costs (in EUR)	Total value verified and/or audited (in EUR)	Ratio (%)[8]:	EC total estimated cost of controls (in EUR)	Ratio (%)[9]:
494 820	139 732 859	0,35%	54 980	139 732 859	0,039%	549 800	0,39%

* Funds managed = EUR 139 732 859 charge back amount
** Total = total costs of ex ante and ex post controls divided by total amount verified = Ratio in %

[4] Total ex ante control cost in EUR ÷ funds managed in EUR
[5] Total ex post control cost in EUR ÷ total value verified and/or audited in EUR
[6] Total cost of controls ÷ funds managed
[7] Total ex ante control cost in EUR ÷ funds managed in EUR
[8] Total ex post control cost in EUR ÷ total value verified and/or audited in EUR
[9] Total cost of controls ÷ funds managed

OVERALL estimated cost of control at EC level							
Ex ante controls			Ex post controls			Total**	
EC total cost (in EUR)	funds managed (in EUR)*	Ratio (%)[10]:	EC total costs (in EUR)	total value verified and/or audited (in EUR)	Ratio (%)[11]:	EC total estimated cost of controls (in EUR)	Ratio (%)[12]:
5 068 285	3 783 933 909	0,13%	71 770	148 242 163	0,05%	5 140 055	0,13%

* Funds managed = Total amount of Relevant Control System : Procurement + Relevant Control System : Revenues (Charge back)
** Total = total costs of ex ante and ex post controls for both Relevant Controls Systems : Procurement and Revenues (Charge back) divided by total amount verified = Ratio

[10] Total ex ante control cost in EUR ÷ funds managed in EUR
[11] Total ex post control cost in EUR ÷ total value verified and/or audited in EUR
[12] Total cost of controls ÷ funds managed

ANNEX 11: Specific annexes related to "Assessment of the effectiveness of the internal control systems" – Budget implementation tasks entrusted to other DGs and entities

DG	Budget lines	Committed amount 2018 (€)	Paid amount 2018 (€)	Reported matters by the other service
COMP	26.030100	2 760 000	2 848 174	The DIGIT-TM consortia were not able to provide valid candidates on time to fulfil the requests for three EPS profiles. A global commitment for EUR 308 186.20 was signed with a view to recruiting the external service providers as soon as possible in 2019 and ensuring the continuity of the projects.
EMPL	26.030100	160 000	282 832	The commitment credits were not transferred until 21/11/2018. This late transfer made it difficult to carry out the necessary contractual procedures before the end of the year. A global commitment was made with the commitment credits with the view to carry out the budgetary commitments L2 and legal commitments in the first quarter of 2019.

DG	Budget lines	Committed amount 2018 (€)	Paid amount 2018 (€)	Reported matters by the other service
ESTAT	26.030100	1 057 100	1 153 116	Action 2016.06 :The commitment of the budget allocated in 2018 could not be done as planned. There was a global commitment for 457,100 € from the 2018 budget covering the continuation of architecture and interoperability benchmarking and the development of shared services. The main reasons for the global commitment were the repercussion of the initial delays in the signature of the DIGIT Framework Contract ABC IV Lot 2 and the non-award of a DESIS III lot 4 open tender. The contracts will be signed in the first quarter of 2019. In addition, 192,900€ were not used and retroceded to DIGIT for reuse in other ISA2 actions. The main reason for budget unspent was efficiency gains in achieving project objectives which will be concluded in 2019. Action 2018.03 : There were significant delays in the commitments for 2018. As a result there was a global commitment for 600,000 € from the 2018 budget covering the setting up of Semantic metadata repository prototype, the definition of a metadata strategy and architecture and the development of reference ontologies for statistics. The contracts will be signed in the first quarter of 2019. In addition, a total amount of 400,000€ initially planned for the development of security guidelines and architecture could not be used because of shift of priorities over the last period of 2018 due to a reorganisation of the unit responsible for this action. This amount has been retroceded to DIGIT for reuse for other ISA2 projects.
FISMA	26.030100	1. 265 000	811 704	none
GROW	26.030100	1 110 590	1 111 664	none
JRC	26.030100	2 196 996	1 682 273	none
	26.010.401	13 000	-	
	26.035100	-	20 469	
MARE	26.035100	-	174 550	None
	26.030.100	950.000	64 789	
OP	26.030100	1 127 341	1 359 333	none

DG	Budget lines	Committed amount 2018 (€)	Paid amount 2018 (€)	Reported matters by the other service
SG	26.030100	80 000	382 471	Action 2016.01 -The implementation of the second phase of THEMIS / Infringements covering the infringements management module has proven more difficult than expected due to the high complexity of the business process and in view of the large data migration required. The stakeholders therefore agreed on a new delivery date in Q2 2019.
SJ	26.030100	74 966	-	Staffing issues encountered by the Legal Service IT sector, due the transition period from framework contracts ESP DESIS-III to DIGIT-TM, have led to slightly postponing the actual Ref2Link ISA2 development phase. Contracts for the provision of services were signed in December 2018 for development work to be conducted on the Ref2Link project, on cross sub-delegated budget line 26.030100. 74 966 €uro of Budget line 26.030100 was committed by end 2018 and will be spent in 2019.
RTD	26.030100	150 260	-	none
CNECT	26.030100	-	238 250	after several reminders no report received yet, but this is not a big problem as they have no new appropriations, did one payment of 238K and have RaL of 238K
HR	XX.010301.11.03 XX.010301.11.04	-	393 319	no AOSD report requested, as only RaL on admin line and no new appropriations; RaL fully paid, confirmed by email

ANNEX 12: Performance tables

Modernisation of public administration

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of the data**: *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 1:	Drive modernisation and digitalisation of core processes, exploit new technologies and optimise IT investments		
Result indicator [KPI-1]: The digital transformation composite index (goes from 0% to 100%) **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
< 10%	Between 10% and 20%	Above 50%	38.25%
Main outputs in 2018:			
SER – DIGITAL TRANSFORMATION: AUTOMATION OF CORE CORPORATE PROCESSES			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
1-1 Compliance track a) This activity focuses on complying with the eProcurement directives and the Financial Regulation through the rollout of the eSubmission and eInvoicing functionality of eProcurement. *b)* This is further complemented by the	a) Rollout of eSubmission and eInvoicing.	In 2018: a.1) effective support for electronic submission for all procedures above the Directive thresholds by end 2018, in all Commission DGs and services, offices and executive	**Target met** a.1) All the EC services and executive agencies have been "onbarded" as planned. In addition another 25 EU bodies (agencies and other insitutions) have been on-boarded .

implementation of SEDIA (once only principle for suppliers and participants).	b) Gradual integration of eProcurement services in the new SEDIA Portal, including in particular the registration of bidders submitting an	agencies. a.2) Interoperability with national e-invoicing solutions is through open PEPPOL by end of 2018 b.1) possibility to request REA Validation Services in procurement context by January 2018	a.2) The development of the new eSubmission system compatible with the target architecture have been completed but with a delay of 3 months. Concerning PEPPOL, work has continued, the pilots are still running but the going production will be postponed in order to be compatible with the more advanced version announced by PEPPOL expected for Q2-2019. The on-boarding of e_invoices has continued and by the end of the year the situations was as follows: • DIGIT: 6 EA + 40 DG + 34 other • OWN: 1 EA + 19 DG + 18 others • e-invoices received by all customers - 2017: 37468 in 2017 => 3122 per month in average - 2018: 48823 in 2018 => 4035 per month in average 2018-2017: >30% increase b1) REA has continued the validation of entities participating in procurement and making use of the PIC under the new eSubmission system. In order to facilitate the user adoption, REA is presenting their services in the training offered by DIGIT as part of the onboarding on eSubmission. The issue on REA not being able to validate entities

	offer.	b.2) Introduction of the SEDIA portal by summer 2018.	applying to calls from services not in the mandate of REA has not yet been solved. The extension of the mandate of REA should happen in the context of the new MFF b.2) The portal went live in October as planned and it is currently in full production.
1-2 Performance track This activity focuses on the rollout of the full post-award eProcurement chain together with the implementation of direct grant management for eGrants.	a) Design of the To-Be models targeting a complete business-and-IT solution by which the process for handling procurement information will be fully automated and integrated, limiting to the strict minimum the manual input of data, and promoting the alignment and reuse of such data along the different processes.	a) Detailed planning of the implementation of the new eProcurement solution to be rolled out in all SER entities[13] by end 2020 (delivery of the planning by 2018).	a.1) The updated roadmap and pilots has been agreed and described in the work plan for 2019 adopted by GPSB on its meeting in December. In terms of business process and harmonisation, modelling has started giving priority to processes to be piloted in 2019. Business continuity on current tools has been further implemented: the work for the integration wth LCK was completed and the on-boarding of new procedures continued but limited to cases ensuring continuity

[13] SER entities refer to the various entities involved in the eProcurement part of the Synergy & Efficiency Review exercise.

	b) Extension of the rollout of eGrants for direct grants.	b)Further rollout to 4 DGs or agencies.	b) No new programmes have been on-boarded, work has focused on the GAP analysis of the missing programmes, in particular those managed by EACEA
1-3 Integration of e-procurement and e-grants The partial implementation of the Opsys project with involvement of both eProcurement and eGrants.	Pilot the convergence of eProcurement and eGrants.	Production rollout for beneficiaries of DEVCO/NEAR/FPI Framework Programmes.	Target met
1-4 Identification of further core-corporate processes to automate in key areas a) Document Management and Archiving. b) Legislative lifecycle transformation (e.g. Decide, Better Regulation Portal). HR processes transformation (from recruitment to payment and retirement and including Inter-institutional rollout).	Specific deliverables that are being defined with the client DGs.	Agreed deliverables delivered on time and accepted by the client.	Target met a) Delivery of HAN 3.1 major release implementing the feature for adding electronic seals to HAN documents. Rollout of HAN to further agencies and JUs. Additional Sharepoint sites integrated with HAN using AresBridge. The number of Corporate applications integrated with HAN through HRS in prod passed 100. Delivery of Decision Cabinet phase with integration in Sep providing a single workspace for Commissioner Cabinets. b) The achievements on HR processes include the launch of a first version of ATLAS in SYSPER and the deployment of the Staff Matters Portal. On the Inter-Institutional roll-out of SYSPER progress was made on on-boarding SYSPER at Council (foreseen in Q2 2019). Support for public consultations in Decide and

			their transmission to Better Regulation Portal (BRP). First version of Edit / Decide Consultation integration delivered in production
SER – Digital Transformation: Data Analytics			
1-5 Data Analytics - Strategy	a) In close cooperation with stakeholders, finalisation of the Data Strategy initiated in 2017. b) Coordination with other strategic analytics initiatives (business intelligence, advanced analytics and artificial intelligence), in the context of the Digital Pole.	a) Endorsement and start of the implementation of the Data Strategy. b) Set-up and start of the implementation of the interlinked set of strategy on analytics in broad sense (artificial intelligence, business intelligence, and data analytics).	Targets met Following the adoption of the DataStrategy@EC Vision, DIGIT coordinated the preparation of the associated Action Plan endorsed by the Information Management Steering Board (IMSB) in October. The implementing actions started under the leadership of the Action Coordinators. Within the data analytics action (covering analytics, artificial intelligence, business intelligence), DIGIT pursued the prototyping of emerging technologies applied to specific business problems in a co-innovation approach with the concerned DGs and started the conceptual development of the data platform underlying the EC data ecosystem.
1-6 Develop an internal EC stakeholder engagement plan on data analytics solutions and service provision in the domain of data analytics	a) Establishment of an implementation roadmap based on the Data Strategy for EC drafted in 2017. b) Establishment of an active	a) Implementation roadmap delivered. b) Active facilitation	Targets met a)The Action Plan has been established. The engaging actions in the Action Plan have been activated: communication, events, facilitation of dedicated communities of interest. b) With the endorsement of the Action Plan, a network of local data correspondents

	facilitation of the analytics community of practice encompassing amongst others business intelligence and artificial intelligence.	of communities of practices established.	has been created. The Data4Policy group evolved in the data ecosystem coordination group that will supervise the implementation of the DataStrategy@EC Action Plan.
1-7 Continue the piloting and develop the analytics infrastructure	a) Executions of new Proofs of Concepts, particularly around Artificial Intelligence (AI) and Business Intelligence (BI). b) Manage and govern the analytics federated catalogue of services together with the other DGs. c) Establishment of a Corporate analytics service on web presence (based on PIWIK). d) Setting up the first EC Data Space.	a.1) New AI Proof of Concepts in the area of Data4Policy executed. a.2) New BI Proof of Concepts around internal resource data (HR and financial) and the activities of the Commission (programme implementation) executed. b) Analytics catalogue of services in place and provision of the identified services started. c) PIWIK Corporate Service established. d) EC Data Space set up.	Target met a) Several co-created prototypes and project have been launched and some of them completed. Proposed projects relying on BI, analytics and AI have been submitted by different departments, analysed and selected for the implementation of proof of concepts. A list of the on-going initiatives has been compiled in order to monitor the overall progress, the related outcomes and their contribution to the DataStrategy@EC analytics action. b) The Federated Catalogue of services has been populated with the first services and the support for the associated activities provided. c) The PIWIK service is currently provided for external and internal communication and collaborative tools according to three corporate strands. On-going further consolidation of the three strands will lead to a fully corporate service.

	e) Establishment of a (big) data infrastructure for the Commission and Member States (under CEF).	e) Big data infrastructure launched.	d) The first EU data space has been implemented in relation to the EU Results project. This space has been enhanced with new features and new data sources on the EC funded projects. This first space will pave the way towards the EC data platform (Data Strategy ecosystem). The Big Data Test Infrastructure was successfully released to the users in December 2019. First projects on statistics (Eurostat) and from Members States (Slovenia) were activated.
SER – DIGITAL TRANSFORMATION: ARCHITECTURE COMPONENTS			
1-8 Catalogue of Reusable Components Identify common IT needs between DGs that may turn into new reusable components and extend the catalogue with this new set.	Extension of the 2017 Catalogue of Reusable Components with additional production-ready, full-serviced components.	Catalogue of Reusable Components extended with at least 3 additional production-ready, full-serviced components.	Target met The catalogue has been extended with the following components: EU Sign, EU Send and API Gateway - available in production. Compass Corporate - Minimum Viable Product ready for acceptance for eProcurement and OPSYS. MyWorkplace - in pre-production and used by current customers of Compass Corporate (eprocurement, OPSYS) eChecklist - in production, plans to become a corporate reusable solution in 2019. Next on the Reusable Solution Platform pipeline:

			EU Access, eForms, eSignatory framework, interface to HERMES/HAN (updated HRS).
1-9 Enhance the maturity and further roll-out of the established set of reusable components a) eUI Platform	a) eUI platform: align with other major initiatives roll-out in DIGIT.B developed information systems	a.1) End 2018: Align with ECL (Europa Component Library) of DG COMM. a.2) Roll-out in DIGIT.B Q4 2018: 2 additional DIGIT.B Information Systems adopting eUI	Target met a.1) Align eUI with ECL: Alignment between release eUI 7.0 and release ECL2.0 achieved by 90%. Continue and target on SEDIA\MyWorkpalce migration from eUi3.0 to eUI7.0 with ECL2.0 compliant components a.2) IMI and BRIS eUI integration has advanced. The new version is scheduled for production in Q1 2019
b) Corporate Notification Service (CNS)	b) CNS: 5 new reuse cases.	b) Implemented by end 2018.	Target met b) The target of 5 reuse cases was exceeded with: 1. OPSYS (DEVCO) 2. Register of Expert Group 3. WIFI4EU(CNECT) 4. DPMS (SG) 5. SEDIA(DEVCO) 6. NDP(PMO) 7. ATMOS(SG)
c) Corporate Search	c) Corporate Search Box indexing data from DECIDE, ARES, MyIntracomm and DGT data sources deployed in production and accessible by EC users.	c.1) Q1 2018: Corporate Search Box in production and accessible from one single URL as Pilot. c.2) Q3 2018: Access to the Corporate	Target partially met c.1) The Corporate Search Box is in production and accessible from one single URL as Pilot as planned. c.2) The extension of the access to all EC users has been delayed for the end of

		Search Box will be extended to all EC users.	Q1 2019 due to technical challenges.
d) EU Login	d) EU Login: Rollout of an authentication solution for Wifi4EU based on EU Login.	d) Pilot with EU Guest Wi-Fi delivered in Q1 2018.	d) Pilot discontinued as DG CNECT decided not to use EU Login for Wifi4EU.
e) ESSI	e) ESSI: Roll out eSignature (eSeals) infrastructure to support ARES and other major processes.	e) ESSI Infrastructure in place by end 2018. • Support for the creation of visual signatures/seals. • Time-stamp brokerage services. • Support for "documentless" (hash-only) signing/sealing.	Target met e) ESSI evolution is on track. • ARES using EU Sign PROD as of December 2018 • eReceipt/eGRANTS using EU Sign PROD as of October 2018 • Both switched to "documentless" sealing! • Core support for visual signatures is included as planned, available to calling applications. • Time-stamp brokerage services has been set up, currently as component internal to EU Sign
f) eTrustEx	f) eTrustEx	f) eTrustEx 1) Update the Web-Client of eTrustEx to a more secure, interoperable and user-friendly technology as well as making it	Target met f) The requirements for the new eTustEx Web (v4.0) have been identified and documented. Development started, first minimum viable product (MVP) is expected by end of Q1

		mobile friendly. 2) Simplify the architecture of the eTrustEx platform by replacing the current adapter by the eDelivery Access Point of CEF (synergies and efficiencies between programmes).	2019. Furthermore, the replacement of the current Adapter is ongoing; the deployment of the eDelivery Access Point Plugins is planned in Q2 2019. Target met
g) CEF eDelivery	g) CEF eDelivery	g.1) Increase the number of solutions that have passed or the conformance testing according to CEF's AS4 profile (i.e. between 3 and 6 new solutions added to the list). g.2) Support the deployment of conformant Access Points and Service Metadata Publishers (SMPs) throughout Europe (i.e. between 28 and 50 new deployments).	g.1) The number of conformant solutions continues to grow. At this moment, there are 23 of them (19 eDelivery AS4 implementations and 4 eDelivery SMP implementations). g.2) According to the last complete figures (Q3 2018), there are 508 Access Points in production across Europe. This number continues to grow and also the SMPs. The overall adoption of eDelivery/ the AS4 protocol continues to grow as more policy domains decide to adopt it. eDelivery is also increasingly considered for national projects Target met
h) CEF eID	h) CEF eID	h) Support the MS to meet the 29 September 2018 deadline which entails the setting up	h) CEF eID is on track. Successful integration concluded with German eID

		of eIDAS eID infrastructure Final release of reference implementation by Q3; Support for final specs by Q2.	
i) CEF eSignature	i) CEF eSignature	i.1) Open-sourcing of TL-Manager by end 2018. i.2) User on boarding process defined for CEF reuse of building block by end 2018. i.3) Advanced search functionalities in place in Trusted List Browser by mid-2018.	i.1) Open source TL Manager (Non-EU) available Target met i.2) Target met i.3) Target met
j) TESTA	TESTA: Operational and technical requirements for the future TESTA procurement drafted a design environment set up in order to specify the technical and governance requirements for the future TESTA network.	j.1) Specifications completed by end 2018. j.2) Draft design document delivered by end 2018	j.1) For TESTA, in Q4 2018, the model proposed was redesigned at the request of the stakeholders to a classic design allowing for more flexibility and lower costs. Work started in earnest in Q4, stakeholders have aligned to the new strategy and are actively working (in Q1 2019) on the compilation of the CFT requirements. The timeline to launch the CFT currently points towards Q2 2019
1-10 Infrastructure and services enabling	Application Programming	Q1 2018: Availability and	Target met

the reuse of architectural components and building blocks	Interface (API) management platform.	criticality of the Platform is defined before the Platform will be in production End 2018: Platform used by at least: 2 main DIGIT projects (such as OPSYS) 2 projects from other DGs.	The following projects are using the API Gateway: • Compass Corporate, • Opsys • BRIS • TED API – pilot mode The API Gateway is the only way to securely access an internally deployed API from the cloud. It is therefore recognised as an important enabler for key technical transformation initiatives (such as VDI and service for developers). This makes the API gateway promised an intensive adoption.
1-11 Building a Corporate Workflow Ecosystem	Create a first major common component between all existing Workflow platforms.	End 2018 : A working Proof of Concept (PoC) of a common Task Centre Component used by the following systems: • Compass (RTD), • RDIS (AGRI), • OPSYS (DEVCO) and Wave (REGIO).	Target met A first production release (Minimum Viable Product) of Compass Corporate has been deployed end of 2018 in order to support the Opsys and eProcurement projects.
1-12 Modernisation of COMREF	Gap analysis of the current system and transition plan.	By end 2018: • Vision clearly defined and approved by system owner including the following: - System purpose and scope - Future architecture - Transition plan • Proof of Concept of	Target partially met The study has started with 3-months delay introducing delays for the initially planned Q4 2018 target. The planning has been re-baselined and the expected targets will be achieved in Q1 2019. Despite the initial delay, there has been very good progress overall. • The AS-IS situation has been clearly documented

		an example service implemented in the new architecture and deployed in the API Management Platform.	and there is good consensus amongst the different stakeholders regarding the future Vision. • Two alternative scenarios have been identified for the future architecture. Both alternatives are widely acceptable by the main stakeholders. The impact and transition plans for each of the alternatives are being elaborated. • A first good draft of the study is expected to be available early February 2019 while the final version is expected to be accepted in March 2019. Despite initial delays, no further risks will occur, and the Study is back on track.
1-13 Provide an Open Source Software (OSS) Strategy for the Commission	Review and update the 2014-2017 OSS strategy and adopt it as a Commission Decision.	• Q2 2018: OSS strategy for 2018-2020 defined. • End 2018: New OSS Strategy adopted as a Commission Decision.	Target partially met Open Source Software Strategy renewal has originally been planned for end-2018, but there is a justified postponement. Due to shared goals between the OSS Strategy and the EU-FOSSA 2 preparatory action, DIGIT has been able to explore synergies and effectively extend the scope of the original study, required for the renewal. The second part of the study will now look at the feasibility of having a common approach across all EU institutions. The study is foreseen to be completed in April for the European Commission part (necessary for the renewal), in September for the part

			concerning other EU institutions. We expect a proposal of a renewed DIGIT's OSS Strategy to be adopted internally before the summer holidays. A parallel track is looking at making the OSS Strategy a "Communication to the Commission", which should be completed by the end of Q3/2019.

Data, Information and Knowledge Management			
1-14 Data, Information and Knowledge Management Develop capabilities in Data, Information and Knowledge management in line with the Commission Communication and Staff Working Document in this domain.	Implementation and follow-up of the Work Programme 2018-19 according to the roadmap endorsed by the IMSB.	Implementation to be launched by 2018.	**Target met** DIGIT continued to provide the support to the coordination of the implementation of the Data, Information and Knowledge Management work programme. The monitoring for the first semester 2019 has been produced based on an enhanced management of the related information. Digit progressed with the action under its remit, notably the data strategy and the collaboration solutions strategy.
1-15 Collaboration Develop a corporate solution for internal collaboration by combining user-centric and document-centric platforms and management facility, including the integration of social networking features, as from the lessons learnt from the Yammer pilot.	a) Implementation of the detailed roadmap associated to the Collaboration Solutions strategy. b) Progress towards the integration of corporate collaboration solutions.	a) Finalisation of detailed roadmap in Q1 2018. b) End 2018: progress towards the collaboration solutions tool-set via further integration of existing solutions and streamlining of the current corporate offer. Additional pilots on 'cloudification' and seamless internal-external collaboration.	Target met a) The implementation of most of the actions associated to the 2018 roadmap took place. b) Progess has been achieved notably towards the opening of the Connected platform to external contributors (scheduled for 2019Q1). Users' requirements and feedback have been collected in the context of the IT survey.The new user interface has been released. The work of the One-Stop Shop on collaboration continued and the processes improvement further progressed.
1-16 Web Presence	Provision of a modern and digitally	In close cooperation with DG COMM and	Target met 1. DIGIT provided the

	transformed web-presence for the European Commission and the European Institutions (Europa domain) that will allow for the rationalisation of contents and resources.	DGT, further progress in the digital transformation of the web presence of the Commission. In particular, further advancements in the three-layer approach to the organisation of the web sites and support to the development of the revamped dedicated sites.	regular support to the web presence of the Commission. 2. the 3 projects for the Drupal 8 platform further progressed 3. Improvements of existing sites and deployment of new sites have been successfully achieved.
OPTIMISED IT INVESTMENT			
1-17 Corporate IT Governance Corporate IT Governance implemented through contribution of the DIGIT/SG IT Investments Team (assessments of projects, agenda preparation of and participation in the IT Board) Among others: • Assess the value and risks of IT Investments, identify synergies and best practices and provide advice and recommendations; • Identify the IT Investments that have the potential to become a standard or corporate system and those that should leverage such existing building blocks (see output 1-8 on reusable components); • Guide DGs on the allocation of the	a) In general, bring increased coherence to the Commission's IT landscape among others by increasing re-use scenarios, finding synergies between DGs and involving DIGIT as catalyst when appropriate: % of IT budget spent having been reviewed. b) Implementation status of the action plan addressing the recommendations of an	a) Review the major IT Investments representing a minimum of 15% of the IT budget spent. b) A timely implementation of the potential action plan that	a) target met – review of major IT investments (representing a minimum of 15% of IT budget spent) was accomplished in 2018. b) Timely implementation of action plan addressing IAS recommendations.

common budget for management and information systems; • Strengthen the knowledge of the IT community through the organisation the Digital Stakeholder Forum.	ongoing IAS audit.	will address the IAS recommendations.	regular organisation of Digital Stakeholder Forum as measure to strengthen the knowledge of the IT community.
Work requested by the European Parliament			
1-18 Preparatory action (PA) on the Governance and Quality of Software Code - auditing of Free and Open Source software[14]	Timely delivery.	Agreed 2018 PA actions delivered on time.	Target met All project activities have been contracted in 2018 despite challenging procurement processes causing some delays. All actions will be delivered during 2019. Early results and project reception look very well including very positive press reception.
1-19 Preparatory action (PA) on Data analytics solutions for policy decision making	Phase 1 implementation and delivery of the action.	Development, implementation and promotion of data analytics solutions for evidence based policy making by Q4 2018.	Target partially met The inter-service for the financing decision was successfully run in the third quarter of the year, but the launch of the activities has been scheduled for 2019Q1.
1-20 Preparatory action (PA) on Linked open data in the European public administration	Phase 1 implementation in close cooperation with the Publication Office and delivery of the action.	Develop the potential and enhance the use of open data by linking them. Promote linked open data in the Commission by	Target met Work in the OP is progressing according to planning.

[14] Note that the communication related to this output (1-18 Preparatory Action - EU-FOSSA) is captured in the dedicated output EC-5 EU-FOSSA referenced later in this table.

		Q4 2018.	

General objective II: A Connected Digital Single Market			
Impact indicator: Aggregate score in Digital Economy and Society Index (DESI) EU-28 **Source of the data**: *DESI*			
Baseline (DESI 2015)	**Target** (2020)		**Latest known results** DESI 2018
0.50	Increase		0.54
Specific objective 2:	Promote modernisation of European public administrations through the provision of interoperability solutions		**Related spending programme: ISA²**
Result indicator: Degree of alignment of National Interoperability Frameworks (NIF) with the revised European Interoperability Framework (EIF), as well as the degree of their implementation. **Source of data:** *Data extracted from the National Interoperability Framework Observatory.*			
Baseline (2015)	**Milestone** (2018)	**Target** (2020)	**Latest known results**
– NIFs/EIF alignment rate 72% – NIFs implementation rate 28%	– NIFs/EIF alignment rate 80% – NIFs implementation rate 40% As defined for the ISA² interim evaluation.	– NIFs/EIF alignment rate 90% – NIFs implementation rate 60% As defined for the ISA² final evaluation.	**Current situation** Due to the new EIF and to allow time to the Member States to implement the required changes, according to the EIF communication 2017 the first EIF monitoring will take place by the end of 2019. By then, we will have the first results of the NIF/ EIF alignment rate and NIF implementation rates with the new EIF.
Completed evaluations: Annual reporting to the ISA² Committee - **Report on ISA² Work Programme 2018 execution**			
Main outputs in 2018:			
Important items linked to the ISA² programme			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
2-1 Support the DSM strategy a) Support the	a) Support the	a) In 2018, the	Target met With the adoption of the

implementation of the revised European Interoperability Framework (EIF), through the ISA[2] programme.	implementation of the revised EIF (as the EIF adopted in 2010 has been largely applied by Member States).	monitoring mechanism by the National Interoperability Framework Observatory (NIFO) will be adapted to the new EIF. It will tested by doing pilots with 3 member states and 3 DGs to fine-tune the mechanism	new EIF (European Interoperability Framework),the monitoring mechanism needed to be adapted. Three pilots with the Member States were successfully completed and provided the required input to fine tune and improve the EIF monitoring mechanism and the questionnaire.
b) Participate and contribute to relevant DSM actions such as the Catalogue of ICT Standards, the Single Digital Gateway, the eGovernment Action Plan 2016-2020, free flow of data initiative, etc.	b) Contribute to relevant DSM initiatives form the interoperability point of view.	b) The expected results for 2018 are: support the Digital Single Gateway and promote the services semantic models and the ICT standards catalogue. Support the monitoring (progress done by Member States) and the implementation of the actions deriving from the Tallinn Declaration and from the updated eGovernment Action Plan.	b. In addition to the elements already reported on during the year, towards the end of 2018, the ISA2 funded study on the architecture of the Single Digital Gateway was concluded and approved. The study will be presented to the different stakeholders in 2019. On the promotion of services semantic models and the ICT standards catalogue, a workshop was organised, very well attended and appreciated, back to back with the SEMIC 2018 Conference in Sofia in June.
2-2 Perform interoperability and	Run interoperability	In 2018:	Target met

digital checks in EU legislation. **Ensure that, through participation to the Impact Assessment and Evaluation processes, interoperability and ICT are considered early at the legislation-making and evaluation stage.**	and digital checks and maintain an ICT Register of Roadmaps[15].	• Digital checks: all new proposals of the Commission are screened for possible ICT impacts. • Interoperability checks: pilot the interoperability checks methodology – currently under development – for at least 10 legal acts. ICT Register of Roadmaps: maintain the current version of the register and start discussions with SG about possible improvements.	In 2018: • Digital checks: All new policy proposals announced through an Inception Impact Assessment were screened for ICT impacts. Out of the 17 new initiatives, 6 had ICT impacts and DIGIT followed 4 of them closely. • Interoperability checks: 63 legal acts under evaluation were pre-screened, and the in-depth interoperability methodology was piloted on 21 of them. Discussions have started to improve the process by exploring the possibility of linking the digital and interoperability screening process to Decide planning and to revisit the current form of the ICT Register of Roadmaps in order to align it with the interoperability checks methodology and to systematically document the assessment results in an online knowledge base.

[15] This latter is an Excel-based dataset, which lists the roadmaps and inception impact assessments published by the Commission since 2015 along with DIGIT's evaluation whether these initiatives may or may not have ICT impacts.

2-3 Implement the ISA² annual work programme a) Prepare, negotiate, liaise with the Member States and Commission services; administer the annual work programme in accordance with the legal decision and the extended scope to businesses and citizens targeting different levels of administration; procure in accordance with procurement rules and programme's implementation plan and budget. b) Prepare next year's work programme.	a) Adopt and execute the 2018 work programme. Procure and implement actions as planned. b.1) Prepare the 2019 work programme. b.2) Start the mid-term evaluation of the ISA² programme.	a) The 2018 work programme is adopted and launched on time (Q1 2018); actions are procured within the planned time frame and budget as detailed in the work programme. b.1) The 2019 work programme is prepared as per legal basis; draft version following ISC ready by end of 2018. b.2) Launch the mid-term review of the programme (to be completed in 2019).	Target met a) 2018 work programme adopted on 20th March 2018. b.1) The 2019 work programme was prepared as per legal basis; draft version following ISC ready and sent to ISA² committee members in December 2018. b.2) The mid-term review of the programme was launched as foreseen.
2-4 Engage interoperability stakeholders through: a) specific actions, including those contributing to the rolling plan of the Communication on	a) Identify and promote standards for corporate data and metadata management for use by the European	In 2018: a) Ensure the reuse of interoperabilit y specifications (EIF) by the Commission internal	Target partially met a) A strongest measure to integrate the EIF alignment within the Corporate governance is being evaluated.

Data, information and knowledge management;	Commission and facilitate that the Commission's information systems become interoperable.	services – aligning DIGIT solutions and services.	
b) liaising with internal and external stakeholders on interoperability;	b.1) support the activities of the Inter-service Group for the quality and innovation of Public Administrations (IGPA).	b.1) Contribute to the organisation and the content of the IGPA meetings (internal stakeholders).	b.1) Collaboration with IGPA and SRSS continues with an active role and contributions from DIGIT in meetings and in concrete projects/activities.
	b.2) engage with external interoperability stakeholders.	b.2) Provide support and animate the Chief Information Officer (CIO) network and develop further links with International Organisations like OECD. Invitations from national administrations and participation in events in Member States. Participation of stakeholders in ISA[2] working groups and actions in general.	b.2) participation to the CIO meeting in Vienna (25th September). Innovation workshop organised with Member States with very good interactions (9th November). OECD participated to one of our workshop, which will lead to more collaboration on Factsheets and studies.
c) Communication	c) Please refer to	c) Please refer to	c) Please refer to Part 2

actions presented under Part 2, section D on 'External communication' but targeting also internal Commission services.	Part 2 of this Management Plan – Section D – External Communication.	Part 2 of this Management Plan – Section D – External Communication.	of this Management Plan – Section D – External Communication.
Other important outputs			
2-5 Connecting Europe Facility (CEF) In relation with the "eGovernment Action Plan 2016-2020", roll out CEF Building Blocks in the Member States and within the European Commission and provide test services for the public and private sectors.	The performance in rolling out building blocks.	In 2018: • Increase the reuse of Building Blocks by CEF's Sector Specific Digital Service Infrastructure by 2% from the existing 86%. Increase the reuse of Building Blocks by Policy Systems projects and Corporate Systems projects by 2% from the existing reuse rate of 19% and 67% respectively.	Target met The reuse of the CEF Building Blocks is progressing beyond expectations with new commitments for reuse coming from the CEF DSIs but also from policy systems outside of the CEF Programme. This means that there are currently 120 known cases of reuse, up from 31 cases at the end of 2017, more than meeting the targets. Additional detailed information can be consulted via the interactive dashboard: https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Reuse
2-6 Preparatory action (PA) "Encrypted electronic communications of Union institutions" a) EU Secure File Exchange Creation of a managed service for the EU Institutions based on the Access Points of CEF eDelivery, ISA's eTrustEx platform and sFTP	a) Milestones*:* • Consolidation of the software elements and infrastructure elements of the managed service. • Creation of operational, governance and funding model.	a) Software elements and infrastructure elements of the managed service consolidated by Q2 2018. • Operational, governance and funding model defined • by Q3/2018.	a) EU Send (new name of EU Secure File Exchange) has been quite successful and has already signed its first MoU. In addition, two other clients are interested. For sFTP, requirements have evolved and new proposals are ready to be discussed with the clients.

b) The SECure Address Book and Certificate Exchange project (SECABC) aims at delivering a service that allows to exchange public keys of the European Institutions and other European bodies. This will allow to simplify the information exchange processes. c) The EU2F (European Union Two-Factor) project aims at providing identities to resources with a high Level of Assurance[16].	b) Milestones: • Define and implement a process for the exchange of information with one partner. • Launch a pilot with an interested entity. c) Milestones: • Inventory of partners for the different proposed options. Pilot with one partner.	b) Process and procedures defined by end of Q2 2018. • Pilot running with an interested entity by Q4 2018. c) • List of interested partners finalised by end of Q3 2018. Pilot with one partner running by end 2018.	b) On hold, awaiting validation of Pilot by partners. c) EU2F design review concluded.
2-7 Pilot project (PP) on the deployment of the online eIDs and Digital signatures This pilot project aims at providing the European Parliament and the European Commission with an online means of authentication to access online services in a secure manner, as well as digital signatures to electronically sign documents required in the daily work of the EU institutions.	a) Information systems can rely on authentica-tion and signature services integrated with national eID solutions and eIDAS-compliant signature services. b) Alignment of the signature services of the Commission and the	a) Authenti-cation and signature services integrated with national eID solutions and eIDAS-compliant signature services in pilot by end of Q2 2018. b) Progress on services alignment between Commission and	Target met a) Services are in place. b) We agreed on the Parliament's proposal to participate in a new CII (Comité Interinstitutionnel de l'Informatique) sub-group to be set up on the topic of Digitali-

[16] In the context of the Preparatory Action launched by the EP, the EU2F project aims at better securing communications and accesses to applications by generalising the 2-factor authentication. The outcome of this project will allow partners to use the EU Login app for 2-factor authentication in their own authentication service. This project is closely followed-up by the CII Security sub-group.

	Parliament. c) Authentication and signature services provide features allowing the use of national eID solutions in a way that is equivalent to local solutions. d) Users have the hardware and software required to use their national eID.	Parliament on signature by Q4 2018. c) Authentication and signature services provide features allowing the use of national eID solutions in a way that is equivalent to local solutions Q4 2018. d) Hardware and Software delivered to a pilot population: Q4 2018.	sation, including a.o. electronic signature, where we could exchange our experiences and agree on next steps. This sub-group is expected to start during Q1 2019. c) The middleware for the Belgian, Luxembourg, Estonia, Spanish, Austria and Germany national eIDs have been made available through EC Store, allowing Commission officials to use their national eID, leading by example d) Hardware and software available for German eID, under preparation for Belgian, Luembourg, Estonia, Spanish, Austrian
2-8 Trans-European Systems (TES) Rationalisation The objective of this action is, starting from the TES Cartography, to launch a process of rationalisation of the existing Trans-European Systems.	Milestones	• Strategy defined and governance for TES rationalisation set up by Q1 2018. • Roadmap drafted and approved by Senior Management by Q2 2018. • Implementation of road map started.	Target met • Following the release of the EC Digital Strategy, TES have been: • *renamed into Digital Solutions for EU-wide public services;* • *integrated into the Reusable Solutions Platform.* Consequently, the focus has now shifted from the rationalisation of these systems to a broader IT modernisation plan, proposing an approach to apply the principles

			of the EC Digital Strategy to both EU-wide and administrative / internal Digital Solutions (e.g. Sysper, etc.) This will build on the reuse work of EU-wide Programmes such as the Connecting Europe Facility (CEF). For example, the reusable solutions of this programme, known as Building Blocks, have had a very significant increase between 2015 and 2018. In 2018, the amount of TES reusing them increased to more than 100 projects. In the near future, within the EU Institutions, the promotion of reuse will be supported by the Reusable Solutions platform (RSP). The RSP will be the main contributing factor to the modernisation of Digital Solutions.

Create the digital workplace of the future

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 3:	Promote modernisation of European public administrations through the provision of interoperability solutions		
Result indicator [KPI-2]: Overall satisfaction level of the end users with the digital workplace solutions provided by DIGIT **Source of data:** *IT Workplace solutions – User satisfaction survey.* *This survey started in 2015 and it is done annually. The results of the survey compare to the Key Performance Indicator (KPI) defined in the ITIC SLA.*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
Target set in the SLA (80%) achieved	Maintain end user satisfaction at least at the level of 80%.	Maintain end user satisfaction at least at the level of 80%.	Current situation According to the IT Survey, 88% of the respondents find the service of the service desk good or satisfactory. 86%% of the correspondents who had received a new laptop were satisfied or partly satisfied.
Main outputs in 2018:			
SER – DIGITAL WORKPLACE: DIGITAL WORKPLACE OF THE FUTURE			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
3-1 Devices a) Transition from desktop to laptop by default. Improvement of the mobile services.	a) Proportion of laptops vs desktops in the European Commission. Degree of seamless	a) Completed by 31/12/2020 – • 30% expected by 31/12/2018 b) Deployed by	Thanks to an acceleration in the last quarter of the year, currently 65% of users have a laptop. This is fully on track again with the planned completion

	integration of smartphones and tablets in the DWP environment.	31/12/2019 – 30% expected by 31/12/2018.	by end 2020.
3-2 Office automation a) Rollout of Windows 10. b) Migration of Digital Workplace back office infrastructure.	a) Proportion of end user workstations migrated to Windows 10 b)Proportion of end user workstations migrated to the DWP infrastructure	a) All workstations migrated to W10, by 31/12/2018. b) Completed by 31/12/2019 – by 31/12/2018, 50% of workstations migrated.	Target partially met 23000 workstation migrated at the end of 2018. b) Actual migration to the new Digital Workplace back office infrastructure could not happen in 2018, because Microsoft stopped supporting the concept originally agreed. This determined the need of a significant change in the technical architecture and in the migration approach. Onboarding will actually start in 2019.
3-3 Email & Calendaring New email infrastructure	Migration of Exchange 2010 to Exchange 2016 platform.	By 31/06/2019.	Target met The migration was structured in 2 phases: a) a prep phase where all possible scenarios are tested and validated, b) the migration of all users on the target environment. The prep phase completed on time. In parallel, the new physical environment has been configured. The migration started on time in 2018 but encountered some problems due to significant hardware

			defects that were fixed with the supplier by the end of 2018. The migration is fully transparent to end users.
3-4 Unified Communication (UC) a) Corporate wide rollout of UC solution. b) Continue phase-out of legacy telephony.	a) Number of DGs on Unified Communication. b) Proportion of number of fixed telephone sets removed.	a) By 31/12/2019 • Depending on financial means dedicated to UC, 40% of the DGs could be on UC by 31/12/2018. b) By 31/12/2019 Depending on financial means dedicated to UC, 20% of fixed telephone sets removed by 31/12/2018.	Target met a) 76% reached by the end of the year. On track to be mostly done by end Q1 2019. b) Thanks to an acceleration in the last quarter 24% was reached by the end of the year.
3-5 Integration and Identity & Access Management Seamless and secured access to cloud services, using strong Identity Management (based on EU login).	Number of pilots integrating cloud and on premise services within the hybrid platform (as part of the Digital Workplace).	By 31/12/2019. 3 pilots will be achieved by 31/12/2018: Integration with Digital Right Management (DRM) services in the cloud; Integration of 2016 Exchange and the Cloud; Integration with SharePoint online (SP Hybrid Platform).	Target partially met Resource constraints in particular in the area of the integration with EULogin impact the progress of this project.

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%

Specific objective 4:	Standardised and centralised management of end-user IT equipment and support services		
Result indicator: Overall satisfaction with the support provided by the IT Helpdesk (call centre & proximity teams) **Source of data:** *IT Workplace solutions – User satisfaction survey.* *This survey started in 2015 and it is done annually. The results of the survey compare to the Key Performance Indicator (KPI) defined in the ITIC SLA.*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
Target set in the SLA (80%) achieved	Maintain end user satisfaction with the support provided by the IT Helpdesk at least at the level of 80%.	Maintain end user satisfaction with the support provided by the IT Helpdesk at least at the level of 80%.	88% of the respondents agree or mostly agree with the statement "Overall I am satisfied with the IT support provided by the IT Helpdesk (call centre; proximity teams)." Following a slight decrease of this value (compared to the 90% of overall satisfaction reached in 2017), DIGIT intends to focus on the suggestions proposed by staff responding to the Survey (same person following up the same ticket, longer hours of support, etc). More attention has been already paid to quality and alignment with the contractor, and more actions addressing the

			suggestions received are being put in place.
Main outputs in 2018:			
SER – CONSOLIDATION AND STANDARDISATION: CENTRALISED MANAGEMENT OF IT EQUIPMENT			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
4-1 Centralise IT equipment management – Adaptation and optimisation of internal processes.	Number of centralised processes for IT equipment management designed and fully implemented, that will replace the legacy decentralised processes heavily relying on IRMs.	Finalised by 31/12/2019. Architecture of the processes defined and 50% of processes implemented by 31/12/2018.	Target met Architecture of the centralisation is defined 3 processes implemented for the centralisation of equipment: end user equipment, printers and printing consumables. 1 process still needs to be defined and implemented in 2019: mobile device management
4-2 Optimize IT logistics processes	Deployment status of new processes in the context of the Digital Workplace.	By 31/12/2019. Architecture of logistics processes fully defined and 50% of these processes will be implemented by 31/12/2018.	Workgroup with OIB/OIL/HR/SCIC to optimise and streamline the user experience. We expect to reinforce the inventory tracking in early 2019 (previous task of the GBIs which was lost by SER and not taken over by OIB) in order to improve the logistics process.
4-3 Explore new paradigms and channels for user support (full automatisation of support	Availability of a strategy on the future user support	Overall strategy defined by 31/12/2018.	Definition of new ways of working in the context of Call for Tender End-User Support Services.

tasks, self-service functionalities, live chat for interaction with users, end user knowledge base, service desk video conferencing, etc.).	paradigm.		

Create the data centre of the future

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 5:	Modernised data centre operations towards a hybrid cloud		
Result indicator: Satisfaction of IT professionals with data centre operations **Source of data:** *DIGIT IRM satisfaction survey run annually with a sample of DGs*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
Overall satisfaction between 65 and 70%.	Increased satisfaction by a minimum of 10% as compared to baseline.	User satisfaction between 85 and 90%.	Due to internal reprioritization of resources, the launch of the survey was delayed. The survey did not take place in 2018.
Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
5-1 Cloud brokering by providing Cloud resources and managing the contract.	a) Provision of Cloud Broker Services (i.e. delivery of cloud services to European Commission and other institutions).	a.1) Cloud broker service defined and implemented in a uniform and structured fashion;	Targets met/on track. a.1) The service is available to all DGs (self-managed cloud track) and EUIs. The service is implemented in a standardized manner (common processes for all customers for request fulfilment and incident management; common tooling for request management and billing). A next version of the cloud broker service is being prepared for the Cloud

	b) Delivering and organising publication of the next Cloud call for tender, in tight collaboration with the other institutions.	a.2) Cloud broker service achieving greater coverage, in terms of: • number of institutions using the brokering service, • number of DGs using the service, • budget provided by customers to the brokering service. b) Next Cloud call for tender agreed and delivered in Q4 2018.	II CfT. a.2) The cloud broker has the following customers: - 1 Institution (Committee of Regions, since 2017) - 14 Agencies or Offices (12 in 2017) - 22 DGs (18 in 2017) The customers provided to the Cloud Broker: 6.413.000 € in 2018 (2.110.000€ in 2017 so +204% increase) b) The next call for tender Orientation document was validated in July 2018 and validated by the other Institutions in September 2018. The call for tender is named Cloud II. Since this date, DIGIT is leading an inter-institutional working group defining the requirements of the Dynamic Purchasing System: It is important to notice that almost all Agencies have declared in

	c) Contributing to the establishment of the Cloud governance for European Commission, on the basis of lessons learnt.	c) European Commission Cloud governance draft agreed in Q2 2018.	interest to join Cloud II, with DIGIT as broker. Cloud II has raised a significant interest in the market with more than 60 entities participating in the public consultation process c) An internal governance process is already in place at the level of DIGIT, with the Cloud broker acting as solution adviser for the DGs. Additionally, DIGIT has drafted a Cloud strategy for the EC under the umbrella of the EC Digital Strategy defining a cloud governance framework and shared it with the relevant stakeholders.
5-2 Creation of a private cloud on premise	a.1) A high level design document of the cloud On-premises. a.2) A validated Proof of Concept with one information system deployed using the new service delivery model.	a.1) High level document completed by Q1 2018. a.2) Proof of Concept with one information system running by mid-2018 on this new platform.	Target met a.2) Proof Of Concept of the Cloud On Prem has been finalised and presented to the various stakeholders. Presentation made to senior management at the end of 2018. Green light to start the pilot phase in 2019.
5-3 DevOps New services for the developer community:	Service catalogue	New services for developers	Target met - Second version of Developer workstation services,

- developer workstation - continuous integration - end-to-end monitoring	extension with new services	available in service catalogue	implementing improvements in connectivity to data centre services and automation capabilities, available. 15 development teams using the service. - Artefact repository (NEXUS) for continuous integration implemented and used in the most used application server technology (WebLogic). - Service for End-to-End application monitoring (Application Performance Monitoring) available through the Service Catalogue. Success story with pilot users (Publications Office) presented in Ops4Devs forum.
5-4 Delivery of Cloud-based hosting services Extending the DIGIT offering for the hosting of Information Systems to include sourcing from public cloud providers.	Inclusion of a set of Cloud based services as an integral part of the Service Catalogue for DIGIT Hosting Services, including all underpinning services (e.g. networking, storage).	Provision of Cloud based services for the main hosting technologies (WebLogic application servers and Oracle databases).	**Target met** Target technologies changed to adapt to DG MARE need to have a hosting offering on open-source technologies (JBoss/Wildfly as JEE application server and Postgress as relational database server). Technical architecture defined for JBoss and Postgress. First version of MARE's application running on pilot environment in the cloud

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents
Impact indicator: Staff engagement index in the Commission	

Source of data: *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 6:	Consolidated data centres		
Result indicator [KPI-3]: Consolidation level of data centres **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2019)	**Latest known results** (2018)
No consolidation so far, but inventory of Local Data Centres (LDC) completed.	- New corporate data centre in Betzdorf operational, old JMO data centre phased out. - Consolidation of the other corporate data centres (Bech, Host) well on its way. - The LDC of 5 DGs are integrated into the DIGIT Infrastructure. - First case of local data centre fully consolidated (ESTAT).	- 80% of all LDC consolidated into the corporate data centre and Cloud. - Full consolidation of the DIGIT corporate data centre into two main sites (Betzdorf and Windhof).	The programme for the Consolidation of Local Data Centres reached 25% in 2018. The 2019 target has been postponed: the consolidation of 80% of LDC will only be reached in 2022[17]. The consolidation of corporate data centres into two main sites (Betzdorf and Windhof) has advanced well. Please refer to detailed description of achievements by LDC in output 6.1
Main outputs in 2018:			
SER – CONSOLIDATION AND STANDARDISATION: CONSOLIDATED LOCAL DATA ROOMS			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)

[17] Note: the 2019 target has been reported to 2022 following the adoption of the new Communication on 'Synergies and Efficiencies Initiative: stock-taking and way forward', on 26/03/2019.

6-1 Data centre consolidation[18]	a) Number of local DCs consolidated. b) Status of consolidation of corporate DCs.	By end of 2018: Consolidation finalised for ESTAT, NEAR and DEVCO. Consolidation advanced for TRADE, GROW and COMP. Due diligence study for the consolidation of 3 new local DCs finalised (RTD, CNECT, SANTE) and the subsequent migration of services started. First extension of Betzdorf Data Centre delivered.	***a)*** NEAR: consolidation finalised. Physical room closure pending consolidation for DEVCO and GROW (shared rooms with NEAR). ESTAT: consolidation finished. Physical room closure ongoing. DEVCO: consolidation finished. Physical room closure pending consolidation for GROW (shared rooms with NEAR and DEVCO). TRADE: Due diligence and roadmap finished. Migration activities ongoing. GROW: due diligence finished. Roadmap and migration activities ongoing. COMP: final phase of planned migration activities. Room closure scheduled only after decommission of last information systems in DG COMP LDC. CNECT: due diligence finalised. Roadmap phase

[18] NB: The programme runs beyond 2020.

			ongoing. SANTE: due diligence finalised. Roadmap phase and migration activities ongoing. RTD: due diligence and roadmap finished. Most migration activities completed. ECHO: no local datacentre anymore; formally closed. MOVE: no local datacentre anymore; formally closed. REGIO: no local datacentre anymore; formally closed. DGT: no local datacentre anymore; formally closed. ENER: removed from scope. Close Collaboration with the CTIE of Luxembourg in the procurement process to fit the new room in BETZ. Delay encountered in the selection process due to the awarding contractor going bankrupt. A new procurement process has been relaunched and completed. Work is

			now in progress
6-2 Onboarding of the Publication's Office IT Infrastructure	a) Deployment of a new Windows domain and Office 365 solution to replace the current OP Windows domain and mail infrastructure	a) OP's email running in Office 365 by end of Q2/2018.	Target partially met a) Project cancelled - OP decided not to proceed with the Office 365 solution, and will onboard directly the standard Commission setup.
	b) Migration of some dissemination applications to the Cloud and establishment of a service in DIGIT to support operations in the Cloud.	b) CELLAR and EUR-Lex applications fully running in Amazon Web Services and supported by DIGIT as a standard service by end of Q2/2018.	b)Less critical service migration to Amazon Web Service scheduled for beginning of 2019. The reviewed cost estimation for the project triggered an ongoing reflection on OP side on the financial aspects of the migration of EUR-Lex and CELLAR to the public cloud. Project on hold until funding can be confirmed or decision to cancel is taken.
	c) Convergence of network and telecommunication services and technical components to DIGIT standards.	*c)* Services such as videoconference, SMS gateway, DNS, firewalls and some other telecommunication services migrated to DIGIT services by end of 2018.	c)The network, network security and telecommunications services have been migrated and Digit is now operating these services for OP as expected

Better IT Security

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 7:	Strengthened cyber-resilience		
Result indicator [KPI-4]:	Improvement of cyber-resilience will be measured using a measure of IT security capability that provides an indication of the overall level of development of IT security across a range of critical fields from the assurance that the basic IT security procedures are respected to fully developed quality assurance		
Source of data: *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
IT security capability levels are low, below 3 on the process maturity scale of ISO 15504 (5 Optimizing, 4 Predictable, 3 Established, 2 Managed, 1 Performed, 0 Incomplete)	Achievement of level 1 in all core processes identified and level 2 in 50% of critical processes (asset management, vulnerability management, system administration).	Achievement of level 3 or above (established, predictable or optimizing) in the most critical processes (to be defined) and at least 2 in the processes defined as core.	Current situation (as achieved) Core process are defined in the Implementing Rules 2017/8841 of the Commission decision 2017/46. All of them are integrated within the systems lifecyle and performed, attaining at least level 1 on the maturity scale. Some, but not all of them, already reached level 2 or 3. In line with the core concept underlying the provisions of the decision 2017/46, dedicated efforts have been put in place to raise the maturity of the risk management process, following the methodology published

			in Q1'2018. Three processes have been identified as critical: technical asset management (AM), vulnerability management (VM) and system administration (SYS-ADM). For these processes: - AM: level 2 attained (proof of concept of a managed process successfully completed) - VM: level 3 attained (established process fully operational) - SYS-ADM: level 2 attained (proof of concept of a managed process successfully completed)
Main outputs in 2018:			
SER – ICT SECURITY: BETTER IT SECURITY SERVICES			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
7-1 IT Security processes a) Review of the privileged user Access Rights on limited parameter of corporate data centre (HeRiC project). b) Implementation central asset repository for Vulnerability Management.	a) Progress in process definition, solution approval and solution evaluation. b) Progress in strategy and process definition, and solution approval.	By end 2018 a) Solution set up and validated on limited perimeter of corporate data centre. b) Strategy and process approved, and solution validated on limited parameter of corporate data centre.	Target met a) Solution installed and validated in the proof of concept environment on limited perimeter. b) Strategy approved. Solution installed and validated in the proof of concept environment on limited perimeter.

c) Extension of vulnerability scanning services for corporate infrastructure. d) Enabling IS Risk Management processes at corporate level.	c) Percentage of DIGIT infrastructure covered by vulnerability scans. d) Number of IS Risk Management processes reviewed.	c) 20% of DIGIT infrastructure covered by vulnerability scans. d) 20 IS Risk Management processes reviewed.	c) Target aligned with the decision of the ISSB, i.e.: coverage of 15 selected corporate systems, achieved (with a proof of concept, covering the last 2 systems, being finalised). d) The methodology is available. High level presentations of the risk management processes continued to several key stakeholders. Basic tool, supporting the methodology, available for the whole EC. First version of a semi-automated tool (GovSec) released for testing. Training content on the risk management methodology (two modules: foundations, practitioners) delivered and tested through pilot training sessions (feedback now being integrated in the improved version). Continuous coaching, reviewing and assistance in DG's IT security risk assessments (including DIGIT).
e) IT Security processes integration in the System Life-Cycle (S^2LC).	e) Number of IS following S^2LC global framework (including IT security processes).	e) 40 IS following S^2LC global framework.	e) Only limited assessment was possible in 2018. Results delivered to ISSB in October in the form of IT Security Risk Management Report. S^2LC is under finalisation to be used

			as guidance for System Owners and will be progressively integrated within IT security governance.
7-2 Infrastructure security **Provide a secure infrastructure, reducing risks for the IT systems and different users across the board, through:** a) Network segregation, Network security, Network encryption and endpoint security;	a.1) Adequate network segmentation / segregation and network access control. a.2) Adequate Endpoint security.	a.1) Execute the segmentation / segregation plan as defined in the Workplace solutions (See Digit Priority 2, specific objective 3) and data Centre of the future (Digit priority 3, specific objective 5-2) programs. a.2) Execute the endpoint security workplan as defined in the Workplace solutions (See Digit Priority 2, specific objective 3) program. a.3) HTTPS	Target met a.1) Segregation in the Digital Workplace environment – as reported under output 3-2. Segregation in the data centre (on-premise cloud) – as reported under output 5-2. Network segregation is a key focal domain in the IT security strategy 2019-2020. A new network security standard is under development. a.2) End-point security – as reported under output 3-2. a.3) Two supporting

	a.3) HTTPS everywhere policy available.	everywhere policy defined and Information System owners are aware about the policy and first steps towards compliance have been taken.	standards for the HTTPS everywhere project are developed/adopted: • TLS Standard (in ISC). • A Web application standard (adopted Oct 2018). "HTTPS Everywhere" technical strategy approved by the DISB. A project steering board will be established to monitor project execution
b) Secure software development environment;	b) Service catalogue extension with new services: • developer workstation; • continuous integration; • end-to-end monitoring.	b) New services for developers available in service catalogue (See Digit Priority 3, specific objective 5-3).	b) Status as reported under output 5-3.
c) Security by consolidation.	c) SHS: Number of SHS environment.	c) 4 new systems are on boarded onto SHS.	c) Status as reported under objectives 5 and 6.

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents	
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*		
Baseline (2014)	**Target** (2020)	**Latest known results** (2018)
65.3%	Increase	69%
Specific objective 8:	Provision of IT security operations	

Result indicator 1: Efficiency of vulnerability patching expressed as a percentage of systems compliant with the time-to-patch rate targets. The time-to-patch rate measures in terms of days the time from identification of the vulnerability to effective patching. A set of time-to-patch rate targets are required to reflect different criticality of the vulnerabilities and information systems. **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
Time-to-patch rate is high for systems managed by DIGIT (ITIC environment and DIGIT data centres) but unsatisfactory at overall corporate level.	Increase by 50% the number of systems achieving their time-to-patch rate targets.	Compliance with the time-to-patch rate targets for at least 90% of systems in the EC IT environment.	The end-to-end vulnerability process, documented in 2015 and field-tested throughout 2016, is operational and covers all IT systems in the EC corporate environment. The process systematically includes time-to-patch progress monitoring. The following time to patch targets are met and exceeded: average time to patch (4 days, versus 7 days target), number of vulnerabilities not solved within 90 days (7, versus 10 target). The cases where patching has to be delayed due to business continuity reasons (duly justified cases) are recorded and followed up as "exceptions").
Result indicator 2: Coverage/accessibility of the corporate incident response service provided by DIGIT (percentage of system owners aware of and using the service of CSIRC) **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
CSIRC service is available and present in DIGIT service catalogue but many stakeholders, including system owners, are still not aware of it or do not use it.	Include measurement of system owners' awareness and assessment of accessibility of the corporate	At least 90% of system owners aware and using the service.	We have improved the way our CSIRC service is promoted to ensure the maximal visibility required: 1. Services are defined in DIGIT service catalogue where the IT

	incident response service provided by DIGIT.		security incident notification process is fully described; 2. Extensive promotion done to the LISO network. Twice a year a dedicated security incident reporting is presented to the LISO meeting; 3. Services are also promoted through the Cyber-Aware programme which is reaching out a very large audience in the Commission and hence also system owners. 4. The Central HelpDesk received a training to route IT Security incidents to the CSIRC. Through all the above actions, and based on the analysis of the allocation of the incidents that happened last year, we believe we reached the target. Obviously, keeping system owners aware is a never ending process that needs to be constantly repeated

Main outputs in 2018:

SER – ICT SECURITY: BETTER IT SECURITY SERVICES

Description	Indicator	Target	Latest known results (situation on 31/12/2018)
8-1 Monitoring and response Maintain and develop the operational cyber-defence capabilities, improve their maturity through the following main activities:		By end 2018	Target met with the following details:

8-1.1 – Security Monitoring: a) Security Monitoring capabilities improvement (SOC); b) Extension of Security Monitoring services provisioning.	8-1.1 a) Percentage of new Windows 10 systems monitored. b) Completion of strategy definition and approval for providing extended security monitoring services.	8-1.1 a) All new Windows 10 systems monitored. b) Strategy defined and approved.	a) All new deployed Windows 10 systems are monitored. b) Strategy has been defined to extend the scope of security monitoring by integrating it natively as part of the main IT infrastructure transformational programmes. Namely: Cloud (both public and private cloud on prem) and Digital WorkPlace (DWP)
8-1.2 – Security Incident Response: Maintain and develop Security Incident Response capabilities, improve their maturity: a) Improve remote forensics capabilities; b) Security hunting service[19] development.	8-1.2 a) Completion of local deployment of EnCase solution in Brussels. b) Completion of Security hunting service setup.	8-1.2 a) EnCase solution deployed and operational in Brussels. b) Security hunting service defined and operational for corporate infrastructure	a) Encase has been deployed and can be used for any computer in the EC. b) Cyber Threat Hunting service is operational.
8-1.3 – 2017 IAS audit recommendation – Phase 1: a) Improve change	8-1.3 a) Completion of solution identification	8-1.3 a) Solutions identified and documented.	a) Following IAS recommendation a detailed ITIL Maturity Assessment Report has

[19] This service aims at performing proactive and iterative search through networks to detect and isolate advanced threats that evade existing security solutions.

management process for DIGIT.S infrastructure; b) Improve baseline monitoring of DIGIT data centre based on SHS experience.	for change management process in DIGIT.S infrastructure. b) Completion of baseline security monitoring for most used technologies in DIGIT data centre.	 b) Most important SHS monitoring scenarios for baseline security monitoring identified and documented.	been drafted. This report is among other addressing the improvement of the change management process. On top, the accompanying Operations Handbook has been developed. b) In order to improve baseline monitoring of DIGIT data centre, it has been decided to integrate the security monitoring services natively in the Cloud on Premises project which is meant to be providing the new Data Centre hosting services. By integrating the security monitoring services from the design phase, we are ensuring the extension of those services to all systems that will be migrated to this new infrastructure.
8-2 Security assurance services: a) Improve IT vulnerability services: false positive and exception procedure	a.1) Completion of procedure development for Vulnerability Assessment "false positive reduction".	a.1) Procedure proposed and agreed	Target met a.1) Procedure was put in place in 2018, by assessing false positives and modifying their severity level within the testing platform (Tenable) so that they are not reported again. It was tested with existing customers (DIGIT.S2), and in the context of Assets Inventory/ Vulnerability Management project (AIVM); this procedure will also be tested in the Proof-of-Concept with critical systems.

b) Improve Test Centre capabilities	a.2) Test of exception management procedure on a limited scope of corporate data centre. b) Identification of code review mandatory criteria.	a.2) Procedure tested. b) Criteria identified and validated.	a.2) Procedure drafted and agreed with DIGIT.C; it was tested in a number of cases already. b) The criteria for mandatory code review were added in the IT Vulnerability Management Standard, adopted in 2018.

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents	
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*		
Baseline (2014)	**Target** (2020)	**Latest known results** (2018)
65.3%	Increase	69%

Specific objective 9:	Better IT security decision making		
Result indicator: Corporate level compliance with IT security rules **Source of data:** *The annual survey of HR.DS will be taken over by DIGIT S.*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
50%	70%	80%	DIGIT developed and documented, in March 2018, the IT Security Risk Management Methodology (ITSRM[2]). The methodology allows system owners to identify, evaluate, document and treat IT-security risks at the level of the information systems that support the Commission business/policy processes. DIGIT has

			engaged with the LISO network and the system owners community to disseminate the methodology and to assist in its practical application through dedicated coaching, training and support. The methodology has, since, been applied to a first set of information systems in DIGIT and in other DGs: first of all, to help the system owners perform the risk assessments and document the level of implementation of security controls for their information systems and, on top of this, to report centrally to the governance level on IT security risks. In October 2018, DIGIT.S presented to the Information Security Steering Board the first corporate IT security risk management report, identifying 6 areas of IT security risks affecting the Commission on a corporate level and indicating the areas of improvement.
Main outputs in 2018:			
SER – ICT SECURITY: BETTER IT SECURITY SERVICES AND PARTIAL CENTRALISATION OF THE LISO ROLE			
Description	**Indicator**	**Target**	**Latest known results (2018)**
9-1 IT Security governance and policy: a) Specification, documentation,	a) Progress in	By end 2018 a) By Q2 2018.	Target met a) Asset Management

review, approval and dissemination of the IT security standards with focus on VM and AM in line with the IAS audit report recommendations; b) Annual revision and update of corporate IT security strategy and monitoring its implementation; c) Support, inform, coordinate and report to the IT security governance bodies.	the documentation, review, approval and dissemination of the IT security standards. b.1) Status updates to ISSB and DISB b.2) Preparation and adoption of the revised strategy. c) Effectiveness of information, support, reporting and coordination of IT Security governance bodies (ISSB, CRMG, DISB...).	b.1) Updates available at ISSB and DISB meetings b.2) Annual review of the strategy completed and updated version submitted to ISSB for adoption. c) IT Security governance bodies effectively coordinated and informed.	and Vulnerability Management standards have been adopted and published in October 2018. A communication on this was launched to stakeholders. b) Revised draft reviewed by ITCB and GDR, submitted for approval to the ITCB (targeted approval date: February 2019) c) continuous action, on track, as summarised in the header above.
9-2 Support of the implementation of the IT security policy on corporate level, through: a) Building a central LISO support function;	a) Progress in deployment and assessment of pilot service run by central team of IT	a) Assessment of pilot service completed.	Target met a) Central LISO team built with resources put at disposal (LISO from DIGIT, PMO and RTD) and one external resource. Description of services finalised. Onboarding of

	Security Advisory Officers.		additional DG's completed (NEAR, CONNECT, REA and DGT). Pilot assessment phase still on-going (on-boarding process of 4 more DGs/Agency took longer than foreseen).
b) Foster an information and knowledge sharing infosec community in line with the IAS audit report recommendation;	b) Progress in InfoSec community setup.	b) Information sessions organised to share IT security best practices.	b) Sessions organised/ information shared with each specific target audience (General staff, Management, LISO, Specialised audiences like the developers, communication specialists, assistants of DGs, …)
c) Provision of assistance and coaching*.*	c) Performance of assistance and coaching for IT security policy, technical and regulatory aspects service*.*	c) Reduced response: 80% of answers to be provided within 5 working days.	c) Continuous answering to question from participating DG's. structural improvement achieved (sharepoint, FAQs, action plans, templates, dedicated meetings, etc).
9-3 IT security awareness raising Continuity of structured programme for cyber-security awareness raising.	Assessment of customer experience of Cyber Aware information sessions.	Participant feedback rating on Cyber Aware sessions of at least 75%.	Target achieved with 35% of VIP/management and more than 40% of all users informed in face to face sessions. Much larger groups have been reached via the online channels with cyber awareness raising information. Customer satisfaction exceeds overall the targeted 75%.

Optimise DIGIT's delivery

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents		
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*			
Baseline (2014)	**Target** (2020)		**Latest known results** (2018)
65.3%	Increase		69%
Specific objective 10:	Increased customer focus		
Result indicator: Degree of the implementation of DIGIT's Customer Orientation Strategy **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
DIGIT's Customer Orientation Strategy endorsed by DIGIT's senior management.	All actions of the Customer Orientation Roadmap are implemented in 2017.	If necessary, implementation of corrective actions and/or additional actions complementary to the roadmap.	Major steps were taken with the CRM function being in place.
Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results** (situation on 31/12/2018)
10-1 Set up a centralised CRM function within DIGIT	Number of DGs covered by the central CRM.	Minimum service for all DGs by end of 2018, no overlap with other DIGIT units.	This target has been reached as the reinforced team is now able to assist all DGs in their operational and strategic IT matters
10-2 Create a customer knowledge base for DIGIT	High level understanding of our customers.	Very good understanding of the DGs we most commonly deal with by end 2018.	Target met

General objective I:	To help achieve the overall political objectives, the Commission will effectively and efficiently manage and safeguard assets and resources, and attract and develop the best talents
Impact indicator: Staff engagement index in the Commission **Source of data:** *European Commission*	

Baseline (2014)	Target (2020)		Latest known results (2018)
65.3%	Increase		69%
Specific objective 11:	Optimised resources management		
Result indicator [KPI-5]: Availability of a management system allowing flexible allocation of resources to priorities **Source of data:** *DG DIGIT*			
Baseline (2015)	**Milestone** (2017)	**Target** (2020)	**Latest known results** (2018)
DIGIT defined a methodology in order to assess the priority and the maturity of its processes, and the adequacy of the resources (staff) allocation. It resulted in the identification of exact staff needs essential to ensure the achievement of priorities as well as potential optimisation areas. It is used as a support for an optimised reallocation of vacant posts to priorities. This priority identification relies on DIGIT's Work Programme, which provides an accurate picture of DIGIT's activities and also establishes a link with the HR allocation, budget allocation and risks, providing staff and management with a clear and dynamic picture of its activities, resources and goals.	- Further alignment of DIGIT's Work Programme and budget structure; - Identification of priorities, resources needs and optimisation potentials embedded in the annual planning exercise.	Availability of a management system embedded in DIGIT's operations which: - allows flexible allocation of DIGIT's resources (staff and budget) to its priorities; - is owned and used by DIGIT's management.	Process in place to ensure flexible allocation of resources to priorities, namely thanks to the programming based on DIGIT work programme, Priority Management Board and DIGIT HR board. DIGIT’s delivery model allows for better capacity management and flexible allocation of resources to priorities.
Main outputs in 2018:			
Description	**Indicator**	**Target**	**Latest known results**

			(2018)
11-1 Finalisation and implementation of a consolidated cost model as a basis for charge-back of services	a) Methodology and analytical data from the consolidated DIGIT cost model is agreed amongst all parties in DIGIT and DG BUDG; ready to be used for budget programming and charge-back b) Cost model results enable valuing all WP services and are ready to be used for Service catalogue and charge-back services latest for the financial year 2019.	a) Final version of consolidated cost model. Version agreed to become master data for the future and presented to the stakeholders. Timely communication for the yearly budget exercise. b) Alignment of WP services with the cost model and the Service catalogue. Documentation of chargeable services in the Service catalogue. Endorsed pricing strategy.	The scope and the results of the consolidated cost model presented in our paper apply mutatis mutandis to the financial situation of the current MFF. a) Methodology and analytical data from the consolidated DIGIT cost model is available for the relevant part. b) Cost model results enable valuing all current WP services.
11-2 Strengthen the new Digit Delivery Model: a) Create and document aligned competency pool processes and practices;	a) Number of processes documented (% of total number of actual processes – e.g. recruitment, training).	a) By mid-2018: 50%; By end 2018: 100%.	a) Five processes have been identified: recruitment, training, documentation, assignment, capacity management. Of these, three have been completely implemented (recruitment, training, documentation) and two are described under the

			last revision (assignment and capacity management). Total progress is (90%).
b) Staff new projects from the competency pools;	b) Number of new DIGIT.B projects staffed from pool instead of on ad-hoc basis.	b) 80% of new projects starting in 2018.	b) Objective reached: 100% of new (2018) projects in B1 and B4 were staffed from the pools
c) Establish supporting functions to ensure capacity to deliver with new delivery model: Project Management Office, Pool Capacity Management;	c.1) % of projects running under the new delivery model participating in consolidated reporting.	c.1) 100%.	c.1) Objective reached: 100%
	c.2) Capacity management: time to have resources in project, from the moment the budget for a project is available to DIGIT.	c.2) For 80% of new projects the required resources are available within 2 weeks after the availability of budget for the project (95%: within 1 month).	c.2) Objective reached: From the moment budget is available for its usage in the proper budget lines, the figure is around 80% (2 weeks) – 95% (1 month)
d) Establish reporting of development-related KPIs;	d.1) Number of KPIs upon which reporting is done.	d.1) Q1: setup of instrumentation to measure at least 10 KPIs.	d.1) objective is reached with 11kpis set-up
	d.2) Number of projects under reporting.	d.2) Q2: pilot for 2 projects. End 2018: operational for 50% of ongoing projects in new delivery model.	d.2) four projects have been on-boarded Opsys.track1 , Wifi4eu, SEP submission and Evaluation. 36% of the projects are using the KPI dashboard. We are now focussing on the quality on the data to

			continue the on-boarding of other projects
e) Identify support efficiencies by consolidating service operations across domains, e.g. service desks, application maintenance, start pilot implementations.	e) Indicator will be defined before submission of final MP.	e)Consolidate the service operations of eProcurement and eGrants as according to the gradual convergence of the two platforms, focusing first in 2018 on SEDIA Organisation Registry and SEDIA Portal.	e) the introduction of SEDIA services for eProcurement (the participant registry since January and the SEDIA portal delivered in June for imminent rollout) led to the handling of several e-Procurement related tickets by the Grant helpdesk team. Since May, the helpdesk and training services for eGrants and eProcurement were both put under the responsibility of the same team leader in perspective of further convergence.