

2016 Discharge to the Commission

WRITTEN QUESTIONS TO COMMISSIONER MOEDAS

Hearing on 19 October 2017

EU 2020, European semester

1. According to the Strategic Plan 2016-2020 the DG R&I pursues for strategic objectives with regard to Europe 2020. Can the Commission inform the committee about the current state-of-play?

Commission's answer:

Europe 2020 targets are for the European Union as a whole and are further broken down into national targets. The European Commission, and individual Directorates-General within the Commission, contribute to the achievement of the targets through their own spending, and also through regulatory action or other non-financial initiatives.

Horizon 2020 is EU's main instrument for the funding of R&I. After the first three years of implementation, the interim evaluation of Horizon 2020 assessed that the programme is on track to contribute to the creation of jobs and growth and the achievement of the priorities of the Juncker Commission.

The key Europe 2020 target to which DG Research and Innovation contributes is to invest 3% of the EU's GDP in Research and Development by 2020. At the end of 2016 the figure was 2.03%.

Of the total investment in Research and Development across the European Union, the share of Horizon 2020 direct investment is 2.1%. This underlines that, despite the importance and impact of Horizon 2020, achieving the 3% target requires progress in other areas, in particular by strengthening Europe's Research and Innovation systems and achieve the European Research Area through working with Member States.

2. DG R&I proudly states. "For the annual European Semester exercise of economic policy coordination, the Commission released the country reports with substantial and pertinent R&I content. The Council then adopted the 13 Country-Specific Recommendations directly addressing R&I (BE, CZ, DE, DK, EE, ES, FR, IE, LT, LU, LV, NL and PT) and a set of others covering issues of DG RTD's interest." Which R&I recommendations were issued for which country?

Commission's answer:

For the 2016 European Semester cycle, there were 13 Country Specific Recommendations addressing research and innovations (R&I) aspects. For the 2017 cycle, 9 Country specific recommendations on R&I were issued. For these, the content in 2017 was in general similar that of the previous year.

Here is the list of countries concerned by R&I Country Specific Recommendation in 2016 and/or 2017.

Belgium

(2016) "**Boost the capacity to innovate, notably by fostering investment in knowledge-based capital.**" (CSR 3)

(2017) "**Foster investment in knowledge-based capital, notably with measures to increase digital technologies adoption, and innovation diffusion.**" (CSR 3)

Czech Republic

(2016) "**Strengthen governance in the R&D system and facilitate the links between academia and enterprises.**" (CSR 3)

(2017) "**Remove obstacles to growth, in particular** by streamlining procedures for granting building permits and further reducing the administrative burden on businesses, by rolling out key e-government services, by **improving the quality of R&D** and by fostering employment of underrepresented groups. (CSR 2)

Denmark

(2016) "**Incentivise the cooperation between businesses and universities.**" (CSR 2)

Estonia

(2016) "**Promote private investment in research, development and innovation, including by strengthening cooperation between academia and businesses.**" (CSR 2)

(2017) "**Promote private investment in research, development and innovation, including by strengthening cooperation between academia and businesses.**" (CSR 2)

France

(2016) "**Take steps to simplify and improve the efficiency of innovation policy schemes.**" (CSR 4)

(2017) "**Simplify and improve the efficiency of public support schemes for innovation.**" (CSR 4)

Germany

(2016) "**Achieve a sustained upward trend in public investment, especially in infrastructure, education, research and innovation,** by using the available fiscal

space and prioritising expenditure." (CSR 1)

(2017) "**Accelerate public investment at all levels of government, especially in education, research and innovation**, and address capacity and planning constraints for infrastructure investments." (CSR 1)

(2016) "Reduce inefficiencies in the tax system, in particular by reviewing corporate taxation and the local trade tax, modernise the tax administration and **review the regulatory framework for venture capital.**" (CSR 2)

Ireland

(2016) "**Enhance the quality of expenditure**, particularly by increasing cost-effectiveness of healthcare and **by prioritising government capital expenditure in R&D** and in public infrastructure, in particular transport, water services and housing." (CSR 1)

(2017) "**Better target government expenditure, by prioritising public investment in transport, water services, and innovation in particular in support of SMEs.**"(CSR 2)

Latvia

(2016) "**Pursue the consolidation of research institutions and provide incentives for private investment in innovation.**" (CSR 3)

Lithuania

(2016) "**Take measures to strengthen productivity and improve the adoption and absorption of new technology across the economy. Improve the coordination of innovation policies and encourage private investment, inter alia by developing alternative means of financing.**" (CSR 3)

(2017) "**Take measures to strengthen productivity by improving the efficiency of public investment and strengthening its linkage with the country's strategic objectives.**" (CSR 3)

Luxembourg

(2016) "**Remove barriers to investment and innovation that limit economic development in the business services sector.**" (CSR 2)

(2017) "**Strengthen the diversification of the economy, including by removing barriers to investment and innovation.**" (CSR 1)

The Netherlands

(2016) "**Prioritise public expenditure towards supporting more investment in research and development.**" (CSR 1)

(2017) "**Use fiscal policy to support domestic demand, including investment in research and development.**" (CSR 1)

Portugal

(2016) "**Incentivise cooperation between universities and the business sector.**" (CSR 5)

Spain

(2016) "Take further measures to improve the labour market relevance of tertiary education, including by **providing incentives for cooperation between universities, firms and research. Increase performance-based funding of public research bodies and universities and foster R&I investment by the private sector.**" (CSR 3)

(2017) "**Ensure adequate and sustained investment in research and innovation and strengthen its governance across government levels.**" (CSR 3)

3. Why does the DG R&I not publish its country specific recommendations, although the Parliament explicitly asked all directorates general to do so?

Commission's answer:

The Directorates-General of the Commission do not individually issue country-specific recommendations. The recommendations are proposed by the Commission and then formally adopted by the Council after discussion in the relevant committees and Council formations and endorsement by the European Council. Detailed and comprehensive reporting on their implementation takes place in the context of the country reports of the European Semester, which are produced annually by the Commission services. Eurostat also publishes yearly updates of the developments regarding the main indicators of the Europe 2020 Strategy.

Where relevant, a Directorate-General reports in its Annual Activity Report on its contribution to the European Semester, including on how its activities contribute to the annual process leading to country-specific recommendations to Member States. Distinction should be made between the reporting on indicators measuring progress on the Europe 2020 strategy in these reports and the reporting in the annual activity reports of the Directorates-General presenting the results of actions taken by reference to the objectives set in the management plan. The Annual Activity Reports are not intended to provide comprehensive and detailed reporting on the implementation of country-specific recommendations. Please also refer to the document "Detailed replies to the specific requests made by the European Parliament complementing the Commission report on the follow-up to the discharge for the 2015 financial year" (COM(2017)379 final). See link: <http://www.europarl.europa.eu/cmsdata/129482/2017-10-10-Draft%20EP%20Detailed%20replies%20FINAL.PDF>.

Nevertheless, the Research and Innovation aspects of the Commission's Semester Country Report are included in the annual compendia made available via the

Policy Support Facility website and distributed to a very large number of stakeholders via regular "newsletter" channels.

See: <https://rio.jrc.ec.europa.eu/en/library/research-innovation-european-semester-country-reports-2017> to access last year's compendium.

4. CSR were adopted in 2016. How are the Member States reacting to these CSR in general, are the Member States achieving progress this year as they implement these CSR?

Commission's answer:

First and foremost, after the Commission issues its proposals for Country Specific Recommendations (CSRs) to the Council, Member States have the opportunity to react in the various Committees and Council formations, before their final adoption by the Council.

The European Commission actively engages with national authorities and stakeholders on discussions around the CSRs to clarify their underlying reasoning, when necessary, and to maximise their policy impact. In general, Member States react positively to the Research and Innovation analyses made as part of the European Semester and share the challenges identified in the Country Reports and fed into the Country Specific Recommendations.

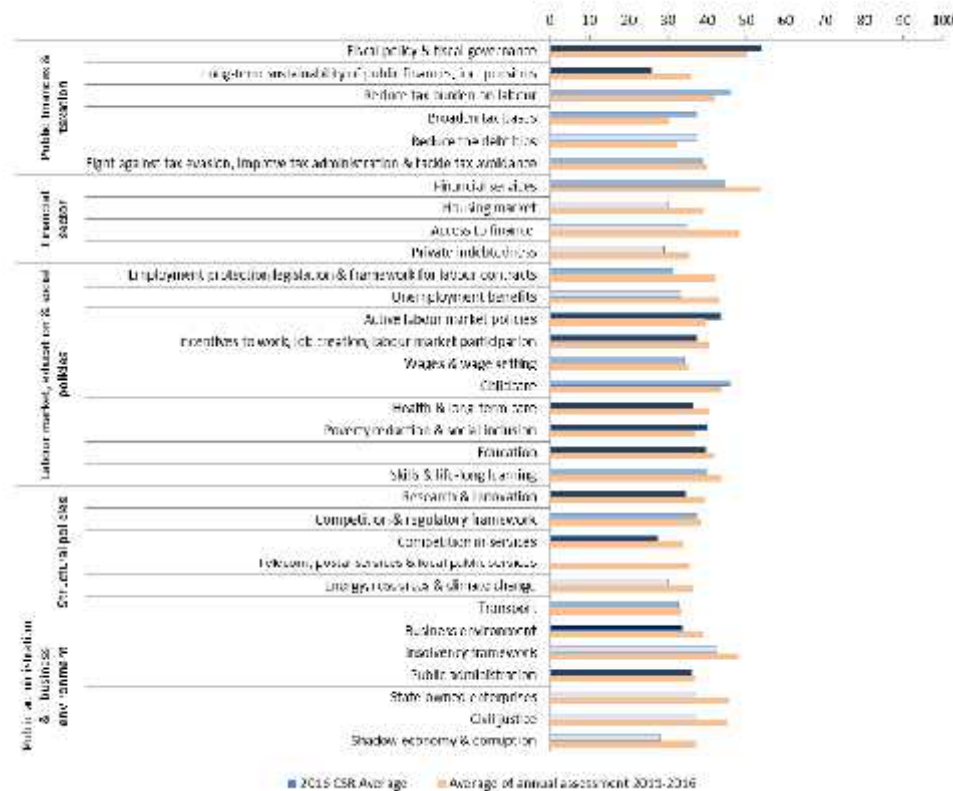
The Directorate-General for Research & Innovation of the European Commission has had an intense interaction with Member States around the European Semester analyses. This interaction has been ensured by presenting the European Semester approach and country analyses, as well as the corresponding CSRs, to the European Research Area and Innovation Committee, including in the context of a dedicated seminar with Member States. The Commission has also engaged in bilateral dialogues with national administrations in 2017 with a considerable number of Member States (including BE, CZ, AT, ES, LT, PT).

It should also be noted that in 2017 the Commission has, for the first time, consulted Member States on the analytical parts of the Country Reports before their release in February 2017. This approach, very much appreciated by Member States, allowed for an improvement of the shared understanding between Member States and the Commission on the analysis made, and permitted to correct factual mistakes.

Moreover, several Member States have requested support from the European Commission to implement reforms linked to Research and Innovation CSRs. The Horizon 2020 Policy Support Facility (PSF) has been deployed during the reference period to help Member States who requested support, in the design, implementation and evaluation of reforms of the national Research and Innovation systems. Latvia, Lithuania and Estonia have all benefited, or will soon benefit, from operational policy recommendations put forward by high level experts and policy peers from countries that successfully put in place reforms in the target areas addressed by the PSF support.

The last assessment of the uptake of Semester recommendations, of May 2017, indicates that most countries made either limited progress or some progress in implementing the 2016 CSRs on Research and Innovation. This implementation level is similar to that of other policy fields for which CSRs were issued. Implementing successful policy reforms takes time and it is important to assess the process over the medium term. From a multiannual perspective, reform progress has been greater. The Semester Country Reports of 2018 (planned for release in February 2018) will include the monitoring of progress in relation to the implementation of the 2017 Country Specific Recommendations.

Figure 3: Assessment of progress on 2016 country specific recommendations by policy area



Source: (COM(2017) 500 final) Communication on the 2017 European Semester: Country-specific recommendations

- Will the Commission improve its reporting on the impact of Horizon 2020 on economy, industry and employment by including performance indicators, which respond to the DG preliminary strategies and objectives and to the international classifications for innovation capacity and results?

Commission's answer:

The Commission monitors the implementation of Horizon 2020 through annual monitoring reports, based on Horizon 2020's key performance indicators listed in the legal base. The fact that, for the first time, these Key Performance Indicators are identified and agreed at the start of the Framework Programme is a significant

development compared to previous Framework Programmes.

The Commission considers that the impact of Horizon 2020 on the economy, industry and employment is best assessed by evaluation. Based on the Commission's Better Regulation Guidelines, evaluations go beyond the indicators set in the legal basis and gather additional data to assess impacts.

The Interim Evaluation of Horizon 2020 published in 2017 assessed the progress of the programme towards its objectives after the first three years of implementation. However, the impact of science and innovation can only be meaningfully assessed over the medium to long term.

The Interim Evaluation also identifies areas for improvement, including data availability, measurability and reliability as well as a lack of a fully-fledged indicator system to track progress towards (societal) impact. These are identified areas for long term improvement.

As well as the interim evaluation of the programme, the Regulation establishing Horizon 2020, Regulation 1291/2013 (Article 32(4)) states that:

"By 31 December 2023, the Commission shall carry out, with the assistance of independent experts, selected on the basis of a transparent process, an ex-post evaluation of Horizon 2020, its specific programme and the activities of the EIT. That evaluation shall cover the rationale, implementation and achievements, as well as the longer-term impacts and sustainability of the measures, to feed into a decision on a possible renewal, modification or suspension of any subsequent measure. The evaluation shall take into consideration aspects relating to the dissemination and exploitation of research results."

6. How will the Commission help to improve regional success rates of Horizon 2020 and its successor in order to make the funding more inclusive? Will the Commission consider options such as significantly bigger share of small grants, increased funding for mobility actions, as well as advisory support offices in Member States?

Commission's answer:

Horizon 2020 is a programme based on excellence across Europe. This was a choice proposed by the Commission, and fully supported by the European Parliament and the council during the inter-institutional negotiations. This means that funding is allocated to the best proposal, without using any geographical criteria.

The lower success rates of H2020 compared with FP7 are a general concern. They are a reflection of the success of the programme in generating higher numbers of applications due to the increased attractiveness of the programme to applicants, not only in the type of research topics being offered but also the reduced time to grant, the improved ease of application and the many other related simplifications which have been brought in. It should also be noted that success rates have been declining for other programmes similar to H2020, for example in the United

States.

The Commission has assessed the size of the projects in the context of the Horizon 2020 interim evaluation. This analysis did not find a link between the size of the project on the one hand and the participation of lower performing Member States (in terms of Research and Innovation) on the other hand.

Nevertheless, the Commission is concerned about the innovation divide in Europe and has a dedicated programme which aims at spreading excellence and widening participation in Horizon 2020. Its actions, with a budget of more than EUR 800 million, are: 'Teaming', supporting the development of centres of excellence via partnerships with institutions of Research and Innovation excellence; 'Twinning', to build on the potential of institutional networking; and 'ERA Chairs', to bring excellent researchers to institutions with high potential.

Other widening actions are the Policy Support Facility, which offers expert advice to public authorities; the European Cooperation in Science & Technology (COST), which provides low-hurdle access to cross-border scientific networking, and the Widening Network of National Contact Points.

The Horizon 2020 interim evaluation concluded that compared to the previous framework programme progress has been made in this area but that more needs to be done to build the Research and Innovation capacity in lower performing countries, for instance through the Policy Support Facility.

In October 2017 a specific Policy Support Facility Mutual Learning Exercise will start on the topic of Widening and Synergies. This aims at facilitating the exchange of practices amongst interested Member States. This complements a number of other cross-cutting measures, such as paying special attention to topics of potential interest to Widening countries and mobilising of all thematic NCP networks to better involve Widening countries.

Finally, complementing the Widening actions, European Structural and Investment Funds (ESIF) have been used for Research and Innovation capacity-building, notably in low performing Member States and regions. In the period 2014-2020, more than EUR 40 billion are allocated for Research and Innovation activities through a process of smart specialisation, which encourages all Member States to identify and build on their existing strengths. The Commission has taken a number of steps to improve synergies with the Structural Funds, of which the Seal of Excellence is a visible example. See also the reply to question 37.

Nevertheless, one of the findings of the Horizon 2020 interim evaluation is however the need to further improve synergies with structural funds. The Commission is strongly committed to address this issue in the context of the preparations of the next framework programme. Improved synergies between Research and Innovation funding and structural funds would increase the impact of EU funding to the benefit of all.

Finally, while H2020 can act as facilitator for Widening participation, closing the innovation divide is a shared responsibility: Member States need also to take their own actions through national reforms and investment in Research and Innovation.

7. How does the geographical balance in the granting of funds develop?

Commission's answer:

The Commission has assessed the distribution of funding among countries in the interim evaluation of Horizon 2020, and especially the staff Working document accompanying the evaluation. As an overall conclusion, the geographical balance in participation has remained relatively constant between FP7 and Horizon 2020, with funding to countries with lower performing Research and Innovation systems seeing a slight increase – participations from the so-called EU-13 Member States has increased from 7.9% in FP7 to 8.5% in Horizon 2020, and the level of overall funding from 4.2% to 4.4%

See also the answer to question 6.

Nevertheless, the level of spending by Member State in itself is insufficient to give the complete picture across the European Union. In the interim evaluation, therefore, the Commission also set out the EU contribution per inhabitant, per researcher, and per EUR million spent on research and development. This provides a more complete analysis, as shown below.

Extract of Commission staff working document "Interim Evaluation of Horizon 2020"

Top 15 of countries according to the following indicators:

H2020 contribution, inhabitant, researchers and R&I investment nationality

Country	H2020 contribution (EUR million)
Germany	3 464
United Kingdom	3 083
France	2 097
Spain	1 813
Italy	1 664
Belgium	965
Sweden	704
Austria	576
Denmark	497
Greece	435
Finland	430
Ireland	356
Portugal	343
Poland	185
Slovenia and Hungary	109

Country	Per inhabitant
Luxembourg	94

Netherlands	92
Denmark	87
Belgium	85
Finland	78
Ireland	75
Cyprus	73
Sweden	71
Slovenia	53
Estonia	50
United Kingdom	47
Germany	42
Greece	40
Spain	39
Malta	36

Country	Per researcher FTE
Cyprus	71 860
Netherlands	20 337
Malta	19 094
Luxembourg	18 892
Belgium	17 518
Ireland	16 610
Estonia	15 767
Spain	14 806
Slovenia	13 848
Italia	13 786
Austria	13 609
Greece	12 396
Denmark	11 887
Finland	11 470
United Kingdom	10 654

Country	Per EUR million spend on R&I
Cyprus	768 657
Greece	258 158
Malta	230 759
Estonia	217 990
Portugal	149 794
Latvia	141 825
Spain	137 627
Slovenia	128 243
Ireland	121 962
Netherlands	114 857

Romania	98 703	
Belgium	95 806	
Croatia	85 644	
Luxembourg	80 767	
Italy	75 991	

8. The Seventh Research Framework Programme (FP7) it's no in its final stage of implementation. What lessons can be drawn from it? What improvements can be derived for future programmes?

Commission's answer:

The ex-post evaluation of the Seventh Framework Programme, carried out with the input of a high level group of experts, concludes that:

- **FP7 was particularly effective in strengthening scientific excellence.** FP7 projects have generated 170,000 publications, with an open access rate of 54% for all scientific peer reviewed publications created during the life time of FP7.
- **FP7 contributed to increasing the competitiveness of Europe's industry.** Over the course of FP7, the participation of private partners increased. The Joint Technology Initiatives and other Public-Private Partnerships boosted industry participation, made it possible to realise strong leverage effects that contributed greatly to the competitiveness of Europe's industries in areas as diverse as pharmaceuticals, aeronautics and fuel cells and hydrogen.
- **FP7 will have a positive impact on growth and jobs.** Given that FP7 only accounted for a relatively small proportion of total public RTD expenditure in Europe, its estimated economic impacts are substantial, through the leverage effect of various instruments. It is estimated that FP7 will increase GDP by approximately €20 billion per year over the next 25 years, or €500 billion in total through its indirect economic effects and create over 130 000 research jobs per year (over a period of 10 years) and 160,000 additional jobs indirectly per year (over a period of 25 years).
- **FP7 addressed transnational societal challenges.**
- **FP7 trained and involved leading international scientific and technological talent.**
- **FP7 was an open system that allowed more than 21,000 new organisations to receive EU funding.**
- **FP7 was effective in fostering inter-disciplinary research and increased Europe-wide research and innovation collaboration and networking.**
- **FP7 made progress as regards the gender dimension.**

- **FP7 contributed to increasing the level of research investment.** It did so notwithstanding the difficult economic situation in the latter part of FP7. Between 2007 and 2013, the share of EU-28 GDP dedicated to R&D increased, with FP7 compensating for the sharp decline in national public funding for research and innovation in certain Member States.
- **FP7 engaged SMEs strategically,** with funding of around €6.4 million, above the 15% target for the FP7 cooperation programme.
- **FP7 was open to the world,** involving participants from 170 countries. It widened EU participation and contributed to the achievement of ERA.
- **FP7 enhanced the alignment of research activities between Member States.** It achieved this through common strategic research agendas, aligned national plans and joint calls.
- **FP7 provided the knowledge base to support key EU policies.** To date, there are more than 350 cases where FP7 projects have been used in the development of EU policies.

The ex-post evaluation of FP7 has highlighted certain shortcomings in the implementation of FP7:

- FP7 could have been simpler. Although the measures introduced during the course of the Programme on a piecemeal basis proved beneficial, the variations in rules and procedures between different parts of the Programme hindered its efficiency.
- The different parts of FP7 programme operated too much as isolated silos. Although FP7 had a transparent structure around four Specific Programmes with explicit priorities, the different components of the Programme were unduly rigid. This led to inefficiency due to overlaps between the objectives of different parts of FP7's Specific Programmes.
- FP7 was not effective in building synergies with related European funding programmes. One of the goals of FP7 was to ensure complementarity with other programmes such as the Competitiveness and Innovation Programme and the European Institute of Technology, as well as the Structural Funds. However, the separate legal bases and differences in implementation rules meant that progress was more limited than required.

Many of these lessons were already learnt for Horizon 2020, and will be considered as part of the development of the next Framework Programme.

Finally, given the long term nature of Research and Innovation impact, Horizon 2020 Annual Monitoring Reports as well as Horizon 2020 Interim Evaluation continue reporting on results and impacts of FP7.

Further information on the FP7 ex-post evaluation, Horizon 2020 Annual

Monitoring Report and the Horizon 2020 Interim Evaluation can be accessed at https://ec.europa.eu/research/evaluations/index_en.cfm?pg=home.

9. How much of your spending is reimbursement based, and how much of your spending is entitlement based?

Commission's answer:

See question 14.

Key results and progress

10. The Commission reports: “In the first three years of programme implementation, EUR 20.4 billion – just about one fourth of the total Horizon 2020 budget - has been allocated to 11 108 signed grants. Horizon 2020 has so far attracted more than 100,000 applications, representing a 65% increase in the annual number of applications compared to its predecessor, the 7th Framework Programme (FP7).” Only one in nine project proposals received a grant. Did the Commission create expectations they are unable to meet?

Commission's answer:

The Commission is very satisfied that Horizon 2020 has proved to be a popular programme, both with regular beneficiaries and newcomers to EU research funding.

It is true that there has been a fall in the success rate for proposals compared to the Seventh Framework Programme. The higher numbers of applications are due to the increased attractiveness of the programme to applicants, e.g. not only in the type of research topics being offered but also the reduced time to grant, the improved ease of application and the many other related simplifications which have been introduced.

While the overall size of the budget is the major factor influencing success rates, the Commission is carefully monitoring the situation and is taking steps to mitigate low success rates, for example by reducing the initial investment needed in preparing proposals, and in particular by greater use of two stage calls in the final work programme of Horizon 2020.

Other measures aimed at improving success rates include fewer topics with larger budgets and tighter descriptions of the expected impact for the topic as described in the work programme, thereby encouraging proposers to think more realistically about where they should apply.

The Commission also continues to liaise closely with the National Contact Points, which have a key role in explaining the opportunities of the programme and guidance as to whether ideas are worth developing into full proposals.

11. Has the Commission paid any bills related to Horizon 2020 or were all transfers pre-financing payments?

Commission's answer:

For grants, for the whole of the research family, from 2014 until today, interim and final payments totalled €1 954 million compared to €8 741 million of pre-financing.

12. By 2017 only very few projects were completed (0,6% of the budget committed). Do we run the risk - again - to accumulate an enormous backlog by the end of the financing period?

Commission's answer:

Research and Innovation projects typically take 3-5 years, and so it is not surprising that few projects were completed by the end of 2017.

For FP7 the remaining payments due at the beginning of 2017 were EUR 3.9bn. This is not a backlog, but part of the normal profile of expenditure of the research and innovation Framework Programme. The Commission does not see any signs that there will be an accumulation of a backlog in Horizon 2020.

13. Is it true that until end 2016 no cost claims/expenses were audited, as none were received?

Commission's answer:

It is not true.

Interim and final payments were made in 2016. By September 2017 they totalled EUR 1 945 million. 319 audits of Horizon 2020 beneficiaries, covering 739 Horizon 2020 participations have already been launched in 2016 and 2017, the first results will be available for the Annual Activity Reports of 2017.

14. Can the Commissioner give us a list of the percentages for FP7 and H2020 in payments based on reimbursements and the same in entitlement-based payments for 2016?

Commission's answer:

In Horizon 2020 there is one scheme that is entirely entitlement-based – the SME scheme phase 1. Expenditure on this scheme was around EUR 37 million in 2016, 0.4% of the total paid under Horizon 2020.

The Commission is examining whether there are other areas that would be suitable for the use of an entitlement scheme. And in 2018 there will be a pilot scheme applying lump sum funding, an entitlement scheme, to two calls for proposals.

It should be noted that many stakeholders are opposed to the use of lump sum funding. There are concerns that it may lead to less risk-taking in projects, provide poor value for money, and put at risk the European research effort. Together with stakeholders, and in the light of the evidence from the pilot scheme, the Commission will consider whether, for the next Framework Programme, a wider use of entitlement funding (lump sum funding) could provide an appropriate approach to meeting the objectives of the programme.

15. Can the Commissioner supply us with (a) a list of beneficiaries with the top 10 and the lowest 10 in study grants; and b) a list of beneficiaries with the 10 largest contracts and the 10 smaller contracts in aid to researchers?

Commission's answer:

a) information on the 10 largest and smallest beneficiaries in Marie Skłodowska-Curie actions (MSCA) (basically study grants) is provided in annex.

b) information on the 10 largest and smallest beneficiaries in MSCA&ERC is provided in annex.

16. Can the Commissioner give us a list of the 10 entities (universities, research centers, companies, etc.) that have been continuously repeating as beneficiaries of the EU research and innovation programs (FPs and HH2020), in what modalities and in what amounts?

Commission's answer:

Information concerning the top 10 entities is provided in Annex. Data have been extracted from the Seventh FP7 Monitoring Report 2013 and the Horizon 2020 Annual Monitoring Report 2015 (Brussels, 21.11.2016 - SWD(2016) 376 final).

Key Performance Indicators

17. For KPI 3 – Climate-related and sustainability-related expenditure – the value of 2014-2016 is only provisional. When can we expect the final data?

Commission's answer:

The values of H2020's contribution to Climate Action and Sustainable Development for 2014-2016 are provisional as not all Grant Agreements were signed for 2016. Therefore, final data can be expected by end of 2017.

At the cut-off date of 1/1/2017 the contribution to Climate Action was 29% of total expenditure (EUR 7 bn), while for and Sustainable Development it was 69% of total expenditure (EUR 16 bn).

18. For KPI 6 – share of grants signed with a time-to-grant within 245 – it is stated, that the (falling) trend is due to a number of Research Infrastructure grants on which the complexity of the consortia triggered delays in the finalisation of the grant agreements, often on the request of the beneficiaries. Can the Commission identify the mostly used reasons for these beneficiaries' requests? Could such delays be prevented, e.g. by calls conditions?

Commission's answer:

Across the whole of Horizon 2020, 95% of over 11 000 grants have been signed within the Regulatory deadline of 245 days, which is an excellent achievement.

DG RTD has signed 778 of these grants. For DG RTD alone, at the end of 2016 88% of contracts had been signed within 245 days, currently the figure is 91%, with an average of 215 days. As was reported in the Annual Activity Report for 2016, the particular challenge for DG RTD has been signing contracts for certain Research Infrastructures. These are particularly complicated, with a large number of partners. It is often the consortia that request a delay in the finalisation of the grants, and there have regularly been changes in consortia in the run up to signing the contract. Delays are not related to the call conditions.

Excellent Research Infrastructures available to researchers across Europe are an essential part of the development of an efficient and effective European Research Area.

19. Will the Commission reduce the 25 managing and implementing bodies of Horizon 2020 in order to simplify and streamline the processes, and to shorten the application-to-grant time?

Commission's answer:

The processes for Horizon 2020 have been simplified and streamlined from the Programme's introduction. Thanks to efficient processes 95% of grants are signed within the target of 245 days, with an average a little over 200 days.

The Commission does not consider that the number of managing and implementing bodies has a negative impact on the processes developed for Horizon 2020, or that a reduction in the number of such bodies would in itself result in any reduction in the time taken to sign grants.

20. The Court noted that the Commission uses, under budget heading 1a, 25 general objectives. 90 specific objectives and 154 indicators. How are the objectives and indicators aligned in DG R&I? Do you consider, for operational purposes, the number of objectives and indicators to be adequate?

Commission's answer:

The monitoring and evaluation system for Horizon 2020 is established by Articles 31 and 32 of Regulation 1291/2013. A set of key performance indicators have

been set as the minimum basis for assessing the extent to which the objectives of Horizon 2020 have been achieved. These are reported upon annually. There will also be an interim and final evaluation to assess the rationale, implementation and achievements of the programme, as well as its longer-term impact and sustainability.

The Strategic Plan, and the Annual Management Plans of the Directorates General, set out the longer term and shorter term objectives of the DGs for all areas of their operations, not just for spending programmes. They are aligned with the priorities of the Commission as a whole, and the Europe 2020 strategy.

The Commission is considering, as part of the Budget Focussed on Results exercise, how the performance framework for spending programmes can be improved. This will include a consideration of the number of indicators, and their alignment with objectives. This will lead into the development of the next Framework Programme for research and innovation.

21. Could the Commission provide data on 2016 on the EU funds involved in research on climate change in EU (data country by country)? Our overarching objectives for a transition to a low-emissions economy must be accompanied by a serious boost in our research and innovation activities, especially in this sector. Considering that EU is still lagging behind many other economies in terms of innovation, do you think that Horizon2020 is sufficient to realise our targets and to bring Member States to invest more resources in R&I? It is not encouraging to see continuous cuts to its initial budget, but it is also probable that these proposals will be repeated in the future, also beyond 2020. How do you think we could better align national and industrial policies in R&I to our policy objectives enshrined in the 2020, 2030 and 2050 targets?

Commission's answer:

In total 425,351,850.60 EUR have been committed in H2020 to participants for climate change in grant agreements signed in 2016. Please find split by country bellow:

Country Code	EC Contribution
UK	56,200,781.23
ES	53,539,139.93
DE	48,549,624.15
IT	44,946,545.04
NL	30,272,791.54
FR	28,470,070.86
BE	21,748,675.05
NO	16,347,964.34

EL	16,043,349.91
DK	15,145,451.26
PT	14,917,161.24
SE	10,637,351.29
AT	9,480,444.29
FI	8,688,925.44
IE	7,621,933.43
PL	4,760,287.25
HU	4,222,147.13
TR	3,670,147.00
CZ	3,452,873.69
IL	3,210,340.56
RO	3,035,971.40
SI	2,789,128.35
EE	1,965,512.50
ZA	1,767,934.03
CY	1,252,254.21
KE	1,193,986.64
MT	1,088,625.00
SK	1,063,474.56
LU	1,034,460.76
IS	771,769.53
TN	610,000.00
TZ	469,142.50
ET	453,406.25
BA	446,095.47
JP	434,937.50
HR	400,733.43
MZ	366,502.50

RS	359,810.97
EC	351,025.00
ZM	304,198.75
EG	278,587.50
LV	276,198.89
LK	267,312.50
UG	258,162.50
UA	253,793.45
AL	247,249.26
MA	224,950.00
CH	200,000.00
CL	190,070.15
FO	187,025.00
MW	144,625.00
AR	138,278.25
LB	110,937.50
PE	92,425.00
BR	71,663.75
JO	69,200.00
GL	54,337.50
CN	49,163.75
MD	36,125.00
MK	35,015.42
BG	31,167.50
CO	28,750.00
LT	21,838.70

Considering that EU is still lagging behind many other economies in terms of innovation, do you think that Horizon 2020 is sufficient to realise our targets and to bring Member States to invest more resources in R&I?

The added value of investing in Research and Innovation at EU level is very large, as shown by the Horizon 2020 interim evaluation.¹ Research and Innovation are public goods with a strong European dimension.² EU investments in Research and Innovation leverage additional funds at national level, without evidence of substitution. Due to their scale, speed and scope, EU-funded projects would not have gone ahead with national funding alone.³ Despite its impact, Horizon 2020 remains however largely insufficient on its own for the European Union to achieve its target of spending 3% of GDP in Research and development by 2020. The EU Research and Innovation programme is only a small proportion of total public R&D investment in Europe, representing about 10% of it. And more could be achieved by the European framework programme for research and innovation if underfunding was not such a major issue. Horizon 2020 suffers from underfunding resulting in large-scale oversubscription, much larger than under FP7, which constitutes a waste of resources for applicants and a loss of high-quality research for Europe.⁴ An additional EUR 60 billion would have been needed over the first three years of Horizon 2020 to finance all high-quality proposals.⁵

To foster higher investment levels by Member States and reforms to increase the efficiency and quality of the national research and innovation systems in order to maximise the impact of those investments, the European Commission issues country specific recommendations as part of the yearly European Semester cycle of economic policy coordination. The recommendations that address research and innovation issues focus notably the need to develop stronger national science bases, with tighter science-business links and an adequate business and regulatory environment to make innovation thrive.

How do you think we could better align national and industrial policies in R&I to our policy objectives enshrined in the 2020, 2030 and 2050 targets?

While economic growth has returned, Europe now needs to ensure that this growth is sustained and sustainable, in that it delivers prosperity for all.

Producing new knowledge is crucial to generate new and innovative products, processes and services, that enable higher productivity, industrial competitiveness, sustainable development and ultimately our prosperity. Compared to earlier

¹ Staff Working Document for Horizon 2020 Interim Evaluation. European Commission, May 2017. Available at: https://ec.europa.eu/research/evaluations/index_en.cfm?pg=h2020evaluation

² Reflection Paper on the Future of EU Finances: https://ec.europa.eu/commission/publications/reflection-paper-future-eu-finances_en

³ As shown in the Interim Evaluation of Horizon 2020, 83% of projects would not have gone ahead without EU funding.

⁴ See Interim Evaluation of Horizon 2020, section 7.

⁵ The success rate in Horizon 2020 is 11.6%, compared to 18.5% under the previous framework programme.

Framework Programmes, Horizon 2020 has increased its support for pilot lines, proof of concepts and industrial demonstrators.

However, to unlock the full potential of research and innovation as drivers of productivity growth in Europe and better align research and innovation efforts at national and EU level, Member States should:

- Boost high quality investment in Research and Innovation and other intangibles such as ICT and training and cement the basis for sustained economic growth. These investments crucially improve innovation diffusion and the economy's capacity for knowledge absorption.
- Member States which benefit from fiscal space for public investment should invest more in Research and Innovation and other intangible assets. This includes public support to bottom up transformative innovative projects and market-creating disrupting innovations, from which are unable to attract private capital.
- In addition reforms of the national research and innovation systems should be put in place to:
 - Boost the flow of knowledge between public research and the business sector to enhance the uptake and diffusion of innovation in an increasingly digital world.
 - Make markets more flexible and facilitate the entry and the orderly exit of firms so that resources get reallocated towards the most innovative and productive firms.
 - Improve the business environment and regulatory framework for innovation in support of the creation and scale up of new and innovative companies.

The European framework programmes contribute to deploy Europe's research and innovation efforts in support of the energy and climate targets with a focus on societal challenges such as: Secure, clean and efficient energy; Smart, green and integrated transport; Climate action, environment, resource efficiency and raw materials. The successor of Horizon 2020 is best positioned to continue this support with a mission-oriented focus. The recent Commission Communication on Industrial Policy⁶ aims at building on Europe's leadership in a low-carbon and circular economy, giving a central place to innovation and investment.

⁶ http://eur-lex.europa.eu/resource.html?uri=cellar:c8b9aac5-9861-11e7-b92d-01aa75ed71a1.0001.02/DOC_1&format=PDF

22. Could the Commission provide data on 2016 on the EU funds involved in research on connectivity (energy, digital chain, etc.) (data country by country)? A more distributed model of decision-making process, energy flows and supply chain is not anymore a utopic idea, but in different MS and regions this is becoming a political trend. Decentralisation passes through many paradigm changes that must be integrated in a holistic and integrated view with the social dimension. How do the Commission think we can foster a more bottom-up innovation policy that keeps at its core the wider societal benefit and the citizen himself, especially when technology and digital innovation is involved (e.g. NegaWatt, smartness, blockchain, additive manufacturing, 3D printing, robotics, etc.)?

Commission's answer:

As far as the part of the H2020 Work Programme there have been many calls for proposals which make funding available for technology and digital innovation, indeed these are core concerns of the Framework Programme.

As an example in the energy field, there are demonstration projects that are preparing the electricity system to increasing shares of production from decentralised renewables sources. This requires the development of a number of flexibility sources (e.g. storage, power to heat) of new markets and the engagement of consumers / local communities. ICT is a key enabler in connecting all these elements (e.g. peer-to-peer trading, use of 3 or 4G to transmit demand-response relevant data, ICT based energy management systems, etc.). A budget of EUR 113M was committed to these Topics in 2016.

As a further example, through the Horizon2020 co-funding of the Smart Cities and Communities lighthouse projects, there is support for innovation and integrated smart solutions at district level with the citizen at the centre. In these projects, local renewable energy sources are involved, there are specific actions to engage citizens, clean transport is part of the project with the integration of electric vehicles and an ICT layer enables to connect people, services and information. Replicating these solutions at larger scale will require taking new routes to co-creation and co-financing by public and private partners. This is one of the goals of the bottom up European Innovation Partnership (EIP) on Smart Cities and Communities (SCC) which helps European cities, companies, research organisations and other partners to thrive in this market. In 2016, EUR 60M of funding were dedicated to these projects.

Moreover, innovative approaches to user- interfacing and consumer engagement towards energy management solutions and services are developed and tested by the projects funded under Energy Efficiency calls. This goes from the ICT tools raising energy awareness in order to change consumer's behaviour towards more energy efficiency, to the comprehensive tools and services aiming at 'activating' energy consumers using different incentivising elements such as: information on the real time consumption, dynamic electricity prices, benchmarking, gamification and 'push messages' about the energy-relevant actions to take.

The projects funded under Energy Efficiency calls represented in 2016 around

EUR 10M.

So overall, almost EUR 153M of funding has been dedicated to research an innovation projects which fall under the scope of the scope of the question. It is however difficult to extract the proportion of expenditure that is dedicated purely to research on connectivity (energy, digital chain, etc.), since this is integrated into large numbers of calls and projects.

In the table below is the detail per country of this EUR 153M.

Country	MEur
Austria	5.3
Belgium	4.6
Bulgaria	0.5
Croatia	0.1
Cyprus	1.3
Czech Republic	3.1
Denmark	6.3
Finland	6.4
France	12.4
Germany	17.1
Greece	7.8
Ireland	1.8
Israel	0.4
Italy	9.4
Latvia	0.1
Lithuania	0.2
Norway	7.2
Poland	0.6
Portugal	8.5
Romania	2.0
Slovakia	0.6
Slovenia	2.3
Spain	15.0
Sweden	9.9

Switzerland	0.0
The Netherlands	15.5
United Kingdom	14.7
	153.2

The European Commission has promoted an approach to research and innovation in which all societal actors (researchers, citizens, policy makers, businesses, civil society organizations, etc.) work together during the whole Research and Innovation process, with the aim to better align research and innovation outcomes with societal values needs and aspirations. The Commission has referred to this approach as Responsible Research and Innovation (RRI).

In practice, the European Commission implements RRI as a package aiming to better engage society in Research and Innovation activities. This package touches on civil society engagement this is where the practices are lagging behind. It is supported by further activities enabling easier access to scientific results to all, favoring a better uptake of the gender and ethics dimensions in Research and Innovation content, and spreading good practices in formal and informal education to science.

23. What are the regulatory barriers with regard to the main objective of “From E-mobility to recycling” to increase access to electric mobility by reducing the total costs of electric vehicles? Can the Commission identify the main regulatory barriers?

Commission's answer:

The Action plan on Alternative Fuels will be published on the 8th of November as part of the Mobility Package.

The Commission has not identified regulatory barriers to the uptake of e-mobility as such, although it has identified that there are regulatory barriers related to the recycling of batteries. However, in the Action Plan on Alternative Fuels, the Commission seeks to address the lack of market demand for e-mobility by:

- (1) ensuring there is better consumer acceptance (through delivering better electro-mobility services by making it easier to locate, reserve and charge an Electric Vehicle);
- (2) encouraging Member States to further develop the availability of recharging infrastructure.

24. What is the Commission’s position on smart transport and mobility services such as UBER from the point of view of regulatory barriers?

Commission's answer:

The Commission would like to underline that Member States' regulations of such services must respect EU Treaties and secondary legislation.

In the field of transport, the freedom to provide services reaches only as far as foreseen by Secondary Legislation of which there is none on local passenger transport.

The Freedom of Establishment guaranteed by the Treaty on the Functioning of the EU (TFEU) is of major importance to this issue. It implies that Member States may only impose restrictions for legitimate objectives and that those must be justified.

Furthermore, Member States' legislation must respect EU secondary legislation as far as "smart transport and mobility services" fall under the scope of respective directives and regulations, e. g. the E-Commerce-Directive, the ITS Directive, the TAP-TSI, etc.

Finally, the Commission would recall that the European Court of Justice is expected to rule on whether Uber is a transport service undertaking.

Simplification

25. In 2016 the Commission put forward further simplification measures such as targeted support for start-ups and innovations and a wider use of lump-sum funding for projects. Do you have any statistics concerning how many researchers benefitted from these measures?

Commission's answer:

1) The targeted support for start-ups and innovators refers to the pilot action for the European Innovation Council. In 2017, the Commission has prepared the implementation of this pilot action that forms part of the 2018-20 Work Programme for Horizon 2020. The respective calls for proposals will be published by the end of October. This means that no statistics on participation are available yet.

2) The wider use of lump sums refers to the lump sum project funding pilot that is part of the 2018-20 work programme for Horizon 2020. The respective calls will be published at the end of October. The pilot will cover two topics. The expected number of projects to be funded in these topics is in the order of ten.

26. The second wave of simplification should be completed this year (2017). What are the lessons learned using simplified forms of funding? To what extent does the Commission plan to implement these in next Framework Programme? On what basis are the lump-sums defined?

Commission's answer:

Simplified forms of funding (flat rates, unit costs, lump sums) are used in Horizon 2020 since the start. As examples:

- A single flat rate of 25% is used for covering indirect costs.
- The Marie Skłodowska-Curie fellowship actions are fully funded via unit costs.
- Unit costs are also applied for several other specific cost items (clinical studies, energy-efficient building measures etc.).
- Lump sum funding is applied in the SME phase one projects (€50 000 lump sum) and in some small-scale Coordination and Support Actions.

The novelty in the second wave of simplification concerns a pilot scheme testing lump sum project funding on large scale collaborative R&I projects. Two options will be tested. In option 1, the respective lump sum amount per project is defined in the call for proposals, on the basis of statistical analysis and historical data for similar projects. In option 2, the lump sum is defined individually per project, based on a detailed budget to be presented by the applicants in their proposal that is assessed by external experts.

All flat rates, unit costs and lump sums are established in line with the rules set out in the Financial Regulation, Article 124.

The extent of use of simplified forms of funding in FP9 will be part of the Commission's legislative proposal for FP9 in 2018.

27. If, according to the new simplification rules applied in H2020, the procedure for the flat-rate payment of 25% of the project in the form of indirect costs without justification is proving to be very effective in reducing the error rate, however, the Court of Auditors warns that such simplification also carries risks. In order to gain a better understanding of the extent to which such risks may arise, we would ask the Commissioner to provide us with a list of the 10 such payments with the largest amount (by country and beneficiaries) and the 10 such payments with the smallest amount country and beneficiaries).

Commission's answer:

The Court of Auditors identified a potential risk with respect to the formula used to calculate personnel costs. However, the Court has not identified such a risk with respect to indirect costs in any of its annual reports.

The 10 largest and smallest commitments for Horizon 2020 can be found in the annex.

For the smallest commitments the indirect costs correspond exactly to 25 per cent of the direct costs.

However, in the case of the largest commitments this is not the case, as some direct cost elements (for example sub-contracting) do not attract indirect costs and some unit costs have indirect costs already added within them. Indirect costs are

therefore not exactly 25% of direct costs.

28. As follow up to the previous question concerning the Court of Auditors' warning about the risks of excessive simplification via the use of flat-rate and non-to-be-justified payments in an increasingly high percentage, in order to reduce the error rate, we ask the Commissioner:
- a. What risk prevention mechanisms your services have planned and how they are being implemented?
 - b. And if he can specify cases in which these mechanism of preventing risks of misuse of this 25% lump sum and without justification for indirect expenses have been put into practice and with which results.

Commission's answer:

The Court of Auditors identified a potential risk with respect to the formula used to calculate personnel costs. However, the Court has not identified such a risk with respect to indirect costs in any of its annual reports.

The flat rate for indirect costs was proposed by the European Commission to address the complexity of the calculation of actual indirect costs. Around 30% of errors arose from this cost category alone. The 25% flat rate for indirect cost is therefore in itself a measure for reducing the error rate.

The calculation of the flat-rate was undertaken in full conformity with the requirements of the Financial Regulation, Article 124, in particular assuring that, across Horizon 2020, there was compliance with the no-profit and co-financing principles. The justification for the percentage (as an overall average) was part of the ex-ante impact assessment of the H2020 Rules for Participation. The use of the flat rate for indirect costs was fully discussed during the legislative process, and accepted by the legislative authority.

According to the Financial Regulation, Article 125(4), grants based on properly set flat rates shall not give rise to a profit. There is therefore no need for any controls on the “appropriateness” of the 25% in individual cases. However, according to the interim evaluation of Horizon 2020, the funding model established under Horizon 2020 is attractive for stakeholders and did not lead to a significant change in funding rates compared to FP7 (EC contribution of 70% of total projects' costs).

The Commission therefore considers that the flat rate for indirect costs will reduce irregularity, and is a considerable simplification for beneficiaries. The interim evaluation confirms that this basis for the flat rate was sound.

29. The European Court of Auditors has observed that funding rules for the seventh research programme were more complicated than funding rules under Horizon 2020. Can you give

us examples of conditions which made access to funding under the seventh research programme more difficult? Why was it necessary to include these conditions in the rules and where you see room for improvement?

Commission's answer:

The funding rules in FP7 were based on a complicated matrix of reimbursement rates, depending on organisation categories and types of activities in a project. These conditions required, among other difficulties, a lengthy process for validating the categories of legal entities, in particular SMEs. For indirect costs, four different options were available, including flat rate and real indirect cost options. The system was complex, entailed considerable administrative burdens and was a considerable source of errors.

This complex system was replaced by a simple model in Horizon 2020, with one reimbursement rate in a project and a single flat rate for indirect costs. Together with other simplifications that were introduced, for example simplified rules for time recording and calculating productive hours, the Horizon 2020 system is simpler, with a lower administrative burden for beneficiaries. Additional simplifications have been introduced in 2017 and the search for effective simplification continues, both for Horizon 2020 and for the next Framework Programme for Research and Innovation.

Standardization

30. Did calls in Horizon 2020 have the intention to create standards and standardization? In which areas?

Commission's answer:

Several of the Calls for Proposals under Horizon 2020 are related to the creation of standards and standardisation, although this subject is often integrated into wider calls.

As an example, ICT standardisation is mentioned in 50% of related work programme objectives. Especially specific objectives have been formulated in relation to cybersecurity encryption, Cyber-Physical Systems (CP-CETIS), Embedded systems (HIPEAC) and Factories of the Future (Connected Factories), Cloud interoperability and data flows, Cloud model contract terms, Cloud Service Level Agreement (SLAs), Reference architecture for urban (smart city) platform, sustainable data centres, robust open standards for such distributed and decentralised architectures, services related to research data through the European Interoperability Framework , web accessibility and on eHealth and interoperability of Electronic Health Record information, especially on the technical and semantic level.

In addition a number of partnerships are relevant to the setting of standards, for example:

- The contractual Public Private Partnership on Big Data contributes to the identification of missing standards and design options for a big data reference architecture.
- The 5G Public Private partnership had as one of its main mission to support the development of 5G standards for the next generation of communication networks.
- The Cyber security Public Private Partnership has also a work package on standardisation and certification.

31. What is the share of the EU contribution that is standardization related in Horizon 2020?

Commission's answer:

It is not possible to have a reliable estimation of the EU contribution to standardisation. Standardisation is often integrated into wider calls, and pre-standardisation activities are often carried out in the projects.

In certain areas however, expenditure on standardisation can be significant, for example it is estimated that, for the 5G Public Private Partnership, at least 30% of the expenditures have a direct relation to technologies that will be standardised.

32. Which standardization measures/actions are taken to support the dissemination of H2020 project results?

Commission's answer:

There are clear rules for the dissemination of project results, established in the Grant Agreement. Open Access to research results is the general principle that applies.

An additional action related to standardisation is the Rolling Plan for ICT standardisation, which identifies ICT standardisation needs in support of EU policies. H2020 projects contribute to fulfil these needs.

A 5G pre standardisation working group has been created where all projects of the 5G Public Private Partnership contribute. User guidelines for SMEs and the public sector have been produced in order to increase the uptake of cloud standards by the end users.

Finally there has been a direct contribution to standards in certain areas. More specifically contribution to ISO/IEC JTC1 SC38 2 standardisation projects on Cloud SLAs (ISO/IEC 19086 - Cloud computing- Service level agreement (SLA) framework) and on Cloud interoperability (ISO/IEC 19944 Cloud services and devices: Data flow, data categories and data use) and CEN TC/WGs.

33. Are there any plans of the Commission to develop key performance indicators for Horizon 2020 which take standardization activities into account?

Commission's answer:

The Key Performance Indicators for Horizon 2020 are established in the legal base of the Programme. There are no plans to modify these indicators.

However, in addition to the KPIs for the Programme as a whole, the Innovation Radar has already tracked, for approx. 1500 EU-funded projects (FP7 and H2020), whether Standardisation is "Done or ongoing in the project", "Planned in project", "Not planned in project but needed/desirable" and "Not planned in project and not needed". The Innovation Radar method is already being used by several themes of Horizon 2020, for example ICT themes. Industrial Technologies/Factories of the Future, FET, Space research and some Marie Curie actions. Additionally preparations are being made for the Innovation radar to be used by the Energy and Bio-economy themes of H2020, as well as by the SME instrument.

The 2017 cybersecurity package has made certification, standards, and trust labels a cornerstone of EU's cybersecurity strategy. The forthcoming H2020 projects will propose a key performance indicator to indicate how well they score against this requirement.

European Innovation Council

34. What is the actual state of play of EIC? Can the Commission identify the enhanced synergies between the different funding mechanisms?

Commission's answer:

The European Innovation Council (EIC) pilot draft work programme has been published and describes activities for the period 2018-2020. It supports innovators developing breakthrough innovations with the potential to create new markets and boost jobs, growth and prosperity in Europe through grants, financial instruments, blending finance, prizes and support measures. The European Commission is considering options for a fully-fledged EIC as part of its proposal for the successor programme for Horizon 2020.

European Institute of Technology

35. EIT was supposed to obtain financial autonomy in 2010 yet it only obtained a partial financial autonomy by 2011. The Commission is currently conducting a financial autonomy assessment and the report is about to be completed in December this year. Could the Commission share any preliminary results of the assessment at this point? What elements have been the main obstacles in achieving financial autonomy?

Commission's answer:

The EIT has improved its management capacity during the last years and has addressed a number of issues that were preventing it from being granted full financial autonomy. For instance, for some years the EIT has had difficulties to reach its full staff complement and has only recently reached full staffing. A direct positive consequence has been the increased quality of the implementation of the grants for KICs. The additional staff has also allowed better administration of the Institute which has become visible, for instance, in the quality of procurement procedures launched by the EIT.

The Commission is assessing the implementation of the internal control standards by the EIT, and how the EIT is applying the rules of grants and procurement. It is expected that the assessment will be completed during 2017.

36. Moreover, the ECA has noted that while EIT implements projects using Horizon 2020 funds, it remains outside the Commission's common management and control framework for research and innovation funding. What is the background of this state of affairs and is the Commission going to remedy the situation?

Commission's answer:

The EIT is not currently participating directly and fully in the Common Support Centre for Horizon 2020. However, the EIT has access to the services of the Common Support Centre when necessary via its partner Directorate-General, DG

Education and Culture.

It is important however to underline that the Grant Agreements between the EIT and the Knowledge and Innovation Communities are based on the Horizon 2020 model grant agreement and follow the Horizon 2020 rules. The EIT's management and control framework, supervised by the Commission, ensures compliance with those rules.

Synergies

37. Will the Commission synchronise the regulation of FP9 with the post-2020 ESI Funds regulations in order to achieve better synergies?

Commission's answer:

The creation of synergies between Horizon 2020 and the European Structural and Investment Funds (ESIF) is a major priority for the Commission.

Although Horizon 2020 and the Structural Funds have different overall aims, the funding rules between Horizon 2020 and Cohesion Policy have been brought closer and beneficiaries have the possibility to combine Horizon 2020 funding and additional funding from the ESIF, including in the same overall project but for different expenditure items.

In addition, in July 2017, the Commission adopted the Communication 'Strengthening Innovation in Europe's Regions: Towards resilient, inclusive and sustainable growth at territorial level'. The Communication and the related Staff Working Document launched a number of innovative pilot actions concerning smart specialisation in regard to interregional innovation partnerships and support for regions in industrial transition. It also addresses synergies between regional, national and European policy programmes and instruments. It will work to facilitate and clarify the combined use of different funds in relation to state aid rules, public procurement and interregional cooperation as well as working with stakeholders on the ground and mapping regional ecosystems.

A practical example of synergies at work is the Seal of Excellence co-launched by Commissioner Moedas and Commissioner Cre u in October 2015. Starting with the Horizon 2020 SME Instrument, the Seal of Excellence is a quality label awarded to projects which succeeded in passing the stringent selection and award criteria but could not be funded under the available budget. The Seal thus identifies promising project proposals which merit funding from alternative sources, both public and private, at national, regional, European or international level.

Since the launch more than 7250 Seal of Excellence certificates have been delivered to SME Instrument proposals and more than 300 SMEs have already been funded by many European countries and regions. An increasing number of

countries and regions are recognising the Seal of Excellence in their funding programmers. Schemes are operational at national and/or regional level in Cyprus, Czech Republic, France, Greece, Hungary, Italy, Norway, Poland, Slovenia, Spain, Sweden and the UK.

The Commission has also extended the Seal of Excellence to other mono-beneficiary schemes such as the Marie Skłodowska-Curie actions and also to Teaming. This expansion will give additional opportunities for excellent projects to obtain funding from the EU.

Other examples for successful complementarities on the ground are the Stairway to Excellence pilot action providing assistance to Member States (MS) and their regions in closing the innovation gap, in order to help achieving excellence in all EU MS and regions and the Memoranda of Understanding signed between Joint Undertakings and regional and national authorities to establish cooperation with industry and MS.

However the Commission recognises that this is not always easy. Therefore, in preparing the regulation of FP9 and the post-2020 ESI Funds regulations, there should be a particular emphasis on further simplification and alignment to encourage synergies.

38. How does the Commission create synergy between R&I investments and structural funds?

Commission's answer:

See reply to question 37.

Financial Instruments

39. The Court noted that the use of financial instruments in 2016 was outside the eligibility period and therefore illegal. However, DG R&I authorized payments of EUR 444 million (14,4% of all payments) for financial instruments. Do you consider the payments to be legal? Who disbursed the money? How is the use of the EUR 444 million accounted for? In which way is the EP informed?

Commission's answer:

The findings of the Court, which are contested by the Commission, refer solely to payments made to final recipients after 31 December 2015 in the frame of financial instruments defined in Regulation No 1083/2006 under shared management. These findings do not apply to payments made for Horizon 2020 financial instruments under indirect management. The legality of payments under Horizon 2020 financial instruments in 2016 is not contested.

Payments to final beneficiaries are made by the EIB and EIF, as entrusted entities of the Commission. Payments to the EIB and EIF are made by the Commission, in particular by DG Research and Innovation. The relations between the

Commission and the EIB/EIF are set out in a delegation agreement in line with Article 61(3) of the Financial Regulation. The Commission (DG Research and Innovation) remains responsible and accountable for the operations of the Financial Instruments.

The Commission reports to the European Parliament on the operation of the financial instruments in two formalised ways:

- pursuant to Article 38(5) of the Financial Regulation, as an Annex to the Draft Budget on the implementation of financial instruments;
- pursuant to Art.140.8 of the Financial Regulation, the report from the Commission to the European Parliament and the Council on financial instruments supported by the general budget.

40. Of the EUR 444 million EUR 436 million are managed by the European Investment Bank. How do you ensure the reporting to the bank to the discharge authority?

Commission's answer:

See the answer to question 39.

41. The Court noted: "The increasing use of other financial mechanisms to deliver EU policies alongside the EU budget risks undermining this level of accountability and transparency, as reporting, audit and public scrutiny arrangements are not aligned." How do position the DG R&I in this debate?

Commission's answer:

See question 39.

Under the Horizon 2020 financial instruments the Commission remains directly accountable for the operation of the Financial Instruments and reports to the budgetary authority as required by the Financial Regulation. There is no exposure of the Commission to financial risk over and above the amounts allocated in the budget.

The Commission considers that the contractual framework set up for monitoring and control of Horizon 2020 financial instruments guarantees the appropriate level of assurance on operations and full accountability and transparency.

42. By whom and how is the "Horizon 2020 InnovFin Pan-European Venture Capital Fund-of-Funds" managed? To which parliament the fund accountable?

A call for proposals for fund managers who will manage the Horizon 2020 InnovFin Pan-European Venture Capital Fund-of-Funds has been made and the selection process is now underway. Nevertheless, it is the European Commission (DG Research and Innovation) who will be responsible for the operation of the Fund, and accountable to the European Parliament for the operations and sound financial management of it.

Cybersecurity

43. In July 2016 the EU Commission launched a public-private partnership on cybersecurity, investing €450 million on research and innovation on this issue. Until now there have been three calls for proposals on diverse issues. Could you please answer the following questions:

- a. How many responses have been received so far?

Commission's answer:

The responses have been 194 proposals, with the following breakdown per call:
- 34 proposals submitted for the topic ref. DS-06-2017 entitled "Cybersecurity

PPP: Cryptography";

- 78 proposals submitted for the topic ref. DS-07-2017 entitled " Cybersecurity PPP: Addressing Advanced Cyber Security Threats and Threat Actors";

- 82 proposals submitted for the topic ref. DS-08-2017 entitled "Cybersecurity PPP: Privacy, Data Protection, Digital Identities".

b. How much money has been invested?

Commission's answer:

The total budget for the above-mentioned three calls is 47.10 M EUR (with 20.50 for DS-06-2017, 10.00 for DS-07-217, RIA; 8.00 for DS-07-2017, IA, and 17.60 for DS-08-2017).

c. What first results have been achieved and how do you evaluate these results?

Commission's answer:

Participation has been greater than anticipated in the topics DS-07-2017 and DS-08-2017, as compared with previous calls on Digital Security in the recent years. On the one hand this might indicate how the establishment of the Cybersecurity cPPP has contributed to raise the awareness on cybersecurity within the EU research community. On the other hand, as the budget did not increase similarly to participation, the overall success rate of these 2 topics will decrease in comparison with previous calls on Digital Security in the recent years.

The projects stemming from DS-06-2017 are expected to start at the beginning of 2018. The projects stemming from DS-07-2017 and DS-08-2017 are expected to start by April 2018.

Third country participation in Horizon 2020

44. What are the eligibility conditions for funding of participants from third countries?

Commission's answer:

The conditions for funding of third country entities are established in Article 10 of the Horizon 2020 Rules for Participation.

(http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h2020-rules-participation_en.pdf)

- Participants established in third countries established in a country that is associated to Horizon 2020 are eligible for funding under the same conditions as entities from the Member States (see Article 10.1.a) of the above mentioned Regulation;
- According to Article 10.2 of the above mentioned Regulation, funding from the Union may be granted to participants from non-associated third

countries provided that at least one of the following conditions is fulfilled:

- a) the participation is deemed essential for carrying out the action by the Commission or the relevant funding body;
 - b) such funding is provided for under a bilateral scientific and technological agreement or any other arrangement between the Union and the country in which the legal entity is established.
- Moreover, according to Article 10.1 c), any legal entity established in a third country identified in the work programme is also eligible for funding (e.g. US entities under the Health part of the Work Programme).

45. What is the share of third-country participations in call for tenders under Horizon 2020 in 2016? How high is the success rate of third-countries in these calls?

Commission's answer:

Applications in eligible proposals from third countries represent 3.11 % of all applications in 2016, with a success rate of 22.24 %.

46. How many grant agreements for Horizon 2020 were signed with which Third Countries in 2016? What was the corresponding financing amount?

Commission's answer:

183 grant agreements for Horizon 2020 were signed with participant from Third Country in 2016 with a total EU contribution to the participants from Third Countries of EUR 55,875,966.

47. Switzerland: The Cash-outs to Switzerland from the EU Budget in 2016 was 401, 8 million EUR (287,7 million EUR under Horizon 2020) while the cash-ins from Switzerland into the EU Budget was only 200, 5 million EUR. Could the Commission comment on Switzerland as a net recipient? What are the reasons for this high amount of cash-outs to Switzerland under Horizon 2020 in 2016?

Commission's answer:

From 15 September to 31 December 2016, Switzerland was partially associated to Horizon 2020 (to the "Excellence science" pillar and "Widening actions") and fully associated to Euratom Framework Programme and to ITER. The financial contribution of Switzerland to Horizon 2020 in 2016 amounted to EUR 180.9 Million.

In Horizon 2020, in total EUR 299.5 Million have been committed to participants from Switzerland in grant agreements signed in 2016. All of these grant agreements have been signed following a competitive selection process, with the excellence of the proposal as a key selection criteria, there are no geographical

criteria.

Switzerland has one of the best-performing research and innovation (R&I) systems of the OECD, and Swiss Research and Innovation funding almost reaches 3% of GDP. In addition, Switzerland is one of the most innovative countries in Europe, and has very strong national measures in support of the Swiss association to Horizon 2020. The strong Swiss Research and Innovation system, its international character, and the very active researchers and research institutes when it comes to both intra-European and extra-European cooperation, are the main reasons behind the successful participation of Switzerland in Horizon 2020.

48. How works the cooperation with Turkish partners in RTD after the attempted coup on 15 July 2016? Which actions in regard to EU cooperation and financial assistance to Turkey were taken to reduce the impact on the implementation of EU financial cooperation and EU programmes? How much money has been paid under Horizon 2020 to Turkey after the attempted coup?

Commission's answer:

The Turkish legal entities participating in Horizon 2020 have not been affected by the attempted coup of 15 July 2016 and all signed Horizon 2020 projects are continuing.

The Turkish government did close by official decree a number of research and education establishments. However, the Commission Services have checked this list and none of them was participating in an ongoing Horizon 2020 project.

126 Turkish legal entities involved in grant agreements signed after 15 July 2016 will be receiving a total of EUR 51.6 million over the lifespan of the projects.

49. Could the Commission provide the Parliament with an overview of all RTD programmes with Turkish entities as grant beneficiaries or affiliated entities / third parties that may be concerned by the closures of institutions/associations/universities? Has the Commission already taken decisions (i) to terminate any of the contracts, (ii) to recover money, (iii) to continue with amendments or (iv) to make a transfer of contracts to other organisations?

Commission's answer:

No legal entities from Turkey participating in Horizon 2020 grant agreements have been concerned by the closure of institutions / associations / universities following the attempted coup.

The services in DG RTD are not aware of any problems related to the participation of Turkish legal entities in Horizon 2020 Grant Agreements. None of the coordinators have contacted the Commission Services reporting shortcomings or underperformance of Turkish partners. Consequently no specific measures had to be taken by the Commission services concerning the participation of Turkish legal entities in Horizon 2020 Grant Agreements.

Brexit

50. Which projects funded under Horizon 2020 will prospectively still be ongoing in the UK after 2019? How will the Brexit affect the management and the control of these projects by the EU institutions?

Commission's answer:

In FP7 the UK had around 15% of total participations, and was involved in over 30% of consortia. Researchers in the UK had over 150,000 collaborative links with researchers in other Member states, and 5 of the top 10 Higher Education beneficiaries came from the UK.

In normal conditions we could expect to see similar participation patterns in Horizon 2020, with around €12bn of Horizon 2020 expenditure going to UK beneficiaries.

At the time that the UK leaves the EU we can expect a large number of contracts with British participation to be ongoing – several thousand of them, with around €4bn still outstanding.

The following message has recently been published for the attention of British applicants:

"Please note that until the UK leaves the EU, EU law continues to apply to and within the UK, when it comes to rights and obligations; this includes the eligibility of UK legal entities to fully participate and receive funding in Horizon 2020 actions. Please be aware however that the eligibility criteria must be complied with for the entire duration of the grant. If the United Kingdom withdraws from the EU during the grant period without concluding an agreement with the EU ensuring in particular that British applicants continue to be eligible, you will cease to be eligible to receive EU funding (while continuing, where possible, to participate) or be required to leave the project on the basis of Article 50 of the grant agreement."

This clarifies the situation that will occur when the UK leaves the EU if no other agreements are reached. The negotiations under Article 50 of the Treaty continue, there are no detailed negotiations underway as yet in the area of research.

The negotiations under Article 50 of the Treaty continue. The principle followed by the EU in these negotiations are enumerated in the "Essentials principles on financial settlement" available at:

https://ec.europa.eu/commission/publications/position-paper-essential-principles-financial-settlement_en. This document states that "*the single financial settlement should be based on the principle that the United Kingdom must honour its share of the financing of all the obligations undertaken while it was a member of the Union. The United Kingdom obligations should be fixed as a percentage of the EU obligations calculated at the date of withdrawal in accordance with a methodology*

to be agreed in the first phase of the negotiations. On this basis, the United Kingdom should continue to benefit from all programmes as before the withdrawal until their closure under the condition that it respects the applicable Union legal rules".

Organisational Management and internal control

51. The Court estimated the error rate to be between 2,1 and 6,1% (most likely error rate: 4,1%); the Commission estimated the “risk at payment” to be between 2& and 2,4%. How do you explain the difference? Are the methodologies used for the calculation of the error margins compatible?

Commission's answer:

The methodologies used for the estimation of errors by the Court and the Commission are different in design and purpose, and thus cannot be directly compared. In particular, the error rates provided by the Court result from testing of a sample of around 150 payments drawn from expenditure incurred in 2016 across the competitiveness chapter. The sample covered 79 transactions from FP7, 13 from Horizon 2020, and 58 non-research transactions.

The detected error rates of the Commission cover all segments of expenditure. They are based on a larger number of audits (over 4000 for research alone), on a multiannual basis.

The Commission's overall weighted Average Error Rate may therefore be somewhat different than the result of the 150 transactions sampled by the Court. The error rate 'at payment' varies between programmes and DGs, with an overall estimate between 2 and 2.4% (see their 2016 AARs).

The Commission considers that no single indicator can correctly summarise the complex and long-term environment of its spending programmes, and that a variety of indicators, encompassing both legality and regularity and performance, must be considered in making an overall judgement of the Commission's performance.

52. The DG R&I works with overall detected, common representative and residual error rates. Is that helpful?

Commission's answer:

The Commission considers that no single indicator can correctly summarise the complex and multi-annual environment of its spending programmes, and that a variety of management indicators, encompassing both legality and regularity and performance, must be considered in making an overall judgement of the Commission's performance.

With respect to error rates, the Commission measures the level of error at various

moments in time:

- at the time of payment; when no corrective measures have been yet implemented (detected or representative error rates);
- at the time of reporting; when some corrective measures have been implemented but others will be implemented in later years (residual error rates);
- at the time of closure, when all corrective measures will have been implemented (based on the *forward-looking* Amount at Risk at Closure).

(See the definitions and details in the 2016 AMPR Annex 3)

The different error rates will also show the multiannual effect of recoveries and corrective action that go on after the payment has been made. For each significant scheme the level of error that will exist at the end of the programme, after all controls have been carried out is calculated. The size of the sample, and the multiannual basis, will tend to limit the variation in time of the error rate.

These different indicators of error rates, as well as information on performance, are included in the Annual Activity Report of DG Research and Innovation. It is hoped that the information is sufficient and appropriate, to allow readers to make an overall judgement of the management of the Framework Programme.

53. In the AAR, it is stated, the main reason for error is the complexity of the eligibility rules and the fact that there are many beneficiaries making claims, and not all can be fully controlled. How many cost claims are actually covered by the control provisions and how can the mitigation of these risks be extended/improved?

Commission's answer:

Every payment claim is subject to controls before payment. Commission staff will verify the cost statement, which may be accompanied by an audit certificate, and the scientific deliverable, before deciding whether the claim can be paid. There is the possibility to demand additional evidence from the beneficiary, for example invoices, time recording systems, flight tickets, etc. however, this should not be done systematically as it is time-consuming and expensive (for the beneficiary and the Commission) and in most cases does not identify any errors.

Commission staff is then encouraged to consider the risk of error when deciding whether to request more evidence from the beneficiary. They are assisted in this choice by guidance, training and IT tools.

The Commission considers that the development of this risk based approach to controls before payment is the most efficient and effective way to mitigate the risk of error, and intends to develop this further over the course of Horizon 2020.

54. The Court of Auditors points out that sufficient information was available under the heading 'Competitiveness for growth and jobs', with an estimated level of error of 4,1%,

to prevent, detect and correct a large number of errors, that if it had been used for this correction the level of error could have been 2.9%. Since 59% of the expenditure of this heading is represented by FP7 and H2020.

- a. Is the Commissioner aware of what information the Court of Auditors refers to in this case and does it envisage additional specific measures to remedy this problem?

Commission's answer:

The Commission is fully aware of the cases identified by the Court where information was available to prevent errors occurring.

Around two-thirds of the 1.2% relates to failures of certifying auditors, appointed by the beneficiaries, to identify irregular expenditure. The Commission is concerned about this weakness, and carries out communication activities address these auditors, as well as issuing guidance. It does note however that cost claims with an audit certificate have, on average, an error rate that is half that of cost claims without an audit certificate, which does show the worth of the system.

In addition, simplifications introduced in Horizon 2020 will make it easier for certifying auditors and beneficiaries to avoid making errors.

The other third of 1.2% relates to errors by the Commission service. It relates principally to one case, where indirect costs were incorrectly calculated.

The introduction of a flat rate for indirect costs in Horizon 2020 will avoid this error occurring in future.

55. The Court of Auditors notes that it has detected differences between the three directorates-general under the heading 'Competitiveness for growth and employment' in the methodologies used to calculate error rates and risk amounts, since expenditure in research and innovation accounts for 59% of this heading, we ask the Commissioner:
 - a. How the methodology for these calculations is coordinated and agreed so that we can consider them sufficiently harmonized to be able to compare risks and progress?
 - b. In what concrete aspects should the joint approach between the Directorates General concerned go ahead for future progress?

Commission's answer:

The Commission considers that the methodology for the calculation of error rates and risk amounts for grants in the Seventh Framework Programme, the biggest part of the budget, is now harmonised and comparable.

The Court pointed out (especially in paragraph 5.23 of its report) some inconsistencies in smaller expenditure areas (administrative costs, financial instruments, contributions to Joint Undertakings). The Commission considers that each service managing this expenditure was transparent about its approach in its

Annual Activity Report, but that these approaches should be more consistent for the 2017 reports.

56. The European Court of Auditor noted the revised rules for the calculation of personnel costs as an increase of complexity for beneficiaries which leads to the result of beneficiaries declaring more costs than actually incurred in the context of Horizon 2020. How could this calculation simplified in order to have a simple option available to all beneficiaries?

Commission's answer:

The Horizon 2020 rules on personnel costs were designed pursuing notably the following objectives:

- Preventing recurrent errors found in previous FPs. This is the case, for example, of the provisions about annual productive hours. Indeed one major source of financial errors in past was the use of a very low number of annual productive hours due to ambiguous or complicated rules.
- Increasing simplification, for example by providing the possibility for any beneficiary to use 1720 hours as annual productive hours.
- Accommodating the many different accounting practices used by the very large community of beneficiaries of EU research and innovation grants. This has led to the existence of a number of different options. While this may have some complexity at the beginning as the beneficiary has to choose from a range of options, once the beneficiary has chosen one option it will be much simpler, the remaining options become irrelevant.
- Provide safeguards against potential abuses. There are provisions on additional remuneration to limit the risk of inflation of ad hoc salaries paid for working on EU grants. And a beneficiary can never charge to the EU more than the total amount earned.

The different options provided in the Horizon 2020 model grant agreement give to each beneficiary the possibility to choose the one which it considers the most appropriate and simplest. There is always one option which is close to the usual cost accounting practices of the beneficiary (for those who have cost accounting systems). And there is one extremely simple option available (annual hourly rates using 1720 as annual productive hours).

57. According to the Court of Auditors, "The estimated level of error in spending on 'Competitiveness for growth and jobs' remains above the level of error for the EU budget as a whole (3.1%). Most of the errors were related to the reimbursement of ineligible personnel or indirect costs declared by the beneficiaries of research projects". Since this estimate is reiterated in the last discharge exercises,
- a. How does the Commissioner assess the efforts and instruments used so far?
 - b. How do you propose to eradicate this reiterated error and with what new instruments?
 - c. Can the Commissioner provide us with disaggregated and comparative data both from FP7 and H2020 on the effectiveness of the 'curative' instruments of this repeated error above the EU average?
 - d. In the case of FP7, can the Commissioner tell us whether recovery procedures have already been initiated and, if so, what amounts have been recovered?

Commission's answer:

The errors identified are inherent to a reimbursement scheme. As such they can be mitigated, but never completely avoided.

The Commission has taken a number of steps to mitigate the risks:

Firstly, particularly in Horizon 2020 it has looked to simplify the rules. This will help to avoid or limit error. For example, the Court notes the risk of error in indirect costs - but the flat rate for indirect costs introduced in Horizon 2020 will entirely avoid this error. The rules on time recording and the calculation of personnel costs have also been simplified, and there is a single reimbursement rate, more acceptance of beneficiaries accounting practices, etc. A number of schemes, such as Marie Skłodowska-Curie actions, use simplified cost options.

Secondly, control systems have been made more efficient and effective, reducing the administrative burden on beneficiaries. Systematic controls, which are time consuming and costly for the beneficiaries and the Commission, have been reduced, with controls undertaken on a risk basis.

Thirdly, in order to assess whether it is a viable and effective way to finance research projects, the Commission will run pilot schemes using lump sum funding, an entitlement scheme, rather than the current reimbursement model. Lump sum financing, which would mean payment based on the achievement of clearly defined objectives, would completely avoid the inherent risk pointed out by the Court. However, the Commission, together with stakeholders including the European Parliament, needs to assess whether such a system can effectively meet all the objectives of research spending.

Regarding the implementation of recovery procedures following audits, for FP7, by 30/6/2017, 86.2% of recovery procedures had been implemented, in line with expectations at the present stage of the implementation of the audit strategy. By 30 June 2017, 1 621 audit results with negative adjustment were implemented (out of 1 880), this amounting to EUR 50 million (cumulative figures for the entire

FP7). 98.9% of FP6 adjustments have been implemented.

For FP7, the amount of corrections implemented by extrapolation of systemic errors, at the end of May 2017, was EUR 16.3 million. The current implementation rate (expressed in number of cases) is 65.2%.

97% of extrapolations for FP6 projects have been implemented.

58. Can the Commissioner explain to us the reasons for the delays indicated by the Court of Auditors in 15% of the projects in the sample audited and what is being done to solve them? And why is it that in 7% of the sample the Court of Auditors identified that they did not show results that were reasonable with respect to the progress made? How do your services specifically solve this dysfunction?

Commission's answer:

There are always projects that do not progress as quickly as planned, or do not achieve the results expected. The Commission's monitoring process, and in particular the interim review, is designed to detect these cases and allow for corrective action.

Depending on the situation the Commission may amend the contract (for example if scientific developments have rendered the original objectives obsolete), enter into discussion with the project partners to get the project back on track, reduce the payment or cancel the contract. The aim is to resolve the problem during the lifetime of the project to ensure that excellent research is produced at the end of it.

59. The Court of Auditors has detected delays in distributing the EU contribution by the project coordinator to the other participants, resulting in harm to the beneficiaries, which may even have serious financial implications,
- a. How does the Commissioner plan to deal specifically with this situation in current cases?
 - b. And how will it act to avoid it in the future, given the disastrous consequences of disaffection added to the EU in a sector as vulnerable as SMEs?

Commission's answer:

The Commission considers it best that the transfer of funds between consortium members is managed within the consortium. And, as the court says in its text, in some cases there were understandable reasons for the delay.

The coordinator must distribute the payments between the beneficiaries without unjustified delay. However, how and when the payments are distributed is an internal matter for the consortium.

If the coordinator does not comply with this obligation, in the first instance it is an issue to be resolved within the consortium.

However, when a case of delayed distribution of funds is detected, or there is a complaint on this issue, the standard practice is to contact the coordinator to identify the reasons, and to underline the obligation to promptly transfer funds.

If, despite the reminder, the coordinator does not fulfil its obligations the Commission may terminate the grant agreement or its participation in the grant agreement.

60. In point 5.12 (page 155) of the ECA Annual Report the Court mentions delays in the distribution of the EU contribution by the project coordinator to the other project participants. How many of such complaints about delayed distribution is the Commission aware of? What is the amount involved? What are the main reasons for such delays? Does the Commission sanction the coordinators who do not comply with their obligations in a timely manner?

Commission's answer:

See Question 59.

In the first place, the possibilities for redress are set out in the consortium agreement, to which the Commission is not a party.

The Commission is informed about delays in the distribution of the EU funding only in a few cases, generally when the issue cannot be solved within the consortium.

This could be the case, for example, when the coordinator is not fulfilling its obligations properly and the consortium members wish to change the coordinator, or because the coordinator is in a difficult financial situation, bankrupt, has suspended business activities or it is changing its legal situation etc.

The Commission may terminate the grant agreement or the participation of the coordinator for breach of its obligation to distribute the payments between the beneficiaries without unjustified delay. In addition, after termination the grant maybe reduced in accordance with the provisions of Article II.39.3 of FP7 grant agreement and Article 43 of the Horizon 2020 grant agreement.

61. What is the DG R&I assessment of the management and control systems of the executive agencies?

Commission's answer:

The Commission considers that Executive Agencies perform in an efficient and cost-effective way in implementing the delegated activities.

The 3-year (2012-2015) evaluation of European Research Council Executive Agency and the Research Executive Agency shows that:

- Executive Agencies deliver high-quality services, as reflected in the satisfaction scores of Framework Programme beneficiaries and

independent experts;

- Satisfaction rates of beneficiaries are 93% for ERCEA and 82% for REA;
- Satisfaction rates of independent experts are 95% for ERCEA and 83% for REA;
- Executive Agencies achieve high levels of cost-efficiency, exceeding - sometimes by a substantial extent – expectations concerning costs and savings.

The Commission has set clear procedures and responsibilities for the supervision of Executive Agencies to ensure that their management and control systems work as intended. Senior staff of the Commission are on the Steering Boards of all Executive Agencies.

There is also regular reporting by the Executive Agencies to the parent Directorate Generals, both on financial issues and on scientific results.

The Internal Audit Service of the Commission is the internal auditor of the Executive Agencies bodies, and the European Court of Auditors provides annual reports. These provide the Commission's DGs with additional independent assurance about their operations.

62. The Internal audit Service of the Commission was critical of the DG R&I project management: “The IAS concludes that weaknesses still exist in ensuring a consistent project monitoring approach across the H2020 implementing bodies and within DG RTD. This is due to the level of monitoring not being systematically adapted to the nature and the risks of the projects. The IAS notes that the H2020 implementing bodies have not reached a consensus on how project monitoring should be implemented. Common rules should be adopted and then applied in RTD.” What measures has DG R&I taken?

Commission's answer:

The Internal Audit Service of the Commission is an important part of the Commission's overall internal control system, and provides assurance to the Institution about the operation of its internal systems. The audit of Project Management was part of the IAS' 2016 audit plan. The audit assessed how DG RTD ensures that project activities were carried out as agreed and that the project deliverables are produced as envisaged.

In this audit, the IAS identified strengths and one area to be improved. The Internal Audit Service acknowledged, as strengths of the system, "the ongoing efforts made by the Common Support Centre and the responsible units of DG RTD as regards the development of the H2020 project management process. The central provision by the CSC of IT systems to support various processes, including project monitoring and amendments for the whole research family, is a real strength. In particular, they facilitate the exchange of key documents (e.g. deliverables, periodic reports, amendment requests) and the tracking of deadlines, which contributes to the overall efficiency of the process.

However, the IAS also considered that steps were needed to ensure a consistent project monitoring approach across the H2020 implementing bodies and within DG RTD. All the recommendations of the IAS were accepted, and an action plan was prepared to mitigate the risks identified.

Since the audit, the Common support Centre has developed guidance on best practices and recommendations of project monitoring strategy. DG RTD is taking steps, as recommended by the IAS, to ensure that its staff carry out a suitable level of monitoring, based on a sound analysis of the risks or on the specificities of the projects. The implementation of the recommendations by the CSC/DG RTD will be assessed by the IAS in due course.

In addition, all Commission services implementing Horizon 2020 (including executive agencies and Joint Undertakings) have agreed on a common ex-ante control strategy that provides for a standard set of ex-ante controls to be applied to all actions and beneficiaries plus risk-based, more extensive, controls in individual cases.

The early identification of potential risks is a standard objective for the Internal Audit Service. In this case the risks have been identified, and an action plan put in place by the managing service to mitigate the risks. This should ensure that, throughout Horizon 2020, DG RTD is in a position to achieve its objectives. The Commission considers that this shows the overall effectiveness of its internal control system, and the important role of internal audit within it.

63. In addition, with regard to the FP7 audit strategy, the Internal Audit Service concluded: “[...] that the CAS still needs to make significant efforts to increase the maturity of its internal processes. In particular, the CAS should reduce the average time to close audits, and should improve the internal processes for ex-post audit planning, monitoring, and reporting. It should also establish smart objectives, and develop an approach and guidance for fraud detection”. What measures has DG R&I taken? Could you elaborate this issue further? What was the main result found by the Internal Audit System? Where do you see further improvements?

Commission's answer:

The Internal Audit Service of the Commission is an important part of the Commission's overall internal control system, and provides assurance to the Institution about the operation of its internal systems. The audit of the Common Audit Service (CAS) in 2017 was part of the IAS' normal planned activities.

The IAS report recognised that the CAS has obtained good results in reaching the strategic annual targets for the number of audits closed in 2014 and 2015, and indeed the CAS also reached its targets in 2016. However, particularly as the CAS moves from auditing the Seventh Framework Programme to auditing Horizon 2020, and in view of the increase in the number of audits that it must undertake, and its central role in providing assurance for all the services implementing research funding, it needed to make a number of improvements to its systems.

The two main IAS recommendations were to reduce the average time to close

audits, and to improve the planning, monitoring, and reporting processes. Other recommendations related to refining the approach to fraud detection, clarifying and improving supervision and quality control functions and improving documentation of in-house audits.

All the recommendations were accepted, and an action plan was established. Of the 29 actions established DG RTD has fully or partially implemented 13, the rest are scheduled for implementation in 2018. The implementation of the recommendations by DG RTD will be assessed by the IAS in due course.

The early identification of potential risks is a standard objective for the Internal Audit Service. In this case the risks have been identified, and an action plan put in place by the managing service to mitigate the risks. The Commission considers that this shows the overall effectiveness of its internal control system, and the important role of internal audit within it.

64. How has the Joint Audit Service implemented the recommendations made by the Commission's Internal Audit Service (IAS) on the need to close audits more quickly, to improve internal planning, monitoring and reporting processes for H2020 projects?
- a. Can you give us the history of the deadlines up to the current ones for the closure of the audits?
 - b. Can you give us specific figures and timelines in the notification of audits of the H2020 projects?

Commission's answer:

See answer to question 63. The Common Audit Service has established an action plan to address the recommendations of the Internal Audit Service. DG RTD has fully or partially implemented 13 of the 29 actions planned, the rest are scheduled for implementation in 2018. The implementation of the recommendations by DG RTD will be assessed by the IAS in due course.

To date 319 audits of Horizon 2020 expenditure have been launched, covering 739 participations.

65. The glyphosate scandal of 2016 has raised attention on the monitoring and control system of the EU law in protecting citizens from any form of abuse. Endocrine disruptors, glyphosate, and other cases show how science can be exploited for political purposes. How to ensure that science is not used for vested political objectives and it is rather employed to the benefits of citizens? The solutions could vary, but how the Commission could grant citizens that the EU legislative process is sustained by non-biased scientists?

Commission's answer:

The European Food Safety Authority (EFSA) and the European Chemical's Agency (ECHA) work transparently and independently and perform proper and thorough assessments, as these are their core values. Both EFSA and ECHA

operate in full openness about their procedures and outcomes and work according to ISO Standard Certification.

The agencies committees/panels are made of independent scientific experts that are nominated or appointed in their individual capacity on the basis of a call (EFSA) or by the Member States (ECHA and EFSA in pesticides). Their independence is ensured through a series of different checks: they are assessed against eligibility criteria before appointment; they fill in a detailed annual declaration of interest thoroughly checked for potential conflicts of interest and made public. Specific / oral declarations are in addition made at each meeting and for case work. Members with private interests in the topics discussed, are excluded from the decision making process. EFSA and ECHA have breach of trust procedures in place, to cover in particular cases where interests which should have been declared were not declared.

The Agencies are governed by a Management Board and are subject to reporting obligations towards the EU relevant budgetary authorities (European Parliament discharge). They are also subject to the audits of the European Court of Auditors, the Internal Audit Service, and their own Internal Audit Capability and the ISO certification body.

EFSA and ECHA have regular contact points with their stakeholders through annual stakeholder meetings, with industry and the NGOs core stakeholder organisations.

All the important principles and procedures are laid down in EFSA's and ECHA's policies on transparency and policies on independence for prevention and management of potential conflicts/competing interests, as approved by their Management Board. The agencies are subject to the same rules as all EU public authorities and acts in accordance with these.

Finally, the so-called "glyphosate scandals", are unsubstantiated claims linked to a Court case in the US – but, as repeatedly clarified by EFSA and ECHA, these have zero impact on the EU assessment.

66. Could the Commission provide the data about the cases of conflict of interest found in 2016? We believe as you do in the fundamental support that science must give to any decision-making process at all government levels. Politicians must be able to employ correctly and effectively the scientific opinions, without the need to ponder the doubts and to look for other ideas that bear the risk of being even more biased. Where do you think we must act to improve the policy that identifies clear-cut criteria to avoid any conflict of interests in all working groups, committees, subcommittees, and other kinds of groups that the Commission uses to inform its decisions and to enforce legislation?

Commission's answer:

The Commission is conscious of the need to ensure good quality, independent,

science-based evidence to support its policy proposals.

The Commission has access to a wide range of scientific views and advice, including projects funded by its services, and the Joint Research Centre, a part of the European Commission, can provide additional advice. Furthermore, it has established, within the Directorate General for Research and Innovation, a High Level Group of Scientific Advisors ('HLG'), an expert group that provides scientific advice to the European Commission. The members of this group act in a personal capacity, independently and in the public interest.

Within DG RTD, the Scientific Advice Mechanism Unit supports better regulation by providing independent scientific advice, fosters the impact and integrity of science and ethics of EU policies, including research for the benefit of Europe, its citizens and its economy.

Although the Commission has considerable in-house expertise, it may need specialist advice from outside experts as a basis for sound policymaking. This may be provided by groups of experts or external consultants, or take the form of studies. In this context, a Commission Decision 30 May 2016 establishes revised horizontal rules on the creation and operation of Commission expert groups.

With these revised horizontal rules, the Commission has reinforced its policy on conflict of interests. Experts appointed in a personal capacity are expected to act independently and in the public interest, as other types of members have their own legitimate interests, which are openly declared. The new rules have introduced a definition of conflict of interest and require Commission departments to perform a conflict of interest assessment for individuals applying to be appointed in a personal capacity, based on the experts' declarations of interests. Only if Commission departments conclude that there is no conflict of interest, may these individuals be appointed. Declarations of interests are published on the Register of expert groups, as long as the experts in question remain members of a given expert group, thus allowing the general public to be adequately informed on the profile of the experts in question.

67. How many conflicts of interest has the Commission detected in 2016 in FP7 and H2020, and of what kind? How did you solve them? Examples.

Commission's answer:

For experts' groups and evaluation experts conflicts of interest are assessed before the appointment of the experts. Experts with a conflict of interest are therefore excluded during the selection process through standard procedures, no statistics of possible exclusion are kept.

The answer to question 66 gives details in respect of expert groups. With respect to FP7 and Horizon 2020, however, there are additional rules and procedures to avoid bias with respect to the selection of experts for proposal evaluation of

project monitoring.

The experts that provide evaluations on the proposals to the FP7 or H2020 actions act in a personal capacity, independently and in the public interest, and are bound by the corresponding rules on conflict of interest.

As a first preventive control, these rules include the requirement for experts to declare any potential conflicts of interest enabling the Commission to assess whether this could jeopardise the impartiality and fairness of the evaluation or monitoring. The conflicts usually relate to involvement in the proposal preparation or due to a close relation (business or otherwise) with one of the participants. Any type of personal link between the expert and participants involved in a given proposal (e.g. joined publications, prior employment, etc.), family relations, working relations, hierarchical relations and commercial relations is considered to qualify as a potential interest to be declared. All experts are informed about their obligation to declare a potential Conflict of interest and receive a detailed briefing to understand the concept and the importance of this obligation.

In addition to this, the call managing service examines the expert's CV prior to assigning tasks. This screening relies also on automated controls under which the CVs are screened using text mining to check information in the CV is checked against information of the proposal(s), for example looking for matches in terms of name, employer, e-mail addresses, etc. As a result, many experts are not assigned a task because of a possible Conflict of interest.

Some conflicts of interests are detected during the evaluation process when the proposal is disclosed to the experts. Depending on the nature of the cases, the experts may be excluded from the evaluation of an individual proposal or even from the evaluation of the whole call.

68. Have you already made the corresponding recoveries of payments and wrong repayments related to FP7? Can you tell us about the amount recovered and in what areas?

Commission's answer:

On 30 June 2017, 1 621 audit results with negative adjustment were implemented (out of 1 880), this amounting to EUR 50 million (cumulative figures for the entire FP7) For FP7, the amount of corrections implemented by extrapolation of systemic errors presented, at the end of May 2017, was a cumulative figure of EUR 16.3 million. For 2016 alone, corrections amounting to EUR 18.15 million was implemented for FP7 (including liquidated damages).

Currently 86% of FP7 audit findings have been implemented and 65% of extrapolations. This is a good performance at this stage of the programme. Many recoveries are deducted from the following payment and, as payments are generally made every 18 months, there will always be a number of recoveries that have not yet been made.

69. How many cases of fraud in both FP7 and H2020 have been identified in 2016 and sent to OLAF? How many from internal services and how many via external informants?

Commission's answer:

According to the information available to the Commission services dealing with Research grants services implementing the research budget, for all, the situation is as follows:

31 cases of suspicion of irregularity reported to OLAF,

48 cases initiated by OLAF in 2016 on the basis of information received from other sources.

QUESTION 15 – Annex

a) Information on the 10 largest and smallest beneficiaries in MSCA.

10 largest beneficiaries in MSCA

Participant PIC	[PJ] Core Legal Name	Participant Requested EC Contrib
999997930	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	60.334.902,45
999991043	KOBENHAVNS UNIVERSITET	47.324.220,60
999977172	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	37.440.747,68
999991334	KATHOLIEKE UNIVERSITEIT LEUVEN	35.192.265,94
999975620	UNIVERSITY COLLEGE LONDON	31.956.060,94
999991722	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	30.552.254,64
999984350	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	30.187.752,64
999993468	IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE	27.493.868,40
999990655	DANMARKS TEKNISKE UNIVERSITET	26.889.282,00
999907526	THE UNIVERSITY OF BIRMINGHAM	22.667.914,06

10 smallest beneficiaries in MSCA

Participant PIC	[PJ] Core Legal Name	Participant Requested EC Contribution
916927615	SUEZ VYUZITI ZDROJU AS	4.500,00
925963359	RAMBOLL UK LIMITED	4.500,00
928677807	SCHEIDT & BACHMANN SLOVENSKO S.R.O.	4.500,00
937035521	IMPEX HIGHTECH GMBH	4.500,00
937307315	ACEA PINEROLESE INDUSTRIALE SPA	4.500,00

940873229	NOVITOM SAS	4.500,00
954720270	ADVANSID SRL	4.500,00
961808448	DSPACE DIGITAL SIGNAL PROCESSING AND CONTROL ENGINEERING GMBH	4.500,00
965880411	ANTHOGYR SAS	4.500,00
973147457	FUTURE ANALYTICS CONSULTING LIMITED	4.500,00

b) Information on the 10 largest and smallest beneficiaries in MSCA&ERC.

10 largest beneficiaries in MSCA and ERC

Participant PIC	[PJ] Core Legal Name	Participant Requested EC Contribution
999997930	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	353.888.437,29
999990267	MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	194.735.757,07
999977172	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	176.911.613,83
999984350	UNIVERSITY COLLEGE LONDON	152.728.852,20
999975620	KOBENHAVNS UNIVERSITET	135.421.359,79
999991043	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	116.970.027,02
999973971	THE UNIVERSITY OF EDINBURGH	101.218.262,81
999974941	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	93.253.061,35
999979015	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	90.378.764,88
999991722		83.498.418,16

10 smallest beneficiaries in MSCA&ERC

Participant PIC	[PJ] Core Legal Name	Participant Requested EC Contribution
916927615	SUEZ VYUZITI ZDROJU AS	4.500,00
925963359	RAMBOLL UK LIMITED	4.500,00
928677807	SCHEIDT & BACHMANN SLOVENSKO S.R.O.	4.500,00
937035521	IMPEX HIGHTECH GMBH	4.500,00
937307315	ACEA PINEROLESE INDUSTRIALE SPA	4.500,00
940873229	NOVITOM SAS	4.500,00
954720270	ADVANSID SRL	4.500,00
961808448	DSPACE DIGITAL SIGNAL PROCESSING AND CONTROL ENGINEERING GMBH	4.500,00
965880411	ANTHOGYR SAS	4.500,00
973147457	FUTURE ANALYTICS CONSULTING LIMITED	4.500,00

Question 16 – Annex

From the Seventh FP7 Monitoring Report 2013

The following descriptions and convention codes are used for distinguishing between different types of organisations:

- Private for profit companies (PRC)
- Public bodies (excluding research and education) (PUB)
- Research organisations (excluding education) (REC)
- Secondary and higher education establishments (HES)
- Other entities (OTH)

Ranking of top 10 HES organisations in FP7 signed grant agreements in terms of counts of participations for the period 2007-2013 (Table 5)

HES rank	Overall rank	Organisation	Country	Participation	EU Financial Contrib.
1	4	THE UNIVERSITY OF CAMBRIDGE	UK	737	424,033,731.50
2	5	THE UNIVERSITY OF OXFORD	UK	719	437,211,509.18
3	9	IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE	UK	657	325,246,663.64
4	10	UNIVERSITY COLLEGE LONDON	UK	610	352,748,161.54
5	11	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	CH	562	336,886,752.92
6	12	KATHOLIEKE UNIVERSITEIT LEUVEN	BE	545	263,002,585.14
7	13	ECOLE POLYTECHNIQUE FEDERALE DELAUSANNE	CH	508	304,732,532.76
8	18	DANMARKS TEKNISKE UNIVERSITET	DK	409	186,622,061.55
9	19	TECHNISCHE UNIVERSITEIT DELFT	NL	406	195,158,867.07
10	20	THE UNIVERSITY OF EDINBURGH	UK	405	225,972,665.75

Ranking of **top 10 REC organisations** in FP7 signed grant agreements in terms of counts of participations for the period 2007-2013 (Table 6)

REC Rank Contribution	Overall rank	Organisation	Country	Participations	EU Financial
1	1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR	1.524	793,225,130.05
2	2	FRAUNHOFER-GESELLSCHAFT	DE	1.228	581,811,909.66
3	3	COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	FR	745	422,915,212.07
4	6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES	701	259,532,907.43
5	7	CONSIGLIO NAZIONALE DELLE RICERCHE	IT	696	231,028,794.70
6	8	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE	665	412,347,025.81
7	14	TEKNOLOGIAN TUTKIMUSKESKUS VTT	FI	471	194,828,078.17
8	15	DEUTSCHES ZENTRUM FUER LUFT& RAUMFAHRT	DE	430	191,188,192.08
9	16	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK – TNO	NL	429	187,829,231.70
10	17	INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE	FR	423	299,026,799.42

Ranking of **top 10 PRC organisations** in FP7 signed grant agreements in terms of counts of participations for the period 2007-2013 (Table 7)

PRC Rank	Overall rank	Organisation	Country	Participations	EU Financial Contribut.
1	118	ATOS SPAIN SA	ES	141	51.948.726,85
2	127	SIEMENS AKTIENGESELLSCHAFT	DE	132	56.889.078,96
3	149	THALES COMMUNICATIONS & SECURITY SAS	FR	117	60.352.385,21
4	159	D'APPOLONIA SPA	IT	111	31.175.942,48
5	162	TELEFONICA INVESTIGACION Y DESARROLLO SA	ES	109	52.620.460,39
6	164	STMICROELECTRONICS SRL	IT	109	42.701.588,98
7	165	AIRBUS DEFENCE AND SPACE GMBH	DE	109	39.809.035,94
8	173	ACCIONA INFRAESTRUCTURAS S.A.	ES	107	30.563.210,26
9	180	PHILIPS ELECTRONICS NEDERLAND B.V.	NL	103	51.724.950,41
10	191	SELEX ES SPA	IT	98	30.492.717,32

Ranking of top 10 SME participant organisations in FP7 signed grant agreements in terms of counts of participations for the period 2007-2013 (extract of table 7b)

SME rank (euro)	EU Funds rank	Legal Name	Country	Number of Participations	EU Financial Contribution
1	91	ATEKNEA SOLUTIONS CATALONIA, SA	ES	66	5.075.940,04
2	2	ARTTIC	FR	61	25.096.870,25
3	3	GABO:MI GESELLSCHAFT FUR ABLAUFORGANISATION:MILLIARIUM	DE	45	18.627.089,51
4	4	INSTITUT VON KARMAN DE DYNAMIQUE DES FLUIDES	BE	41	16.065.897,56
5	33	SIGMA ORIONIS SA	FR	36	7.287.620,50
6	73	INSTITUTO DE BIOMECANICA DE VALENCIA	ES	36	5.645.555,40
7	11	ECOLOGIC INSTITUT GEMEINNÜTZIGE GMBH	DE	35	9.565.614,95
8	17	ASOCIACION DE INVESTIGACION DE MATERIALES PLASTICOS Y CONEXAS – AIMPLAS	ES	35	8.521.421,09
9	36	INSTITUTO TECNOLOGICO DEL EMBALAJE, TRANSPORTE Y LOGISTICA	ES	35	7.231.690,66
10	8	ATHENS TECHNOLOGY CENTER SA	EL	34	10.793.332,00

Commission Staff Working Document - Horizon 2020 Annual Monitoring Report 2015 (Brussels, 21.11.2016 - SWD(2016) 376 final)

This overview of the top organisations in terms of EU funding from Horizon 2020 refers to signed grants for calls closed in 2015

The following descriptions and convention codes will be used for distinguishing between different types of organisations:

- Private for profit companies (PRC)
- Public bodies (excluding research and education) (PUB)
- Research organisations (excluding education) (REC)
- Secondary and higher education establishments (HES)
- Other entities (OTH)

Top-10 **HES organisations** in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding, EUR	Number of participations
1	THE CHANCELLOR, MASTERS AND SCHOLARS OF UNIVERSITY OF CAMBRIDGE	United Kingdom	73,543,045	114
2	UNIVERSITY COLLEGE LONDON	United Kingdom	73,529,176	104
3	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	United Kingdom	63,193,866	87
4	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	Switzerland	59,031,850	72
5	TECHNISCHE UNIVERSITEIT DELFT	Netherlands	51,230,026	69
6	IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE	United Kingdom	51,221,257	72
7	THE UNIVERSITY OF EDINBURGH	United Kingdom	42,413,753	47
8	KOBENHAVNS UNIVERSITET	Denmark	40,850,818	73
9	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	Switzerland	35,245,862	60
10	KATHOLIEKE UNIVERSITEIT LEUVEN	Belgium	35,180,663	61

Top-10 **OTH organisations** in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding EUR	No participations
1	COST ASSOCIATION	Belgium	89,619,171	1
2	FUNDACION BANCARIA CAIXA D ESTALVIS I PENSIONS DE BARCELONA LA CAIXA	Spain	4,904,488	2
3	CYBERFORUM EV	Germany	3,291,419	1
4	SONDERBORG FORSYNINGSSERVICE AS	Denmark	3,108,136	1
5	ICLEI EUROPEAN SECRETARIAT GMBH (ICLEI EUROPASEKRETARIAT GMBH)	Germany	2,932,631	8
6	FOMENTO DE SAN SEBASTIAN SA	Spain	2,514,830	2
7	EIT ICT LABS IVZW	Belgium	2,217,750	1
8	GESELLSCHAFT FUR ANGEWANDTE MIKRO UND OPTOELEKTRONIK MIT BESCHRANKTERHAFTUNG AMO GMBH	Germany	1,976,778	3
9	BIO BASE EUROPE PILOT PLANT VZW	Belgium	1,921,100	2
10	BIOPRAXIS RESEARCH AIE	Spain	1,894,115	2

Top-10 **PRC organisations** in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding EUR	No. participations
1	BORREGAARD AS	Norway	26,664,439	3
2	Clariant Produkte (Deutschland) GmbH	Germany	22,451,450	1
3	SIEMENS AKTIENGESELLSCHAFT	Germany	17,832,259	10
4	GEANT LIMITED	United Kingdom	16,780,315	1
5	ENERGOCHEMICA TRADING AS	Slovakia	13,441,418	1
6	SOLIDPOWER SPA	Italy	10,254,375	2
7	ASML NETHERLANDS B.V.	Netherlands	9,705,374	2
8	ITM POWER (TRADING) LIMITED	United Kingdom	9,459,880	4
9	ACCIONA INFRAESTRUCTURAS S.A.	Spain	9,128,714	9
10	ATOS SPAIN SA	Spain	8,991,774	22

Top-10 PUB organisations in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding EUR	No of participations
1	AGENCE NATIONALE DE LA RECHERCHE	France	7,609,253	12
2	NORGES FORSKNINGSRAD	Norway	7,078,428	14
3	The Department Of Energy and Climate Change	United Kingdom	6,806,348	3
4	BUNDESMINISTERIUM FUER BILDUNG UND FORSCHUNG	Germany	6,778,232	7
5	LANDESHAUPTSTADT MUENCHEN	Germany	6,702,446	2
6	MINISTERIE VAN ECONOMISCHE ZAKEN	Netherlands	5,971,360	14
7	CENTRO PARA EL DESARROLLO TECNOLOGICO INDUSTRIAL	Spain	5,589,625	8
8	ENTERPRISE IRELAND	Ireland	5,412,250	2
9	TARTU LINNAVALITSUS	Estonia	5,408,375	1
10	ENERGISTYRELSEN	Denmark	5,157,728	4

Top-10 **REC organisations** in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding, EUR	No of participations
1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	France	113,283,521	162
2	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	Germany	81,075,752	144
3	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	France	69,526,864	77
4	MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN	Germany	62,003,850	78
5	CONSIGLIO NAZIONALE DELLE RICERCHE	Italy	42,042,944	80
6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	Spain	36,021,827	82
7	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	Germany	32,636,040	57
8	INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE	France	32,583,903	43
9	INTERUNIVERSITAIR MICRO- ELECTRONICACENTRUM IMEC VZW	Belgium	27,961,208	19
10	FORSCHUNGSZENTRUM JULICH GMBH	Germany	22,750,739	24

Top-10 Private SMEs organisations in terms of EU funding in 2015

Rank	Participant legal name	Country	EU funding, EUR	No of participations
1	GEANT LIMITED	United Kingdom	16,780,315.00	1
2	SOLIDPOWER SPA	Italy	10,254,375.00	2
3	ITM POWER (TRADING) LIMITED	United Kingdom	9,459,880.00	4
4	INNOVACIO I RECERCA INDUSTRIAL I SOSTEN.	Spain	6,680,832.00	10
5	HS ORKA HF	Iceland	6,609,293.75	2
6	ESTEYCO SAP	Spain	6,439,875.00	2
7	SYMBIOFCELL SA	France	5,065,050.00	2
8	AVANTIUM CHEMICALS BV	Netherlands	4,852,370.91	7
9	ALACRIS THERANOSTICS GMBH	Germany	4,609,870.98	3
10	GENERAL EQUIPMENT FOR MEDICAL IMAGING	Spain	4,393,596.25	1

Question 27 – Annex - 10 largest and smallest commitments for Horizon 2020

a) 10 largest contracts signed by the Commission in H2020

Project Number	Project Acronym	Type of action	Cascading Grants	Project Requested EC Contribution	Project Total Costs	Sum of Direct Costs	Project Indirect Costs	Project Special Unit Costs Direct Indirect
633053	EUROfusion	COFUND-EJP	Yes	440.800.000,00	856.961.937,57	649.303.982,44	160.275.728,88	47.382.225,00
681463	H2020	SGA-CSA	Yes	137.249.171,00	137.249.171,00	130.723.691,10	6.525.479,90	
696656	GrapheneCore1	SGA-RIA	No	89.000.000,00	89.000.000,10	71.386.555,89	17.613.444,21	
720270	HBP SGA1	SGA-RIA	No	89.000.000,00	89.000.000,00	71.482.018,43	17.517.981,57	
731122	GN4-2	SGA-RIA	No	59.000.000,00	95.904.005,75	77.575.173,80	18.328.831,95	
115854	EBOVAC1	IMI2	No	58.292.722,00	92.038.481,00			
733032	HBM4EU	COFUND-EJP	No	49.933.776,00	74.059.590,64	59.344.652,48	14.714.938,16	
773830	One Health EJP	COFUND-EJP	Yes	44.998.999,99	89.999.999,75	72.168.147,00	17.831.852,75	
691714	PROMOTION	IA	No	39.327.743,88	51.638.753,01	42.337.402,41	9.301.350,60	
723051	L3Pilot	IA	No	35.960.979,39	46.684.871,25	37.705.397,00	8.979.474,25	

b) 10 smallest contracts signed by the Commission in H2020

Project Number	Project Acronym	Type of action	Project Requested EC Contribution	Project Total Costs	Sum of Direct Costs Lowest	Project Indirect Costs
643287	INNO-EEN 2014	CSA	3.150,00	3.937,50	3.150,00	787,50
643264	ENIGMA	CSA	5.600,00	7.000,00	5.600,00	1.400,00
643358	InnoSME-LV	CSA	6.300,00	7.875,00	6.300,00	1.575,00
643355	IB INNO	CSA	6.778,00	8.472,50	6.778,00	1.694,50

674808	INNO EEN-M	H2020-EEN-SGA	7.677,60	7.677,60	6.142,08	1.535,52
642178	InnovImp	CSA	8.400,00	10.500,00	8.400,00	2.100,00
643267	KAM2CY	CSA	8.400,00	10.500,00	8.400,00	2.100,00
699367	EEN Armenia H2020	H2020-EEN-SGA	9.352,50	9.352,50	7.482,00	1.870,50
643269	SME CoachLT	CSA	9.450,00	11.812,50	9.450,00	2.362,50
642522	ICEKAM	CSA	11.005,00	13.756,25	11.005,00	2.751,25