










Commissioner Carlos Moedas

Meeting with [REDACTED], [REDACTED] of IBM

Commissioner's Office

10 October 2017

15:00-16:00

<p>Main contact person: [REDACTED]  [REDACTED] RTD.D1, [REDACTED]</p> <p>Contributors: [REDACTED]  [REDACTED] RTD.A.6 [REDACTED]  [REDACTED] RTD. J.1 [REDACTED]  [REDACTED] RTD.J.5 [REDACTED]  [REDACTED] CNECT.A.1 [REDACTED]  [REDACTED] CNECT. A.2 [REDACTED]  [REDACTED] CNECT. C/2/001</p>	<p>Cabinet Member: Alfredo SOUSA</p>
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Scene Setter

During this visit to Brussels [REDACTED] will meet also Vice-President Ansip, Commissioner Gabriel (immediately after your meeting) and possibly with Commissioner King, Commissioner Malmström, and Commissioner Jourová.

IBM is one of the main Cloud Computing market players, third in market share. It is an important global player in High Performance Computing (HPC) and a provider of HPC infrastructure and services. IBM provides infrastructure to several top-level European Computing Centres.

Existing funding in the order of €800 million for 2018-2020 under Horizon 2020 and CEF will allow to kick-start the European Data Infrastructure. Initial estimation of the required additional public and private investment is €4.7 billion in the period of 5 years. This includes €3.5 billion for data infrastructure, €1 billion for a large-scale EU-wide Quantum Technologies flagship and €0.2 billion for actions on widening access and building trust. The total financial contribution to IBM in FP7 and Horizon 2020 is currently about €135 million.

In the past there was an issue regarding the standard grant agreement and the transfer of intellectual property rights to entities outside Europe, that affected the participation of IBM in Horizon 2020 projects. This has been solved in a satisfactory manner for both IBM and the Commission (see background notes).

Objectives

- To discuss European Research, IBM participation in Horizon 2020 and the future Research Framework Programme.
- To discuss the strategy of IBM for Cloud Computing, High Performance Computing, Artificial Intelligence and the Internet of Things.

Lines to Take

IBM - General

- Welcome IBM's strong participation in Research Framework Programmes. Data indicate that it will be even larger in Horizon 2020 compared to FP7.
- Ask IBM what Europe needs to do to improve its performance in Research and Innovation, especially with regards to data-driven research.
- Welcome the decision of IBM to create a new global division that connects Cognitive computing and Internet of Things, and to locate the global headquarters of this new division in Europe.

FP9

- Mention the new "Missions" approach that will be introduced in FP9, and invite IBM to suggest ideas for bolder industry led mission closer to citizens.
- If appropriate, mention the European Innovation Council (Pilot Horizon 2020, outlook FP9).

European Science Cloud (EOSC)

- Mention that the EOSC aims at building a collaborative environment for open research data, where resources will be shared, data found and re-used, and costs distributed equitably between data producers and data users; the European Open Science Cloud is a fundamental enabler of Open Science.

High Performance Computing (HPC) – Digital Infrastructure

- Mention that areas that will profit from the HPC investments include energy and climate, (enabling transition to carbon-free sources), environment (enabling decisions that help the preservation of natural ecosystems), healthcare (personalised medicine), digitisation of Industry but also many others.
- Explain that the strategic objective is to lift the EU among the top supercomputing powers worldwide by deploying exascale capacity. The initiative should reduce European dependence on third countries' technology and reinforce Europe's position as a provider of high-end supercomputing resources.

Artificial Intelligence (AI)

- Express the opinion that AI-based technology could be used to solve some of the biggest current societal challenges: treating disease, finding cures, lowering fatality rates in road transport and minimising environmental harm from farming. Machine learning is at the core of the 4th Industrial Revolution.
- Mention that Horizon 2020 has a very strong AI component (€700 million over the period 2014-2020).

2. SPEAKING POINTS

IBM

- The IBM decision to place the global headquarters of the new division on Connected Cognitive Computing in Munich Europe, is very welcome.
- I am pleased to see increased participation of IBM in Horizon 2020, comparing to an already very strong participation in FP7.

High Performance Computing (HPC) – Cloud Computing

- The development of a pan European high-performance infrastructure is the basis for provisioning advanced digital services across borders and a prerequisite to boost European competitiveness.
- The ultimate goal is to enhance Europe's scientific capabilities and industrial competitiveness by benefiting from the convergence of HPC, Big Data and Cloud Computing technologies.
- Thanks to a world-class European infrastructure of supercomputing (HPC) capability, this initiative will provide European science, industry and public authorities the means to compete and thrive in the digital economy.

Artificial Intelligence (AI)

- Europe builds on significant research in AI and is particularly strong in cooperating robots, autonomous mobile robots. The Robotics and AI part of the Horizon 2020 framework programme is the world's largest civilian programme in the field with a budget of €700 million over the period 2014–2020, implemented through a contractual Public-Private Partnership.

3. DEFENSIVE POINTS

Does the General Data Protection Regulation (GDPR) unnecessarily hamper development in this field?

No. The GDPR will boost legal certainty for businesses, with a single set of rules across the EU and one single regulatory authority streamlining lengthy processes. Non-EU companies, when offering their services to customers in the EU, will have to apply the same rules as EU companies. Furthermore, the new rules encourage privacy-friendly techniques such as pseudonymisation, anonymisation, encryption and data protection.

Citizens will have better and clearer information on how their data is processed and presented, which will increase confidence in the use of technological applications. The "right to be forgotten" will be clarified and strengthened.

Moreover, it will be easier to transfer personal data between service providers such as social networks –with the new right to "data portability".

Will the European strategy on HPC respect international competition rules?

Yes, all instruments are based on standard European legislation. Europe will seek competitive alternative sources of essential building blocks that can be used in several industrial domains.

Will industry play a role in the definition of the European HPC strategy?

Yes, the Commission is consulting with industrial stakeholders through the normal channels to get input. At this stage we are focused on establishing the cooperation framework between EU Member States to define the strategic goals. With all due caution to avoid conflicts of interest, industry will be called to contribute to the definition and the realisation of the goals.

How will Europe finance its HPC strategy?

The investments for such ambitious goals are important and will require the combination of different funding sources (i.e. European and national public funds and private investments). Member States and the Commission have started to work on possible approaches to pool the necessary resources. These discussions will evolve in the coming year.

4. BACKGROUND NOTES

4.1 CV

[illegible]

4.2 The European Science Cloud

Context on the EOSC

The Commission presented its vision for the European Open Science Cloud in April 2016, as a key part of the Communication '*European Cloud Initiative – Building a competitive data and knowledge economy in Europe*'.

The EOSC will build a collaborative environment for open research data, where resources will be shared, data found and re-used, and costs distributed equitably between data producers and data users. The European Open Science Cloud is a fundamental enabler of Open Science.

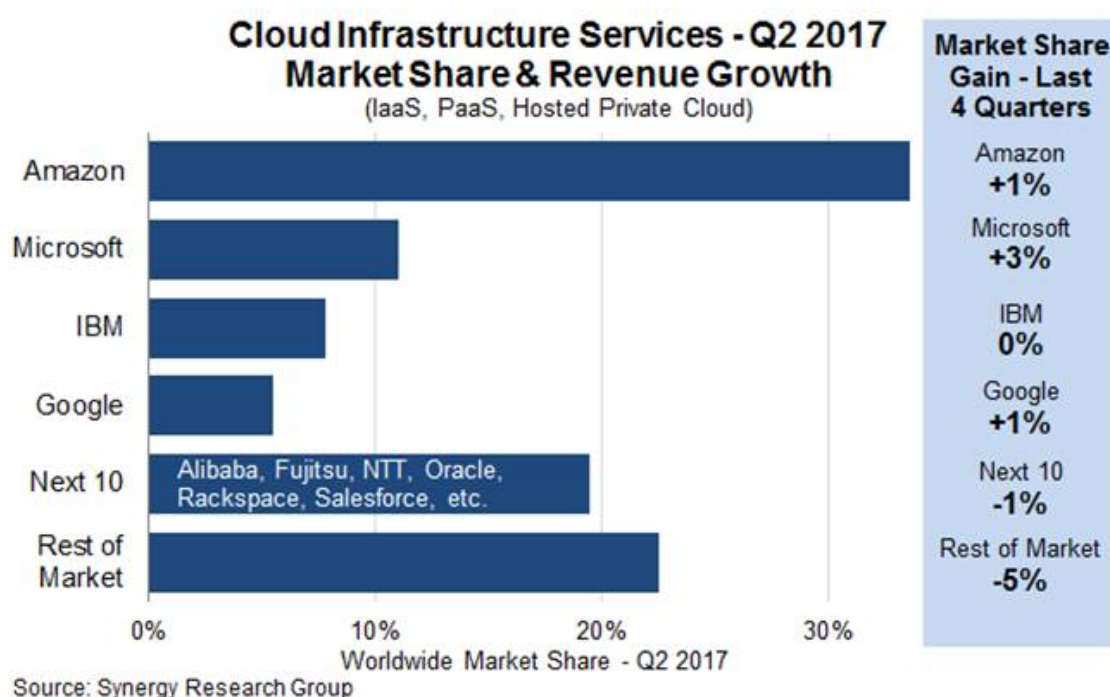
Since then, the Commission has discussed with stakeholders and expert groups within the Open Science Policy Platform, High Level Expert Group, EOSC Pilot project, Member States in order to define the next steps of the project.

Next Steps

To move from vision to action, we are committing significant resources in Horizon 2020 to make the EOSC a reality by 2020.

In the Work Programme 2018-2020 of Horizon 2020, the science cloud is supported notably through the Call INFRA-EOSC; the Call covers all the key functions of the EOSC, with an overall budget of €260-300 million (the fork is due to the need to further define the budget for year 2020).

4.3 Data on Cloud market Share



4.4 Facts and figures: IBM Participation in FP7 and Horizon 2020

Transfer of ownership of results in Horizon 2020 projects

In the past there was an issue regarding the standard grant agreement and the transfer of intellectual property rights to entities outside Europe, that affected the participation of IBM in Horizon 2020 projects.

The Horizon 2020 Grant Agreement gives the possibility to the Commission, through an additional optional clause 30.3, to be informed in advance of any transfer of ownership of results of work performed in an Horizon 2020 funded project, if this transfer is foreseen to a partner established in a non-EU and non-Associated country. The Commission has then 60 days to object the transfer. This is a protective measure which does not forbid any transfer but sets up a preliminary control by the Commission that such transfer will not damage the competitive position of the EU industry.

After discussions with representatives of IBM, the Commission has agreed to make two changes in the application of Article 30.3:

1. to provide more legal certainty, the WP will indicate from now on if the option will be inserted in a grant agreements under a given topic (but leaving open the possibility to exceptionally insert it without such indication if justified).
2. in case where the option is introduced in the grant agreement, the participants may notify the Commission of an intended transfer before the results are generated, if the result can be sufficiently identified at that stage (before they had to wait until specific results were generated).

These changes were communicated to IBM's representatives and they highly welcomed the changes to the application of Article 30.3, both at senior and technical level.

KEY figures on IBM Participation in FP7 and Horizon 2020

KEY FIGURES	FP7	Horizon 2020
Eligible Proposals involving IBM	511	788
Success rate	30.7%	12.4%
Projects (Signed Grant Agreements) involving IBM	147	97
EU total financial contribution to IBM Projects (million €)	91.26	45.82

FP7 and H2020 Participation - Key Figures - IBM*

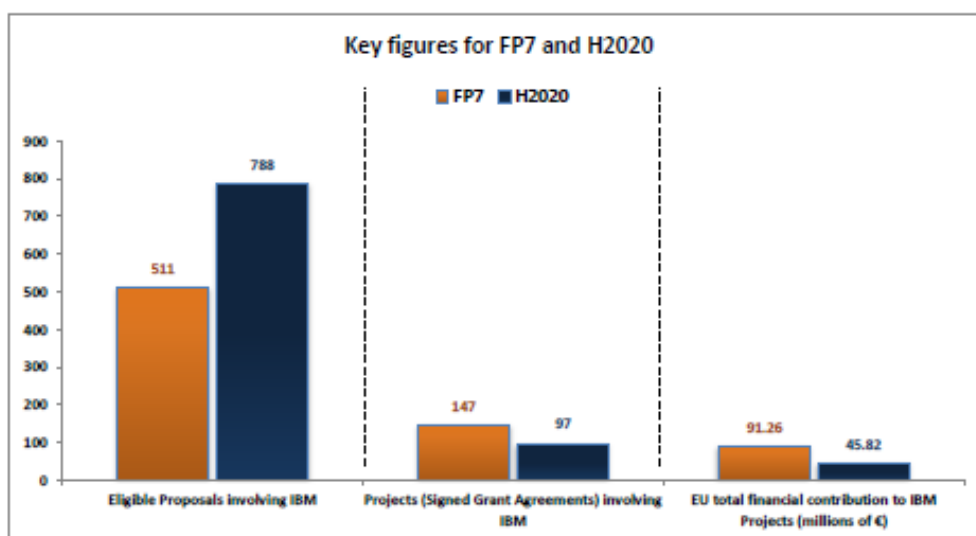
* The statistics on the participation of IBM in FP7 and H2020 presented here are summary statistics for its 18 subsidiaries. Details and key figures for each of these IBM subsidiaries are provided in Annex 2.

Chapter 1: Summary

KEY FIGURES	FP7	Horizon 2020
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The report was generated on 14/09/2017

Chapter 2: Overall Participation

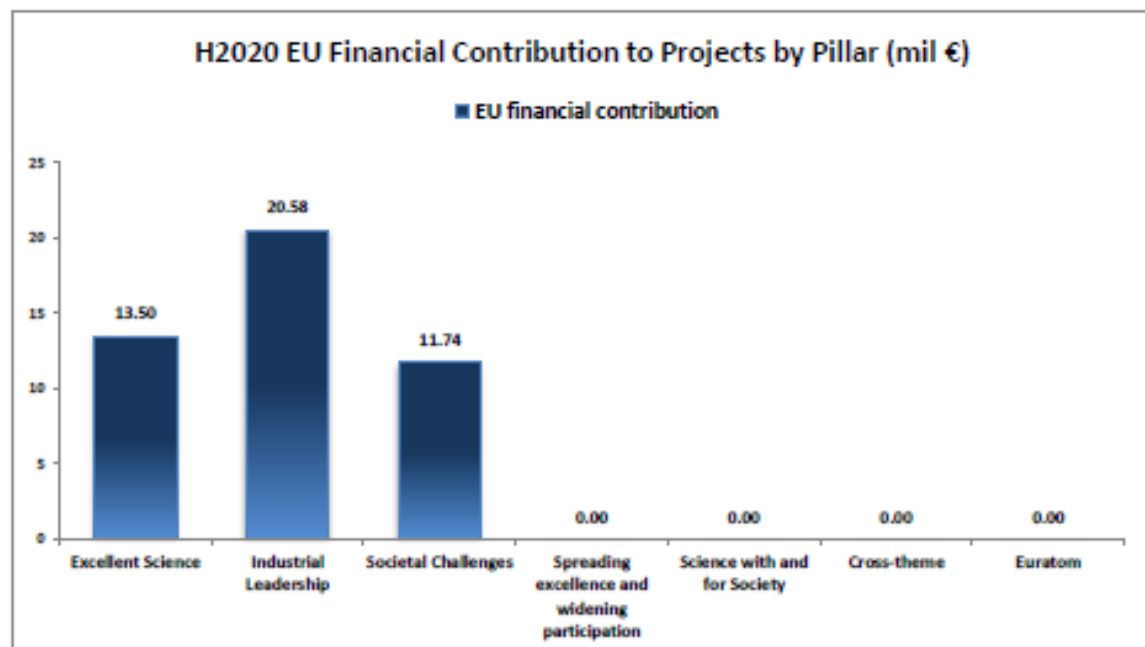


In FP7, 511 eligible proposals came from IBM, with 30.7 % success rate for retained proposals. IBM receive in FP7 a total of EUR 91.26 million as EU contribution from 147 projects, where IBM coordinates 27.

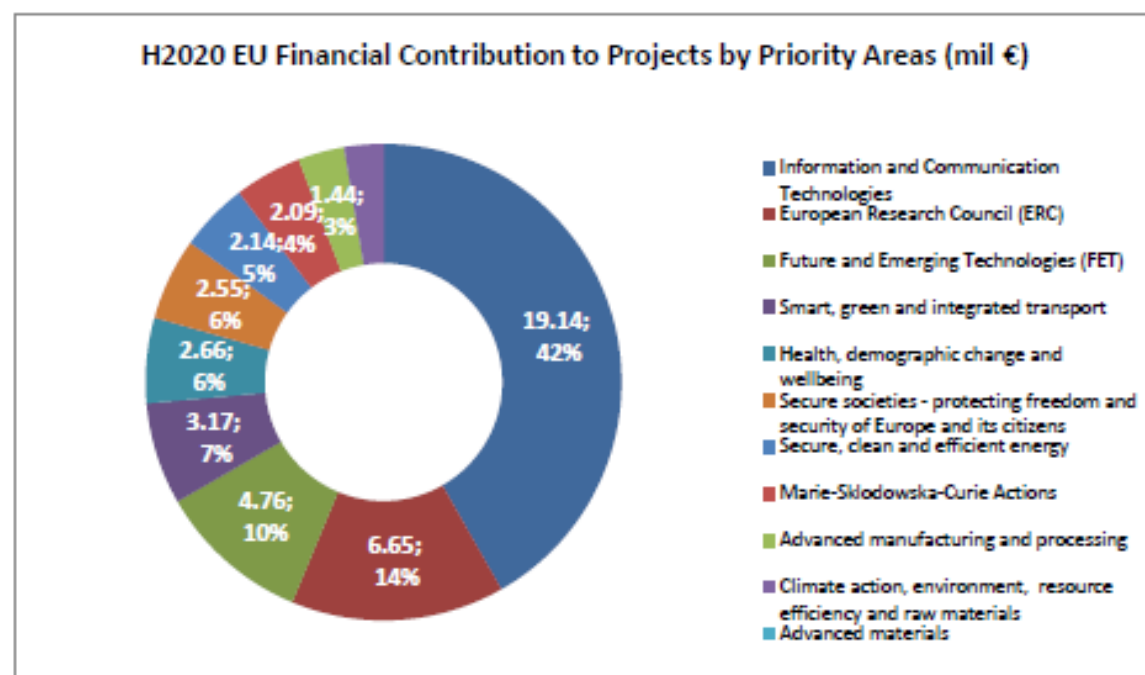
In H2020, 788 eligible proposals came from IBM, with 12.4 % success rate for retained proposals. IBM receives in H2020 a total of EUR 45.82 million as EU contribution from 97 projects, where IBM coordinates 11.

Chapter 3: Distribution by pillar

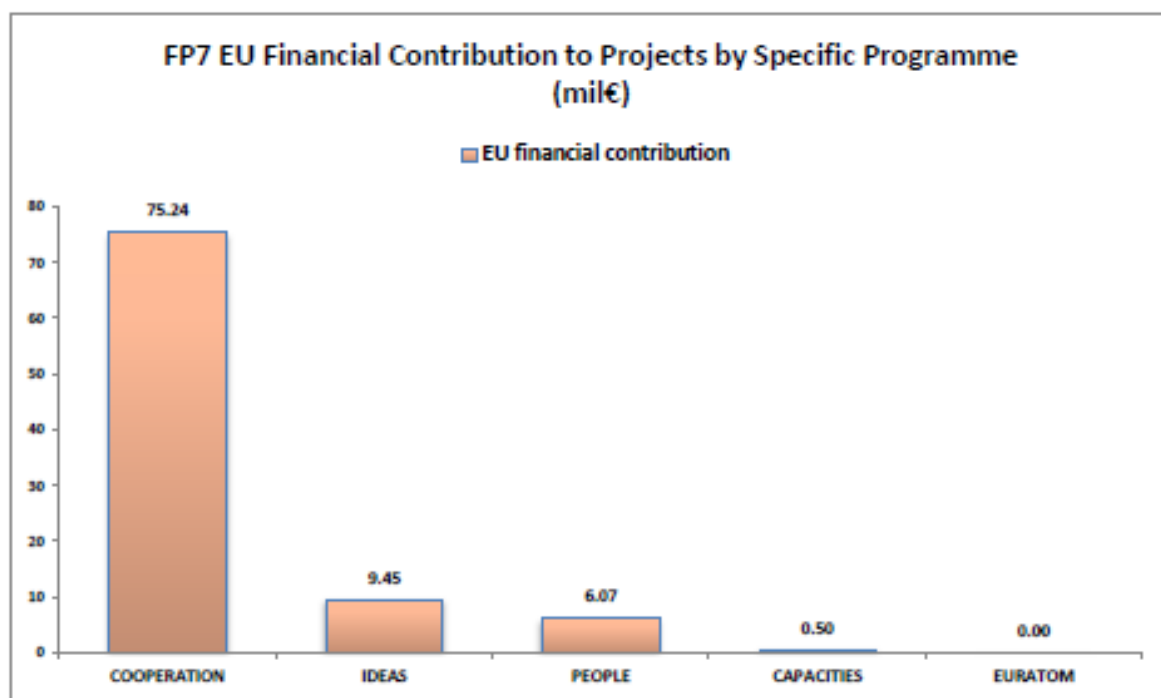
When splitting the figures by pillar, in H2020 the most important contribution is in the Industrial Leadership, with an amount of 20.58 million Euros. The most important contribution by Priority Areas in the Industrial Leadership pillar were Information and Communication Technologies with amount of 19.14 million Euros and Advanced manufacturing and processing with amount of 1.44 million Euros.



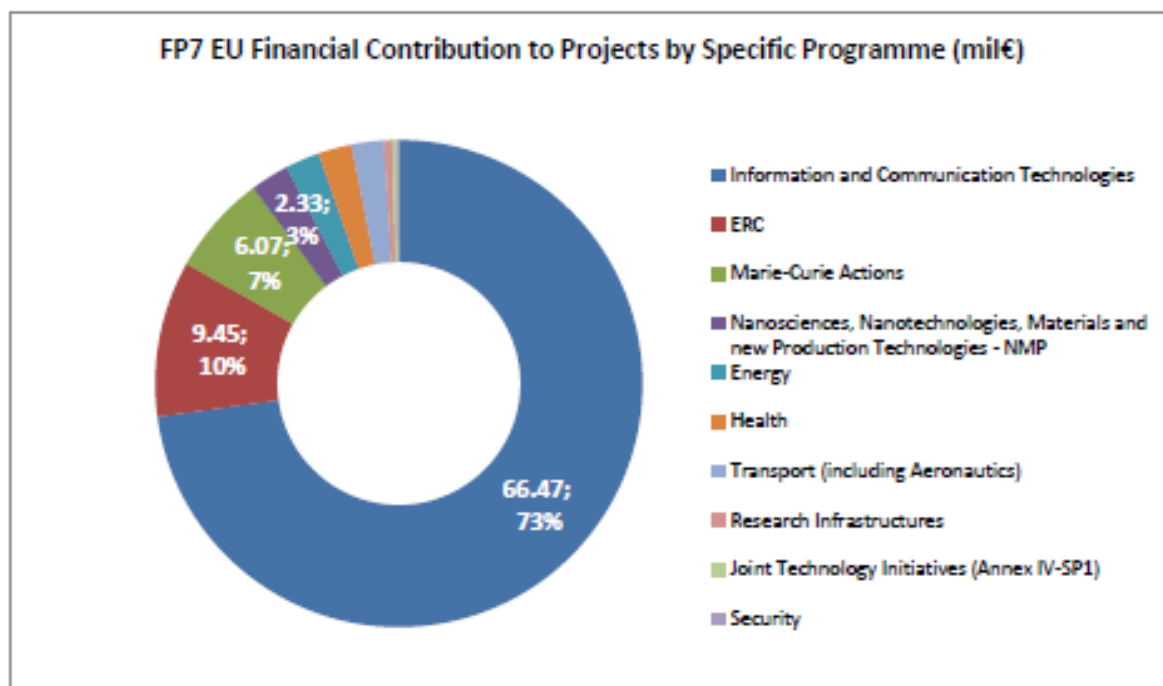
The most important contribution by Priority Areas in all pillars were Information and Communication Technologies with amount of 19.14 million Euros and European Research Council (ERC) with amount of 6.65 million Euros.



In FP7, the most important contribution is in the COOPERATION programme, with an amount of 75.24 million Euros. The most important contribution by Priority Areas in the COOPERATION programme were Information and Communication Technologies with amount of 66.47 million Euros and Nanosciences, Nanotechnologies, Materials and new Production Technologies - NMP with amount of 2.33 million Euros.



The most important contribution by Priority Areas in all pillars were Information and Communication Technologies with amount of 66.47 million Euros and European Research Council (ERC) with amount of 9.45 million Euros.



5. SOCIAL MEDIA

Happy to meet  @IBM today.

Excited to see IBM invest in #EU Research.