Open Science, Evolving Societies: New Horizons for EU-Japan Research

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Evolution of the EU-Japanese collaboration under the new Research and Innovation funding scheme Horizon Europe





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Horizon Europe in a nutshell

- Horizon Europe is the next research and innovation framework programme
- It will become operational from January 2021 = we are in transition period
- It has a *proposed* budget of 100 billion euros
- it puts a big focus on addressing all future societal issues, with missions and new partnerships



Horizon Europe negotiations and planning: not over yet!

- Provisional agreement reached on 19.3.19 within the Trilogue [EC-EP-Council], now pending formal approval by EP + Council
 - The Commission is leading a strategic planning process
 - > Two main points still are not been set

 THE TOTAL BUDGET (EC 100bn; EP 160; Council?)
 MODALITES ASSOCIATION NON EU COUNTRIES



The most important piece of the puzzle

"We can only start [negotiating] when we have the stable basis of the regulation. The article related to association has not been agreed. Once we have that position, we can start that" Signe Ratso, deputy director general Research and Innovation (R&I days 2019)

- > UK status seems under Horizon Europe = the ultimate cause of the negotiation delay.
- > After formal Brexit, UK "should" seek HE membership.
- At least 24 countries from Switzerland to Canada are formally considering joining HE, but first want to see the membership terms and conditions.

SERIOUS RISK: researchers not able to participate in the HE from its start in January 2021.



Associated countries, a priviledged status

- 16 countries associated to Horizon 2020: researchers can compete for EU funding on the same footing as EU researchers, on condition that their governments make a payment, based partly on the size of their gross domestic product, into a central EU money pot to help pay for.
- Under Horizon Europe, EC wishes to change the formula: each country's membership fee, to be equivalent to the money its researchers take out of the programme.



16 countries associated to Horizon 2020

- Iceland
 Norway
 Albania
 Bosnia and Herzegovina
 North Macedonia
 Montenegro
 Serbia
 Turkey
 Israel
- Moldova Switzerland Faroe Islands Ukraine •
 Tunisia Georgia Armenia





Japanese research and EU framework program: today

- \succ Horizon 2020 is open to the world = calls are open for participation from countries outside of EU.
- > Japanese organisations can participate in collaborative research projects
- > Japanese individuals can participate in mobility schemes (MSCA, ERC) in Europe.

BUT

- > Regular research projects in Horizon 2020, Japanese partners are not eligible for automatic funding
- > Japanese participants have to determine themselves the sources of funding
- > They may be *exceptionally* eligible when the EC deems participation of the entity essential.
- There are also coordinated calls: Japanese participants receive funding from the Japanese government (e.g. photovoltaics, superconductivity, aeronautics, critical raw materials and ICT).





Japanese research and EU framework program today – some stats







Japanese research and EU framework program today – some stats

H2020 contribution to Other Countries – getting exceptional funding





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Japanese research and EU framework program today – some stats

				Switzerla	nd	
	Norway			Switzerland, Japan, Norway		
Japan					€1,156,401,086 Total EC Contribution	
Norway, Japan		€849,477,746 Total EC Contribution		2250	Projects	•
€2,752,474 Total EC Contribution		1166 Projects	•	100	Top 100 collaborating organizations	•
100 Projects	•	100 Top 100 collaborating organizations	•	673	Organizations	•
100 Top 100 collaborating organizations	•	516 Organizations	•	117	Collaborating countries	•
63 Organizations	•	121 Collaborating countries	•			
69 Collaborating countries						



IN THE MEANTIME – IN AND OUT OF THE R&I BUBBLE

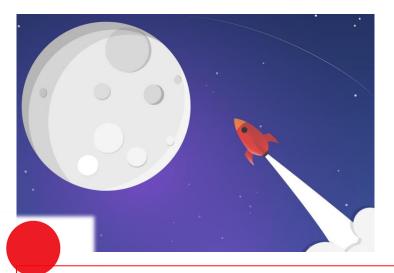


Now EU – JAPAN signed Free Trade agreement.

- Signal of willingness of additional cooperation on research too?
- It is surely true at bi-lateral level: interest for collaboration is specific areas (e.g. Artificial Intelligence), ongoing discussion ongoing between Japan and Germany and Japan and France.

Analysts' view: R&D deals with Canada, Japan and other tech powers far from Brussels will need to be entered into as part of a plan strengthening the geopolitical impact of the framework program and of EU itself.





LOOKING TOGHETER AT THE MOON?

Most interesting developments after the meeting of commissioner Moedas with Japanese Science Minister Takuya Hirai [May 2019]



Upcoming Japan's moonshot project: it will run for at least five years (possibility of being extended to ten years)

Specific goals have yet to be decided, but precise and measurable targets

The moonshots as refocusing of Japan's support for innovation with a full bottom-up system. EU Missions shall achieve, in a set timeframe, a measurable goal that could not be achieved through individual Member States actions;

Shall **impact EU society**, the EU and national policymaking, and **be relevant for European citizens**. Shall work in defined areas (Adaptation to Climate Change; Cancer; Healthy Oceans; Climate-neutral and Smart Cities; Soil Health and Food





- Under the current arrangement Japan's Science and Technology Agency pays for its researchers to participate in a number of small, speciallydesignated EU-led projects, this seems unlikely to continue;
- Associate membership would give greater access and it seems likely to happen, maybe around missions-moonshots;
- The Brexit uncertainty might hinder the efforts of convergence before 2021









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