Horizon Europe in a nutshell: EU-Japan collaborations & IP implications

Gloria Villar Acevedo, PhD
Head of the European Projects Office at PONS IP

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Imovative Partner for Intellectual Property

PRESENTATION INDEX





HORIZON EUROPE IN A NUTSHELL





Innovation

Horizon Europe

THE NEXT EU RESEARCH & INNOVATION INVESTMENT PROGRAMME (2021 – 2027)

#HorizonEU

Based on the Commission Proposal for Horizon Europe, the common understanding between co-legislators and the Partial General Approach, both approved in April 2019







Our vision

A sustainable, fair and **prosperous** future for **people** and **planet** based on European values.

- Tackling climate change (35 % budgetary target)
- Helping to achieve Sustainable
 Development Goals
- Boosting the Union's competitiveness and growth



European Commission

Horizon Europe

The ambitious EU research and innovation framework programme (2021-2027)



to strengthen the EU's scientific and technological bases and the European Research Area (ERA)



to boost Europe's innovation capacity, competitiveness and jobs

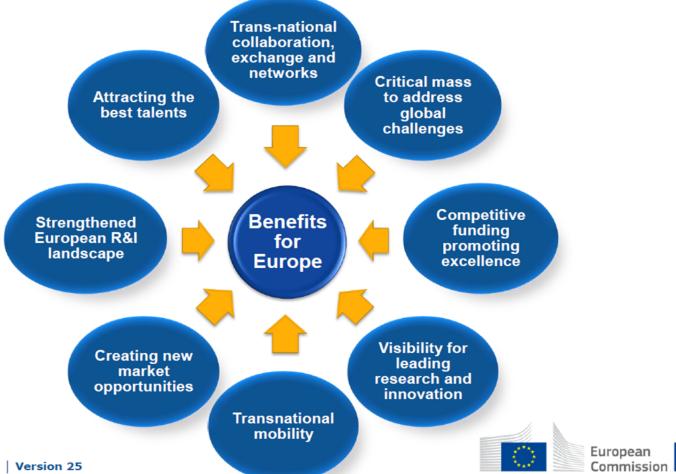


to deliver on citizens' priorities and sustain our socioeconomic model and values

The Commission proposes a budget of € 100 billion for Horizon Europe.



Added value through Horizon Europe:







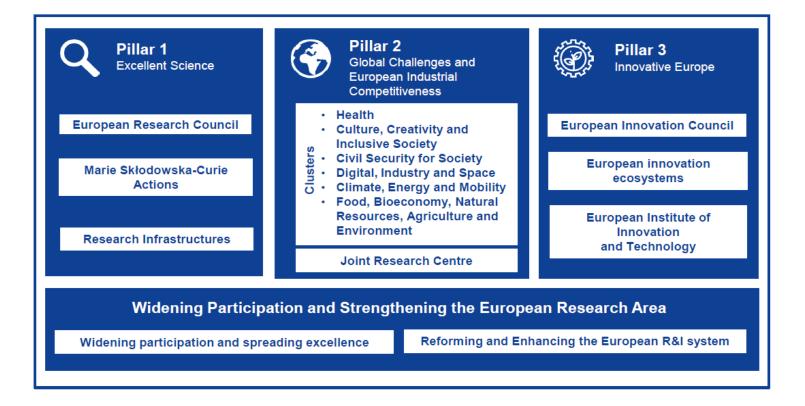
European Parliament and Council reached a common understanding on Horizon Europe on 19 March 2019

- Budget, synergies and third country association still pending, depending on the overall MFF negotiations
- Commission has started preparations for the implementation of Horizon Europe



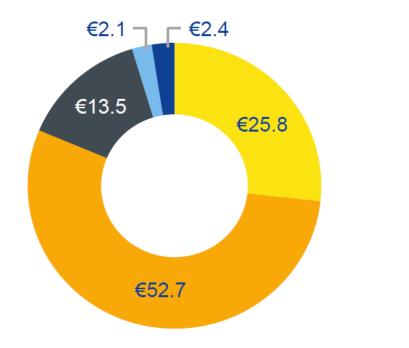


Horizon Europe: Preliminary structure





Commission proposal for budget: €100 billion* (2021-2027)



€ billion In current prices

- Excellent Science
- Global Challenges & European Ind. Comp.
- Innovative Europe
- Widening Part. & ERA
- Euratom

* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

European





Lessons Learned

from Horizon 2020 Interim Evaluation

Key Novelties

in Horizon Europe



Support breakthrough innovation



European Innovation Council



Create more impact through mission-orientation and citizens' involvement



R&I Missions



Strengthen international cooperation



Extended association possibilities



Reinforce openness



Open science policy



Rationalise the funding landscape



New approach to Partnerships



Encourage participation



Spreading Excellence





European Innovation Council

Support to innovations with breakthrough and disruptive nature and scale up potential that are too risky for private investors (70% of the budget earmarked for SMEs)

European Innovation Council – a one-stop-shop Helping innovators create markets of the future, leverage private finance, scale up their companies, Innovation centric, risk taking & agile, proactive management and follow up

Two complementary instruments bridging the gap from idea to investable project

Pathfinder: grants (from early technology to pre- commercial)

Accelerator:

grants only & blended finance (from pre-commercial to market & scale-up)







R&I Missions

Relating EU's research and innovation better to society and citizens' needs; with strong visibility and impact

A mission is a portfolio of actions across disciplines intended to achieve a **bold and inspirational and measurable goal** within a set timeframe, with **impact** for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.

Horizon Europe defines mission characteristics and elements of governance, and 5 missions areas.

Specific missions will be programmed within the Global Challenges and European Industrial Competitiveness pillar (drawing on inputs from other pillars)





New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

Key features

- Simple architecture and toolbox
- Coherent life-cycle approach
- Strategic orientation

Co-programmed

Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

Co-funded

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and in-kind contributions

Institutionalised

Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe





International Cooperation

Tackling together global societal challenges; access to the world's best talents, expertise and resources; enhanced supply and demand of innovative solutions

Extended openness to association

- Third countries with good capacity in science, technology and innovation
- Taking into account objective of driving economic growth in Europe through innovation
- General opening for international participation
- Intensified targeted actions (flagship initiatives, joint calls, etc.)





Open Science across the programme

Open Science

Better dissemination and exploitation of R&I results and support to active engagement of society

Mandatory Open Access to publications: beneficiaries shall ensure that they or the authors retain sufficient intellectual property rights to comply with open access requirements

Open Access to research data ensured: in line with the principle "as open as possible, as closed as necessary"; Mandatory Data Management Plan for FAIR (Findable, Accessible, Interoperable, Re-usable) and Open Research Data

- Support to researcher skills and reward systems for open science
- Use of European Open Science Cloud







Pillar 1

EXCELLENT SCIENCE:

reinforcing and extending the excellence of the Union's science base

European Research Council

 Frontier research by the best researchers and their teams

Commission proposal: € 16.6 billion

Marie Skłodowska-Curie Actions

 Equipping researches with new knowledge and skills through mobility and training

Commission proposal: € 6.8 billion

Research Infrastructures

 Integrated and inter-connected world-class research infrastructures

Commission proposal: € 2.4 billion



Pillar 2 - Clusters

Global Challenges & European Industrial

Competitiveness: boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals

Commission proposal for budget: € 52.7 billion



Commission

Pillar 3

INNOVATIVE EUROPE:

stimulating market-creating breakthroughs and ecosystems conducive to innovation

European Innovation Council

 Support to innovations with breakthrough and market creating potential

European innovation ecosystems

 Connecting with regional and national innovation actors

Commission proposal: € 10.5 billion, incl. up to € 500 million for ecosystems

European Institute of Innovation and Technology (EIT)

 Bringing key actors (research, education and business) together around a common goal for nurturing innovation

Commission proposal: € 3 billion



InvestEU for Research and Innovation (R&I)

Stimulates more investment in research and innovation, notably by the private sector; leverages and complements national/regional initiatives

No market distortion: intervention only to address financing gaps in the R&I delivery chain (notably due to high risk)

Support through:

- InvestEU Fund
- InvestEU Assistance
- InvestEU Portal

Leverages an estimated € 200 bn of investments into R&I; market-based finance for the exploitation and scale-up of European R&I







Simple and fit for purpose rules

- Further alignment to the Financial Regulation
- Increased use of simplified forms of grants where appropriate (building on the H2020 lump sum pilot experience)
- Broader acceptance of usual cost accounting practices
- Enhanced cross-reliance on audits benefiting beneficiaries taking part in several Union programmes

while ensuring continuity and consistency for beneficiaries by maintaining

- Attractive H2020 funding model, including up to 100% funding rate of direct costs
- Single set of rules principle







Strategic Plan for implementing Horizon Europe

The Strategic Plan (new implementing act by the Commission) will prepare the content in the work programmes and calls for proposals for the first four years

- Strategic orientation for R&I support, expected impacts
- Partnerships and missions
- Areas for international cooperation
- Issues such as:
 - Balance between research and innovation
 - Social Sciences and Humanities
 - Key Enabling Technologies and strategic value chains
 - Gender
 - Ethics and integrity
 - Dissemination and exploitation



Strategic plan gives direction to the work programme

Horizon Europe legislative package

Strategic Plan 2021-2024 Work programme 2021-2022

Calls for proposals

Main Features

Early involvement and extensive exchanges with Member States Extensive exchanges with the European Parliament Consultations with stakeholders and public at large



Steps towards the first Horizon Europe work programme



Early involvement and exchanges with Member States, consultation with stakeholders and the public at large Establishment of Mission Boards

Co-creation at Research & Innovation Days 24 – 26 September. Extensive exchanges with the new European Parliament. Establishment of new Commission - envisaged endorsement of Strategic Plan

Drafting of first Horizon Europe Work Programme on the basis of the Strategic Plan

Start of Horizon Europe



INTENATIONAL COOPERATION: JAPAN – EU COLLABORATION



INTERNATIONAL COOPERATION



- Participants from anywhere in the world can take part.... but are not always funded.
- Individual researchers from any country in the world seeking the opportunity to work in Europe for certain period of their career can apply for funding through the <u>European Research Council</u> and the <u>Marie</u> <u>Sklodowska-Curie</u> action

COUNTRY ELEGIBLE FOR FUNDING?

Automatically eligible for funding:

- Members States (MS)
- Associated Countries (AC)

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

Developing countries

• 130 (Afghanistan to Zimbabwe)

http://ec.Europa.eu/research/participants/data/ref/h2020/grantsmanual/hi/3cpart/h2020-hi-list-ac en.pdf



Industrialised countries and emerging economies **need** to find own funding

Exceptionally, elegible for EC funding If

- Bilateral agreement between that country and the EU
- The country is explicity identified in the call for proposal as being eligible for funding.

OR

 Their participation is deemed essential by the EC for carrying out the action ("coordinated call")

33 (

JAPAN IN EUROPEAN PROJECTS



3 May 2019 **Commissioner Moedas meets Japanese Science Minister** Takuya Hirai



Research and Innovation are among the key areas of cooperation between the European Union and Japan. The European Commission and the Government of Japan are seeking to enhance this cooperation at a time of increasing global challenges.

The conditions to cooperate more closely are very favourable with the 6th Science and Technology Basic Plan and the "Moonshot" Research and **Development Programme** in Japan and the next **EU** Research & Innovation Framework Programme "Horizon Europe" being currently under the preparation

SUPPPORT TO JAPANESE H2020 PARTICIPANTS

Available local programmes/funds that could provide support to Japanese Horizon 2020 participants

Japanese researchers, universities, research organisations and enterprises can team up with European partners to participate in projects under Horizon 2020 and use the excellent opportunities Europe offers in research and innovation. Through participation in Horizon 2020, Japanese partners can benefit from access to talent, knowledge, data and infrastructures, and connect to world-leading teams network and value rhains.

As a high-tech country, well advanced in research and innovation, Japanese participants are, however, not automatically funded through Horizon 2020. Japanese participants have to determine themselves the sources of funding and find the resources for their part of the project. These may be own funds, as well as funds received from Japanese ministries, agencies, foundations and other organisations that fund research and innovation activities in Japan.

In Horizon 2020 Work Programme 2018-20, the Japan Science and Technology Agency (<u>UST</u>) is providing funding opportunities for Japanese partners in the following call topic:

SU-DRS02-2018-2019-2020: Technologies for first responders

For further information, please consult the following web page:

http://www.jst.go.jp/sicp/announce_eujoint_04_GeneralInfo_j.html

You can also contact: Mr. Soichi KUBOTA and Mr. Yuta KAWASHIMA, Department of International Affairs, Japan Science and Technology Agency at jointeu@jst.go.jp

The Ministry of Education, Culture, Sports and Science and Technology (MEXT) is providing funding possibilities for Japanese partners in the following call topic:

. LC-CLA-07-2019: The changing cryosphere: uncertainties, risks and opportunities

MEXT will fund researchers in Japan who will join a consortium of LC-CLA-072019 by a research project called ArCS. For further information on ArCS, please see the following website: https://www.arcs.pro.jp/en// Therefore, the funding possibilities are only for the researchers who have already participated in ArCS as research members.

You can also contact: Arctic Environment Research Center, National Institute of Polar Research at arcs@nipr.ac.jp

One way to implement the targeted opening of Horizon 2020 to third country participants is through "coordinated calls", which are organised jointly with funding organisations from third countries. This has worked well with Japan for nine calls during the period 2011-2017 in the fields of ICT and ICT robotics/health (with the Ministry of Internal Affairs and Communications - MICT - and the National Institute of Information and Communications Technology of Japan - NICT), aeronavictics (with the

Last update: August 2019

Who can participate: Japanese researchers, universities, research organisations and enterprises can team up with European partners. However, not automatically funded through Horizon 2020.

These may be own funds, as well as funds received from: Japanese ministries, Agencies, Foundations and other organisations that fund research and innovation activities in Japan.

AVAILABLE LOCAL PROGRAMMES/FUNDS THAT COULD PROVIDE SUPPORT TO JAPANESE HORIZON 2020 PARTICIPANTS



EUROPEAN PROJECTS
JAPANESE PARTICIPATION

Japan Science and Technology Agency (<u>JST</u>) providing funding oportunities for Japanese partners in the following call topic: **SU-DRS02-2018-2019-2020: Technologies for first responders**

The Ministry of Education, Culture, Sports and Science and Technology (MEXT) is providing funding possibilities for Japanese partners in the following call topic:

LC-CLA-07-2019: The changing cryosphere: uncertainties, risk and opportunities

In Work Programme 2018-20, a coordinated call is launched together with MIC -Ministry of Internal Communication/NICT -National Institute of Information and Communications Technology of Japan in the area of ICT, with two topics:

<u>EUJ-01-2018:</u> Advanced technologies (Security/Cloud/IoT/BigData) for a hyper-connected society in the context of Smart City EUJ-02-2018: 5G and beyond



CURRENT PRIORITIES / ROADMAP FOR EU-JAPAN S&T COOPERATION

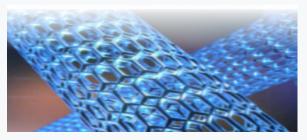
Areas of substantial cooperation include:



Information and Communication Technology (ICT)



Transport research: aeronautics, automated driving



Advanced materials research

There is a mutual interest to increase cooperation in the fields of:



Health/medical research



Environment/climate research (Arctic research, **Disaster Risk Reduction)**



Renewable energy



Quantum Technologies



PONS IP



http://ec.europa.eu/research/iscp/pdf/h2020 why flyer practical inf ormation ip web.pdf#view=fit&pagemode=none

BROCHURES AND OTHER LOCAL **COMMUNICATION MATERIALS AIMING** TO SUPPORT JAPANESE PARTICIPATION **IN HORIZON 2020**



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News/Events Policy Background Projects

News/Events

The 5th Joint Committee Meeting on Scientific and Technological Cooperation between the EU and Japan



At the centre from the left: Ambassador Takeahi Nakane, Jean-Eric Paquet, Director-General for DG RTD and Maria Cristina Russo, Director for International Cooperation in DG RTD

Research and Innovation are among the key areas of cooperation between the European Union and Japan. Over the years a number of excellent projects have been carried out under the EU Research and Innovation Framework Programme with the support of Japanese Ministries and Research Funding Agencies in the areas of renewable energy, disaster risk reduction, power electronics, arctic research, health, space, etc. The European Commission and the Government of Japan are seeking to enhance this cooperation at a time of increasing global challenges.

The conditions to cooperate more closely are very favourable with the 6th Science and Technology Basic Plan and the "Moonshot" Research and Development Programme in Japan and the next EU Research & Innovation Framework Programme "Horizon Europe" being currently under the preparation. During the 5th Joint Committee Meeting the EU and Japan decided to work on concrete steps to strengthen the collaboration in view of the EU - Japan Summit 2020. They expressed their commitment to bring the level of the collaboration between Japan and EU closer to its potential that characterises the world's leading research and innovation powerhouses.

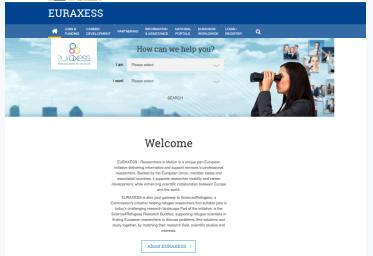
Framework documents Agreement A 760 KB

Background documents

- Roadmap (2018) > 1.8 MB
- . Joint Summary of the 4th EU-Japan Joint S&T Committee 182 KB
- . Towards a new strategic partnership in R&I
- between the EC and Japan > 124 KB
- · Joint Summary of the 3rd EU-Japan Joint S&T Committee 358 KB
- EU-Japan Action Plan A 84 KB
- · Why participate in Horizon 2020 (Japanese

version) > 1.4 MB How can we help you? · How to participate in Horizon 2020 (Japanese **BUITAXESS** version) > 878 KB Links SEARCH . Delegation of the European Union to Japan Available local support for H2020 participants A · EURAXESS links Japan Welcome . EU Japan Centre for Industrial Cooperation · Ministry of Education, Culture, Sports and Science & Technology (MEXT) EURAXESS - Researchers in Motion is a unique pan-European initiative delivering information and support services to professional researchers. Backed by the European Union, member states and https://ec.europa.eu/research/iscp/index.cfm?amp;pg=iapan approisted countries. It supports researcher mobility and career development, while enhancing scientific collaboration between Europe and the world. EURAXESS is also your gateway to Science4Refugees, a

BROCHURES AND OTHER LOCAL **COMMUNICATION MATERIALS AIMING** TO SUPPORT JAPANESE PARTICIPATION **IN HORIZON 2020**





NATIONAL CONTACT POINTS AND OTHER ASSISTANCE SERVICES To find the



To find the contact details of the Japan Horizon 2020 National Contact Points (NCPs) or those of your potential partner's country, you can search for NCPs by country, thematic areas and/or function:

http://ec.europa.eu/research/participants/por
tal/desktop/en/support/national contact poin
ts.html

National NCP Coordinator for Japan:

Dr. Naomichi YAMADA, EU-Japan Centre for Industrial Cooperation

Tel +81 3 6408 0281 Last update: August 2019

E-mail: naomichi.yamada@eu-japan.gr.jp

Web: www.eu-japan.eu







THE IMPORTANCE OF IP IN COLLABORATIVE PROJECTS



IPR & COLLABORATIVE PROJECTS



✓ Collaboration: "the act of working with another person or group of people to create or produce something"

Participating in a collaborative project implies sharing knowledge. Not only the results to be produced within the project but also the IP that as participants we bring to the project to achieve a common goal.

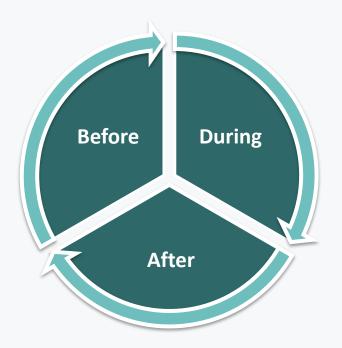
IPR: IS IT IMPORTANT?



As far as we are opening our IP to other beneficiaries, it is necessary to establish the **appropriate measures** in order to be protected from a non-performance or abuse from other beneficiaries

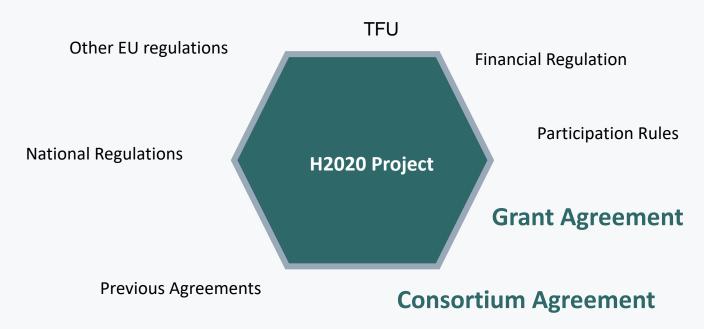
✓ Protection measures shall be in force during the whole project cycle, even once finished.

WHEN?



- IP provisions regulate ownership, protection, transfer, dissemination and exploitation of research project results. They shall be taken into account:
 - Before the Project starts (Memorandum of Understanding, letter of intent, confidentiality agreement)
 - **During** the Project (Consortium Agreement)
 - After the **Project** (License Agreements)

LEGAL FRAMEWORK





LEGAL FRAMEWORK

H2020 Project

Grant Agreement

CE & Beneficiaries: establishes rights and obligations

Consortium Agreement

Private Participants. Agreement between Supplements the GA (Standard document) Must be in line with the GA.



TO KEEP IN MIND REGARDING IP



- The Rules for Participant establish best efforts commitment of participants to exploit their own results.
- IP and exploitation issues are subject to evaluation regarding impact and feasibility of the proposal.
- A convincing outline of IP management and exploitation strategies on individual and consortium level within the proposal is a relevant matter.
- Results of research and development activities require further and often substantial investments to take them to market, which is appealing if the results are well protected through intellectual property.
- Properly managing IP in the projects, helps participants to **avoid future conflicts** among the consortium.



QUESTIONS?













THANKS FOR YOUR ATTENTION!!

gloria.villar@ponsip.com









