HANAMI

HPC ALLIANCE FOR APPLICATIONS AND SUPERCOMPUTING INNOVATION: THE EUROPE - JAPAN COLLABORATION

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DELIVERABLE NR D7.1

Policymaker and funder engagement plan

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Glossary of Terms

Item	Description
ABCI	AI Bridging Cloud Infrastructure
AIST	National Institute of Advanced Industrial Science and Technology
AMED	Japan Agency for Medical Research and Development (AMED)
ETP4HPC	European Technology Platform for High Performance Computing
CoEs	European Centres of Excellence
EU	European Union
EuroHPC JU	European High Performance Computing Joint Undertaking
HPC	High-Performance Computing
HPCI	High-Performance Computing Infrastructure
INFRAG	Infrastructure Advisory Group
JHPCN	Joint Usage/Research Center for Interdisciplinary Large-scale Information Infrastructures
JST	Japan Science and Technology Agency
JSPS	Japan Society for the Promotion of Science
KPIs	Key Performance Indicator
MEXT	Ministry of Education, Culture, Sports, Science and Technology of Japan
PI	Principal Investigator
RIAG	Research & Innovation Advisory Group
RIKEN/R-CCS	RIKEN Center for Computational Science
R&I	Research and Innovation
SAB	Scientific Advisory Board
SRG	Supercomputing Resource Group
STI	Science, Technology and Innovation
WP	Work Package

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Executive Summary

HANAMI is a pioneering project implemented under the umbrella of EU-Japan Digital Partnership, which aims to advance cooperation on a wide range of digital issues to foster economic growth and achieve a sustainable society through an inclusive, sustainable, human-centric digital transformation based on common values. HANAMI will improve international cooperation of EU-Japan HPC communities on advanced HPC applications development, with a roadmap for future collaborations in climate and weather modeling, biomedical and material science domains. HANAMI will pave the way for future projects in international cooperation between EU and priority regions, and therefore has an important role in setting sustainable cooperation framework for the future.

Policymakers and funders have a key role in defining the future of HPC collaboration between the EU and Japan. To ensure their engagement, HANAMI can support the interaction between the key HPC user groups, HPC providers, policymakers, funders, and other strategic stakeholders in the EU and Japan.

The overall aim of HANAMI's policymaker and funder engagement strategy is to promote the sustainability of the collaboration initiated and developed in the HANAMI project. This policymaker and funder engagement plan describes strategic targets, pathways to achieve them and defines an engagement strategy. Based on the analysis of needs of key stakeholders among European and Japanese policymakers and funders, this report describes an action plan for the engagement of stakeholders.

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1. Introduction

HANAMI is a pioneering project implemented under the umbrella of EU-Japan Digital Partnership, which aims to advance cooperation on a wide range of digital issues to foster economic growth and achieve a sustainable society through an inclusive, sustainable, human-centric digital transformation based on common values. HANAMI will pave the way for future projects in international cooperation, and therefore has an important role in setting sustainable cooperation framework for the future. HANAMI will improve international cooperation of EU-Japan HPC communities on advanced HPC application development and establish a roadmap for future collaboration in climate and weather modeling, biomedical and material science domains. This roadmap will first propose ways to strengthen the ecosystem built by HANAMI, and then perspectives and propositions to extend the HANAMI community within Europe and Japan. The overall objective is to promote a sustainable collaboration around HPC with the European and Japanese research organizations. Ensuring HANAMI sustainability is an ambitious goal that requires to build an engagement strategy for policymakers and funders. To achieve this objective, HANAMI proposes the following actions:

- Give a detailed overview of the policymakers and funders that are the most relevant for ensuring HANAMI's sustainability,
- Provide an initial analysis on policymakers' and funders' expectations towards HANAMI's collaboration activities and regarding its continuity,
- Provide an action plan for engaging policymakers and funders within HANAMI.

HANAMI's policymaker and funder engagement plan is closely connected to the collaboration plan (deliverable D2.3) conducted in work package 2, which will detail the other key stakeholder groups for HANAMI and activities targeted towards them. Policymakers and funders are essential stakeholders for the sustainability of HANAMI and therefore the project is making a separate plan for engaging this group with the view of strengthening HANAMI's continuation and with the aim of maintaining the collaboration in the long run. HANAMI is the vehicle that identifies the needs of researchers and other stakeholders, as well as the possibilities to engage policymakers and funders to fulfill them.

2. Engagement strategy

The EU-Japan Digital Partnership was launched on 12 May 2022. Being the first Digital Partnership the EU has signed, it has paved the way for Digital Partnerships with other strategic partners for the EU. The EU-Japan Digital Partnership aims to advance cooperation on digital issues to foster economic growth and promote a human-centric digital transformation, and cooperation in high-performance computing is one of the key areas where the two regions wish to collaborate.

This partnership gives a strong political basis for concrete collaborative work on HPC applications, testing and optimizing them on different computing architectures, including the EuroHPC systems and Japanese system including Fugaku. It

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demonstrates that policymakers and funders also have a key role in defining the future of EU-Japan collaboration in high-performance computing.

Therefore, HANAMI members highly value the engagement of policymakers and funders with the project. This ensures that HANAMI can meet the requirements for establishing a sustainable cooperation framework for EU-Japan cooperation in HPC.

Vision statement for sustainable HANAMI collaboration: EU and Japan are among the world's top regions in high-performance computing and with sustainable collaboration can together contribute to the development of scientific breakthroughs, responses to societal challenges, and the global development of HPC competences. Long-term commitment to collaboration between the EU and Japan would provide opportunities for researchers and engineers to build sustainable relations, joint projects where solutions are developed genuinely together, and to have the appropriate tools and resources to do so. To achieve a long-term commitment from key stakeholders and the HANAMI partners, there is a need for active and regular interaction between the stakeholders and a possibility to jointly discuss and agree on the future approaches to the collaborative efforts.

HANAMI value proposition: HANAMI can support the interaction between key HPC research organizations (academic and industrial), user groups, HPC providers, policymakers, funders, and other strategic stakeholders in the EU and Japan. For instance, HANAMI will organize three sustainability events for these stakeholder groups to regularly exchange views and maintain discussions around topics related to the continuation of HANAMI collaboration.

The overall aim of HANAMI's policymaker and funder engagement strategy is to promote the sustainability of the collaboration created in the HANAMI project. the future roadmap will present the different options (scientific areas, governance, funding) to support HANAMI's sustainability.

Key strategic targets for engaging policymakers and funders during the project are:

1) Ensure regular interaction between the HANAMI members, HPC community (users and providers), policymakers and funders.
2) Key policymakers and funders both in the EU and Japan are aware of HANAMI's successes and results.
3) EU (incl. national policies inside the EU) and Japanese science and technology policies as well as funding schemes to support the continuity of EU-Japan HPC cooperation.
4) EU, national European, and Japanese policymakers & funders support the continuation of HANAMI collaboration.

Pathways to achieve the strategic targets:

1) Create a forum where HPC users, HPC providers, policymakers and funders can regularly meet and exchange views on topical matters, discuss on next steps, and aim towards a common vision for the sustainability (scientific fields, key partners, governance and funding) of HANAMI collaboration.

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2) Further define which project results from HANAMI will be sustained beyond the project lifetime and what are the requirements for sustaining them from HANAMI members' and external stakeholders' (esp. policymakers & funders) perspectives.
3) Engage policymakers and funders via annual high-level sustainability events and update them regularly about HANAMI achievements via bilateral meetings, active dissemination efforts (in WP2), and other events and publications (such as policy papers).
4) Define concrete recommendations for policymakers and funders on EU-Japan cooperation in HPC and publish them via policy papers, conference talks / papers / posters, and the deliverables in WP7 on recommendations for governance structures and funding models, as well as a final roadmap for collaboration.

We propose the following indicators in order to evaluate the policymaker and funder engagement to HANAMI:

- Policymaker and funder participation to annual sustainability events
- Availability of policymakers and funders for bilateral discussions, other events, and meetings
- Recommendations from HANAMI on future EU, Japan and national (within EU) Science, Technology and Innovation (STI) policies and funding schemes, to ensure their support for continuing active collaboration in key HANAMI thematic areas.

3. Stakeholder mapping

This chapter presents the prioritization process and a list of key stakeholders among funders and policymakers. It is important to note that initiatives and stakeholders from other areas (e.g. scientists etc.), while not listed here, are of course on the same level of importance and will be presented in Deliverable 2.3 Collaboration Plan.

3.1 Prioritization of key stakeholders

The project organically divides policymakers and funders into Japanese and European stakeholders. On the Japanese side, the stakeholders consist of national funding and government agencies. On the EU side, relevant stakeholders include both national and EU-level entities, but since there is such a large number of relevant national actors, this document will not provide an exhaustive list but instead discuss them as a collective group.

Within this framework, the most relevant stakeholders were collected via the project network and via an analysis of policymakers and funders in both regions. The list will be further expanded during project lifetime, as necessary.

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3.2 Funders and policymakers

The selected key stakeholders can be found in Table 1 below. HANAMI might not always be in direct contact with some of the stakeholders, but also use indirect connections to engage them.

Stakeholder	Description & importance for HANAMI	Type
Cabinet Office (Japan)	Coordinates government policies and initiatives, providing administrative support to the Prime Minister and overseeing various governmental functions. As the agency responsible for coordinating Japan's Science, Technology and Innovation Basic Plans, it has an important role in ensuring that HPC cooperation is a national priority, supported across different government sectors.	Policymakers
Ministry of Internal Affairs and Communications of Japan (MIC)	MIC oversees a wide range of functions related to the basic structures of Japan, from administrative management to information and communications. Its involvement is crucial for promoting ICT industry policies, ensuring citizen safety, and supporting regional revitalization, all of which are essential for the successful implementation and sustainability of HPC initiatives under HANAMI. By engaging MIC, the HANAMI project can leverage its broad jurisdiction to support comprehensive and resilient HPC collaboration frameworks between the EU and Japan.	Policymakers
Ministry of Foreign Affairs of Japan (MOFA)	Conducts Japan's foreign affairs, representing the country's interests globally through diplomacy, international cooperation, and foreign policy initiatives. Its diplomatic channels and international cooperation frameworks are essential for formalizing and sustaining EU-Japan partnerships in HPC.	Policymakers
Ministry of Education, Culture,	Oversees education, culture, sports, science, and technology in Japan,	Policymakers

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Sports, Science and Technology of Japan (MEXT) National Institute of Science and Technology Policy of Japan (NISTEP)	promoting development and innovation across these sectors. Its involvement is crucial as it can align national education and research policies with the goals of the HANAMI project, ensuring sustained support and resource allocation for HPC initiatives. As part of MEXT, NISTEP provides research-based policy advice to the Japanese government, fostering strategic planning and development in science and technology. The insights and recommendations of NISTEP can help shape policies that support long-term EU-Japan cooperation in HPC.	
Ministry of Economy, Trade and Industry of Japan (METI)	METI's mission is to develop Japan's economy and industry by promoting economic vitality in private companies and advancing external economic relationships, as well as securing stable and efficient supply of energy and mineral resources. METI's involvement in the HANAMI project is vital for fostering industry-research collaboration, driving economic growth through HPC innovations, and ensuring that the HPC infrastructure supports both economic and industrial needs.	Policymakers
New Energy and Industrial Technology Development Organization of Japan (NEDO)	NEDO undertakes technology development and demonstration activities to carry out the missions of addressing energy and global environmental problems and enhancing industrial technology by integrating the combined efforts of industry, academia, and government.	Funders
Japan Society for the Promotion of Science (JSPS)	JSPS supports scientific research and talent development in Japan, facilitating academic exchanges and funding research projects. The JSPS programs can directly fund collaborative HPC projects and facilitate researcher mobility between the EU and Japan.	Funders
Japan Science and	JST promotes innovation and	Funders

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Technology Agency (JST)	technological advancement in Japan through research funding, collaboration initiatives, and technology transfer programs. JST's support can drive innovation in HPC, providing financial resources and facilitating joint research efforts between EU and Japanese institutions. One of the relevant programs of JST is the Strategic International Collaborative Research Program (SICORP). SICORP's focus on international cooperation aligns with HANAMI's goals. The Center for Research and Development Strategy (CRDS), as an affiliated institution of JST, independently conducts investigation and analysis and makes proposals on science, technology, and innovation policy. Their combined support can drive innovation in HPC, providing financial resources and strategic policy recommendations that facilitate joint research efforts between EU and Japanese institutions.	
Japan Agency for Medical Research and Development (AMED)	Drives medical research and development in Japan, funding projects and initiatives to advance healthcare and address public health challenges. Its involvement can benefit the HPC collaboration in the biomedicine research domain.	Funders
EuroHPC Joint Undertaking	European initiative aiming to develop a world-class high-performance computing (HPC) ecosystem, fostering collaboration in HPC research, infrastructure, and applications. The support of HANAMI can facilitate the exchange of best practices, shared infrastructure, and joint research efforts with Japan, strengthening the global HPC landscape.	Funders
DG CNECT	Directorate-General for Communications Networks, Content and Technology of the European Commission, responsible for developing and implementing policies to advance digital transformation,	Policymakers

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	telecommunications, and information technology within the EU. Its support can ensure that HPC initiatives are well-integrated into broader EU digital strategies, promoting sustained collaboration with Japan.	
European Union	Political and economic union of 27 member states, promoting cooperation, peace, and prosperity through shared policies and institutions, including the single market, common currency (euro), and various regulatory frameworks. The European Union's policies and funding mechanisms (e.g. Horizon Europe program) can support the institutionalization and sustainability of the HANAMI project, fostering a stable environment for long-term HPC collaboration.	Policymakers
European National Funding Agencies (e.g. Research Council of Finland, Spanish National Research Council, Agence Nationale de la Recherche [ANR], etc.)	These national funding agencies play a crucial role in providing financial support for scientific research and innovation within their respective countries. Their involvement in the HANAMI project can ensure the availability of funding for joint EU-Japan HPC initiatives, support cross-border research collaborations, and facilitate the integration of national HPC efforts into a cohesive, international framework.	Funders

Table 1: Key stakeholders for HANAMI

In addition to the key funders and policymakers listed above, several other influential organizations such as HPCI, INFRAG, RIAG, and ETP4HPC play critical roles in shaping HPC policies and advancing research infrastructures. These organizations provide either world-class computing resources, strategic policy recommendations, and/or support for industrial innovation and research infrastructure development. Their involvement in the HANAMI project will be essential for fostering comprehensive and sustainable EU-Japan collaboration in HPC, and activities planned towards them will be further outlined in the Collaboration Plan, D2.3.

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4. Initial analysis of stakeholder needs and HANAMI offering

4.1 European landscape and stakeholder needs

Regarding the EU-Japan high-performance computing cooperation, the key policymakers and funders in the European Union are the European Commission and the EuroHPC Joint Undertaking, and the main EU documents and strategies that the cooperation is based on are the European Digital Strategy[1], Digital Compass 2030[2], EU Indo-Pacific strategy[3], and the Global Gateway strategy[4]. Cooperation was established with the EU-Japan Digital Partnership agreement[5]. In this context, an annual Council is organized between the European Commission and the Japanese counterparts. Based on related documentation, the main interests of the European Commission and the EuroHPC Joint Undertaking regarding the Digital Partnership can be outlined.

A major factor affecting EU policymakers' interests towards EU-Japan digital cooperation is the aim to respond to emerging dynamics in the global landscape that are affecting the regional stability. In the European Union's Indo-Pacific strategy, adopted in 2021, the EU outlined an aim to promote an open and rules-based regional security architecture in the Indo-Pacific region. EU policymakers are calling for an Indo-Pacific region that is inclusive and based on the rule of law and democratic values.

Furthermore, the European Commission highlights the need to develop partnerships with regions where a shared value-base can be found. The Commission's 2030 Digital Compass Communication calls for forming international Partnerships for the Digital Decade with like-minded partners, and the Digital Partnership document declares that *both sides share a commitment to a positive and human-centric vision of the digital economy and society where the design, development, governance, and use of technology are guided by democratic values and respect for universal human rights*. Moreover, the Digital Partnership Council in 2023[6] reinforced the need to maintain unity in upholding a free and open rules-based international order, while also protecting the shared values and vision.

To maintain and strengthen the shared value base, international cooperation is seen as an important vehicle by the policymakers and funders. The Digital Compass 2030

[1] EU Digital Strategy: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en

[2] EU Digital Compass 2023: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

[3] EU strategy for cooperation in Indo-Pacific: https://data.consilium.europa.eu/doc/document/ST-7914-2021-INIT/en/pdf

[4] EU Global Gateway strategy: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/global-gateway_en

[5] Japan-EU Digital Partnership: https://www.consilium.europa.eu/media/56091/%E6%9C%80%E7%B5%82%E7%89%88-jp-eu-digital-partnership-clean-final-docx.pdf

[6] Second EU-Japan Digital Partnership Council: https://digital-strategy.ec.europa.eu/en/library/joint-statement-second-meeting-european-union-japan-digital-partnership-council

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states that strong international partnerships are a key for the success of Europe's Digital Decade and can support achieving the targets in all four key areas: skills, infrastructures, transformation of business and public services. It foresees the EU to take a leading role in developing a wider coalition of like-minded partners who share the vision of a human-centric digital transformation. Joint research activities are seen as an important way to support developing European leadership in evolving and digital technologies to tackle societal and environmental challenges.

Being one of the first Digital Partnerships, the EU-Japan Digital Partnership is expected to establish structures for collaboration in the digital field, and the following implementing actions launched for instance by the EuroHPC Joint Undertaking include the HANAMI collaboration. This collaboration is seen as a vehicle to promote cooperation in areas that both parties see valuable for solving common challenges and for advancing the common aims regarding digitalization. HANAMI is a pioneer project, and it is expected to pave the way for following projects regarding Digital Partnerships with other regions.

In the EU-Japan Digital Partnership agreement and related EuroHPC JU call for proposal[7], high-performance computing is raised as one of the key areas for collaboration to promote economic growth and sustainable society. It also defines other areas of collaboration that are closely linked to HPC like network connectivity, artificial intelligence and quantum computing. According to these communications, the following areas are seen valuable for achieving the common aims in HPC:

- Promoting the exchange of researchers and engineers
- Promoting the utilization of EU and Japan supercomputers among their research communities
- Fostering cooperation in HPC applications, having the thematic areas of biomedical, materials science, seismic/tsunami and/or weather and climate modelling as a starting point
- Exchanging information regarding optimizing HPC applications of common interest for future generations of supercomputing architectures
- Development of a roadmap for sustainable EU-Japan cooperation in HPC.

Based on this initial analysis, the key interests and needs for the EU policymakers and funders can be identified:

- International partnerships with like-minded regions to:
  - Strengthen human-centric digital economy and society globally
  - Develop European leadership in evolving and digital technologies by joint research activities
  - Develop sustainable collaboration between the European and Japanese HPC communities
- Promoting the exchanges and extended visits of researchers and engineers
- Promoting cross-access to European and Japanese supercomputing systems
- Fostering cooperation in HPC application development

[7] EuroHPC Call for proposals HORIZON-EUROHPC-JU-2022-INCO-04-01: https://eurohpc-ju.europa.eu/eu-japan-partnership_en

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- Strengthen competences in optimizing HPC applications for different supercomputing architectures
- Optimizing and testing biomedical, weather/climate and materials science applications of common interest on Japanese (and European) systems
- Advancements in scientific knowledge and societal impact enabled by the developments in key HPC applications
- Increase the competitiveness of both European and Japanese research communities.

4.2 Japanese landscape and stakeholder needs

Key policymakers and funders related to HPC collaboration between the EU and Japan are the Cabinet Office, who is the main contact on Japan's side for the EU-Japan Digital Partnership and formulates Japan's Science, Technology and Innovation Basic Plans, MEXT, who leads Japan's S&T policy, and funding organizations JSPS and JST. Japan's major policy directing the EU-Japan digital cooperation is the 6th Science, Technology and Innovation Basic Plan (2021)[8], which aims to implement the vision of a "Society 5.0" aiming to create "a human-centered society in which economic development and the resolution of social issues are compatible with each other through a highly integrated system of cyber space and physical space".

The 6th STI Basic Plan guides Japan's engagement in the Digital Partnership. The plan promotes international cooperation with actors who share the same values, highly reliable scientific research and technological capabilities, as well as the existence of extremely high-quality social data. The importance of international cooperation is highlighted especially in the creation and adoption of international standards, human resource development, strengthening international industry-academy joint research and promoting international data flow. In addition, the plan also sets out a goal of defining ideal ways of international cooperation.

HPC is recognized as a core capability to enable the usage of data and AI to achieve the Society 5.0 goal of "creating new value through the fusion of cyber space and physical space", as well as a key resource to achieving the most results in strategic research fields such as environmental sciences, life sciences and biomedicine, materials and quantum. Japan's flagship supercomputer Fugaku is already open to international researchers, but the Japan-EU Digital Partnership outlines cross-access, exchange of researchers and engineers and optimization of HPC applications as fields of interest for cooperation.

Based on an initial analysis of the policy objectives, the following needs of Japanese stakeholders can be derived:

<u>Policymaker and funder needs:</u>

- Internationalization of Japanese research
- Examples of efficient ways to implement international collaboration
- Understanding of the benefits of HPC collaboration with Europe
- Understanding of potential research fields for international collaboration

[8] https://www8.cao.go.jp/cstp/english/sti_basic_plan.pdf

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- Requirements for sustained collaboration with the EU
- Mutual commitment for international funding programs from EU counterparts
- Understanding of potential fields for international collaboration
- Existing networks for joint research
- Advancements in scientific knowledge and societal impact enabled by the developments in key HPC applications
- Increase the competitiveness of both European and Japanese research communities.

4.3 HANAMI offering

In order to be relevant for policymakers and funders as they aim to realize their objectives, HANAMI must respond to the above-mentioned needs and serve the interests of policymakers and funders.

International cooperation in HPC between Europe and Japan is currently an area that policymakers are willing to formalize and structure. There are a number of bilateral collaborations between individual organizations as well as the basis laid down by the Digital Partnership. HANAMI can support creating sustainable implementation structures for realizing the EU-Japan collaboration by:

- Bringing together key stakeholders regularly to discuss current and future trends, synergies, as well as potential gaps and needs for alignment in HPC communities and policies in Europe and Japan,
- Engaging closely with the policymakers and funders to deepen understanding of the benefits of HANAMI collaboration and its continuation,
- Facilitating research collaboration and HPC application development in key strategic areas (biomedical, weather/climate and materials science) via 7 subprojects,
- Creating new networks and identifying new potential areas for future collaboration (such as astrophysics, neurosciences, smart cities, AI, robotics, medical sciences),
- Creating opportunities for researcher and engineer mobility to strengthen personal networks and deepen collaboration between the HANAMI participants to build basis for sustainable collaboration,
- Promoting sustainable collaboration between the European and Japanese HPC and key scientific communities, investigating different possibilities for a sustainable cooperation structure and developing a roadmap for the future,

This analysis (incl. list of stakeholders, policymaker and funder needs, HANAMI offering) will be further complemented during the project. For example, the needs of national policymakers and funders require further analysis. The next steps include a survey to further understand policymaker and funder needs and the first sustainability workshop in January 2025.

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5. Action plan

HANAMI's funder and policymaker engagement strategy will be implemented via specific actions throughout the project's lifetime. These actions are designed to answer the stakeholder needs identified in the previous chapter to enable and ensure support for sustainable HPC collaboration between Europe and Japan.

Each action is aimed to fulfill one or multiple strategic purposes:

- **Creating awareness**: Stakeholders are made aware of the strong interest towards collaboration among the HPC communities, the HANAMI offering and its successes, and stay updated about the progress of sustainable HPC collaboration between the EU and Japan.
- **Engagement and influencing**: Stakeholders are engaged in dialogue and onboarded into the process for creating sustainable HPC collaboration between the EU and Japan, and commit to enabling it via relevant policies, funding schemes or other engagement.
- **Provision of recommendations**: Sharing possibilities or recommendations for sustained collaboration identified and analyzed within the project and via discussions with the stakeholders.

The specific engagement activities are outlined in the Table 2 below, followed by a timeline showing how the actions and outcomes align with project's timeline.

Action	Timeframe	Target stakeholders	Outcome	Metric
High-level sustainability workshops	Annual	All policymakers and funders	All key stakeholders are aware of the HANAMI offering and the possibilities for sustainable collaboration and are committed to achieve it	Policymaker & funder participation in the sustainability workshops
Bilateral meetings and discussions	Regular	EuroHPC JU, JST, JSPS. In regard to expectations and requirements for HANAMI sustainability: EC, MEXT, METI.	Policymakers and funders in Japan and the EU provide their own requirements for what needs to be sustained and how in the continuous HANAMI collaboration	Availability of policymakers and funders for bilateral meetings and discussions[9]
Targeted communications (in collaboration with WP2)	Continuous	All stakeholders	Stakeholders are made aware of the HANAMI project, its goals and	Number of communications sent

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			successes	
HANAMI presentations or talks at related international events and conferences (in collaboration with WP2)	Regular	All stakeholders	HANAMI is recognized as a key contact in international HPC collaboration	Number of events where HANAMI is represented in the program
Coordination with related initiatives (in collaboration with WP2)	Continuous	India HPC call, potential future calls with Japan, South Korea and Singapore, INPACE project[10]	Feeding results and aligning identified collaboration models with other Digital Partnership -based collaboration initiatives	Number of meetings with other consortia
National-level engagement via partners' existing networks	Continuous	Embassies, national policymakers	National actors are committed to support the sustained collaboration	Number of communications sent Number of meetings with national offices
Recommendations for governance structures, funding models and policy formulations for future HPC collaborations via policy papers and conference talks	From 2026	All policymakers & funders	EU, Japan and national STI policies and funding schemes enable the continuation and sustainable HANAMI collaboration between the regions	Future formulations of STI policies and funding schemes
Future roadmap for sustainable collaboration	End of the project	All policymakers and funders	All key stakeholders are aware of the requirements and possible ways to realize sustainable HANAMI collaboration between EU and Japan	Number of communications sent related to the HANAMI proposal for the future roadmap

Table 2: Engagement activities to implement the policymaker and funder engagement strategy.

5.1 Initial timeline

[10] HANAMI will attend and/or organize meetings with stakeholders and relevant international collaborations in the limit of EuroHPC rules. HANAMI can not fund any external organization (non HANAMI members, including Japanese research organization identified within the HANAMI grant agreement) and can not fund any meeting outside of Europe or Japan. Despite the relevance of listed projects and organizations of interests for HANAMI, the effective list of target stakeholders, visits and meetings is subject to change according to the EuroHPC fundings rules.

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The initial timeline presented in Figure 2 below shows how the actions outlined in the Action Plan will be realized through the project's lifetime. Each activity is given an approximate timeframe in relation to the project's overall timeline, and outcomes to be achieved are described on a yearly basis.

Participation to any events mentioned in the timeline is subject to receiving any necessary invitations or any other relevant means of access (e.g. talks being accepted in open calls for sessions, etc.), but HANAMI will strive to engage in them as much as possible. HANAMI might also try to represent at other relevant events, such as the EU-Japan Science Policy Forum or international HPC events (in the limit of EuroHPC funding rules), if possible.

The actions included in the timeline may be supplemented by additional activities as new opportunities and needs to achieve HANAMI's goals arise.

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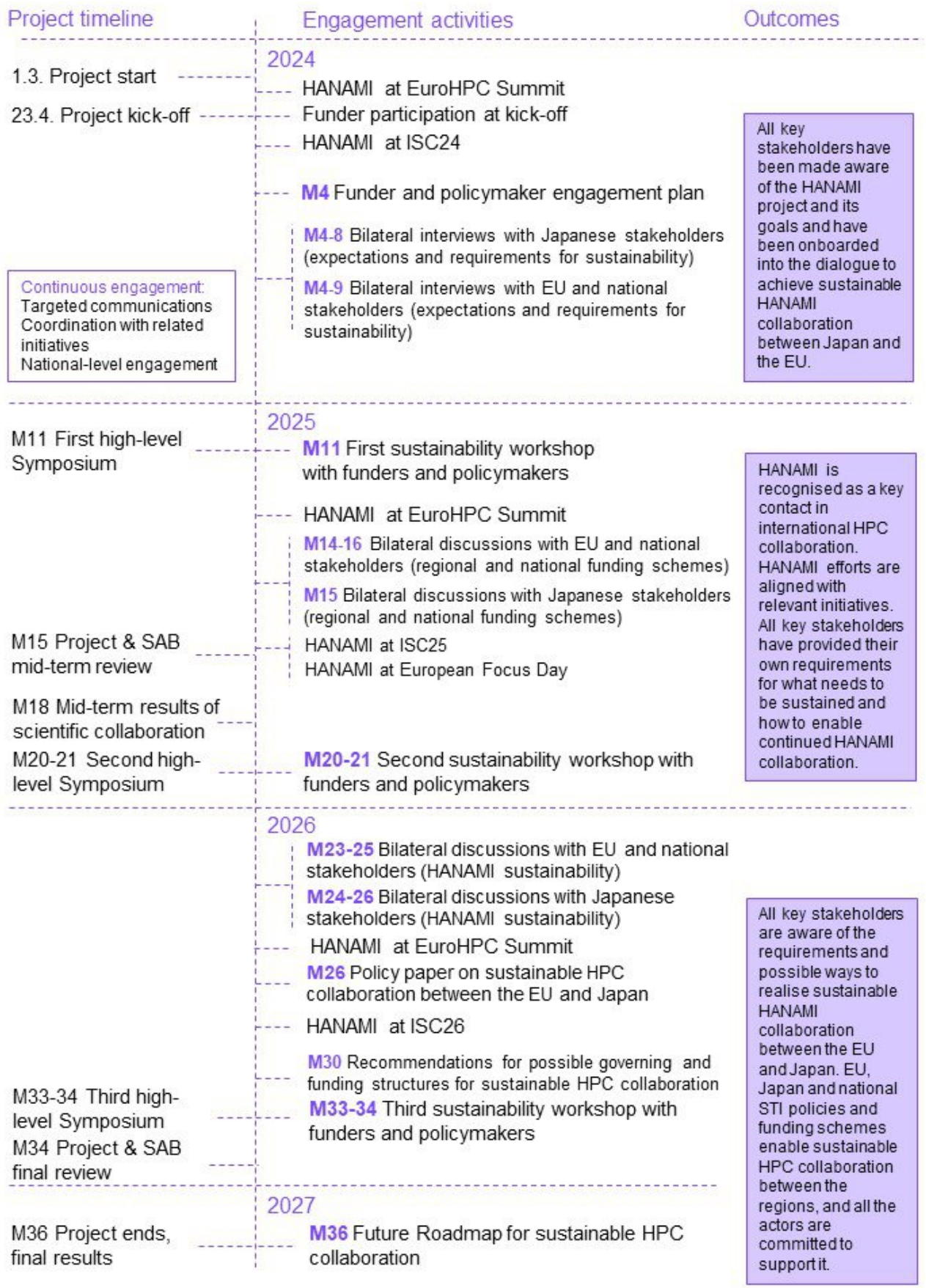

Figure 1: Initial timeline for HANAMI policymaker and funder engagement activities

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6. Conclusions

Policymakers and funders are an essential stakeholder group for HANAMI's sustainability because this group determines the future policies and funding structures for HPC collaboration between Europe and Japan. This plan identified a list of key policymakers and funders, and based on a desk-top study, analyzed key policymakers' and funders' needs and expectations towards the HPC collaboration between EU and Japan. Furthermore, this plan detailed the actions to engage policymakers and funders as well as an initial timeline.

Based on this initial analysis, key expectation from the European Commission, EuroHPC Joint Undertaking, Cabinet Office, MEXT, JSPS and JST, is to foster international cooperation in HPC, increase understanding of the requirements and benefits for sustaining the cooperation, and promote concrete cooperation structure for the cooperation. HANAMI will address these needs in various ways, such as investigating possible cooperation structures and defining a roadmap for the future, facilitate small-scale subprojects in key strategic areas and mobility and interaction between EU and Japan communities, and promote regular interaction between HANAMI members and key stakeholders.

Further analysis will be conducted during the project to also further define the actions and timeline in a flexible manner.

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