



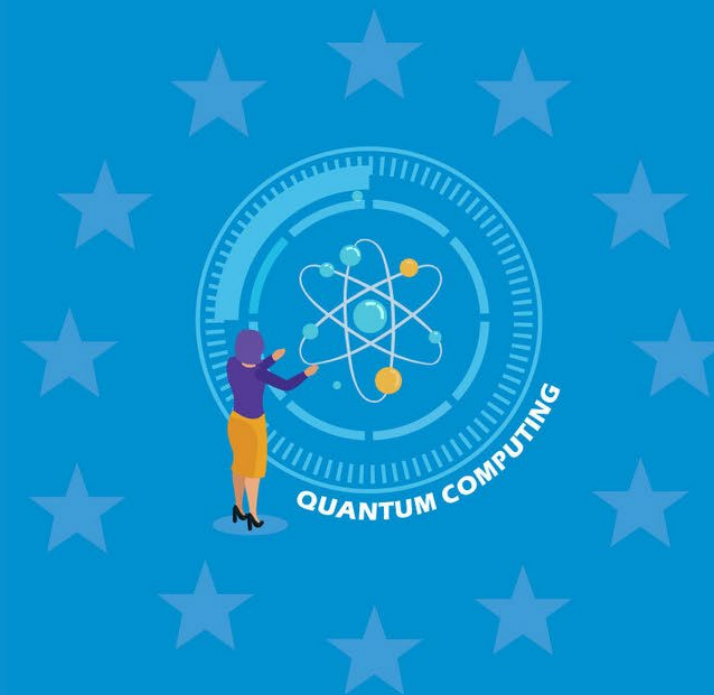
EuroHPC
Joint Undertaking

Disclaimer

Dear Participant,

Please be aware that this session is being recorded and will be uploaded to third party services afterwards. If You do not consent, please disconnect from the call now

1 MARCH 2024



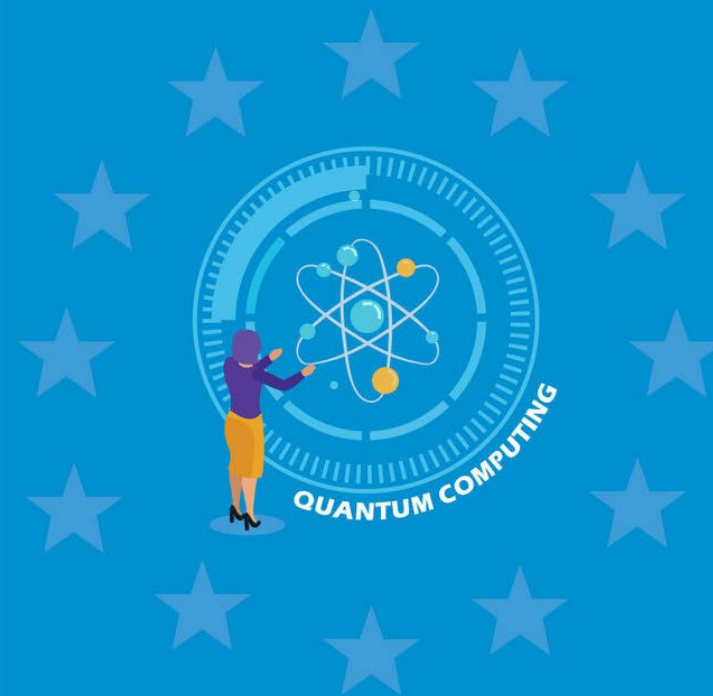


EuroHPC
Joint Undertaking

WELCOME TO THE

Info Session on EuroHPC Quantum Centres of Excellence (QECs)

1 MARCH 2024





EuroHPC
Joint Undertaking

Agenda

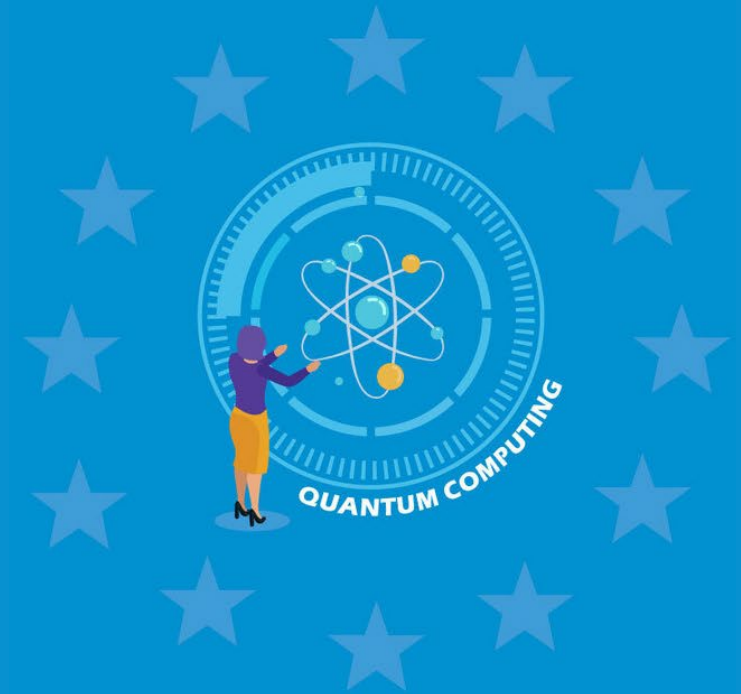
10:00 – 10:30 : EuroHPC Introduction and Overview

10:30 – 10:45 : REA information on Participant Registration

10:45 – 11:00 : REA information on “Ownership Control Assessment”

11:00 – 11:30 : FAQ Session

1 MARCH 2024



HORIZON-EUROHPC-JU-2023-QEC-05



EuroHPC
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Overview:

- EuroHPC anticipates to fund **two** European Quantum Excellence Centres (QECs), one with a strong focus on **academia** and one with a strong focus on **industry**
- A total grant amount of **20.000.000 EUR** with an EU contribution of 10.000.000 EUR is foreseen for this Research and Innovation Action (**RIA**)
- A project duration of **48 months** is foreseen
- The QECs will serve as “**One-stop-Shops**” for all issues surrounding applications and algorithms in quantum computing and hybrid HPC-QC
- The QECs will tightly cooperate with initiatives from the **Quantum Flagship** of the European Commission

[Introduction to the Quantum Flagship | Quantum Flagship \(qt.eu\)](#)

HORIZON-EUROHPC-JU-2023-QEC-05



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Scope:

- Development of **novel quantum-oriented application areas**
- Development and advancements of **quantum algorithms, - libraries** and **application software**
- Optimisation of **scalability** of quantum algorithms
- **Test** and **validation of codes** for a multitude of different QC platforms
- **Adaptation** of **developed codes** and **application software** to upcoming call on HPC/QC Middleware
- QECs shall establish themselves as **service providers** and as **primary point of contact** for relevant industry partners
- QECs shall conduct **dedicated** and **extensive user training** and awareness building in the European HPC and QC communities (“Quantum literate ecosystem”)



Scope:

All **developed codes**, applications, algorithms must:

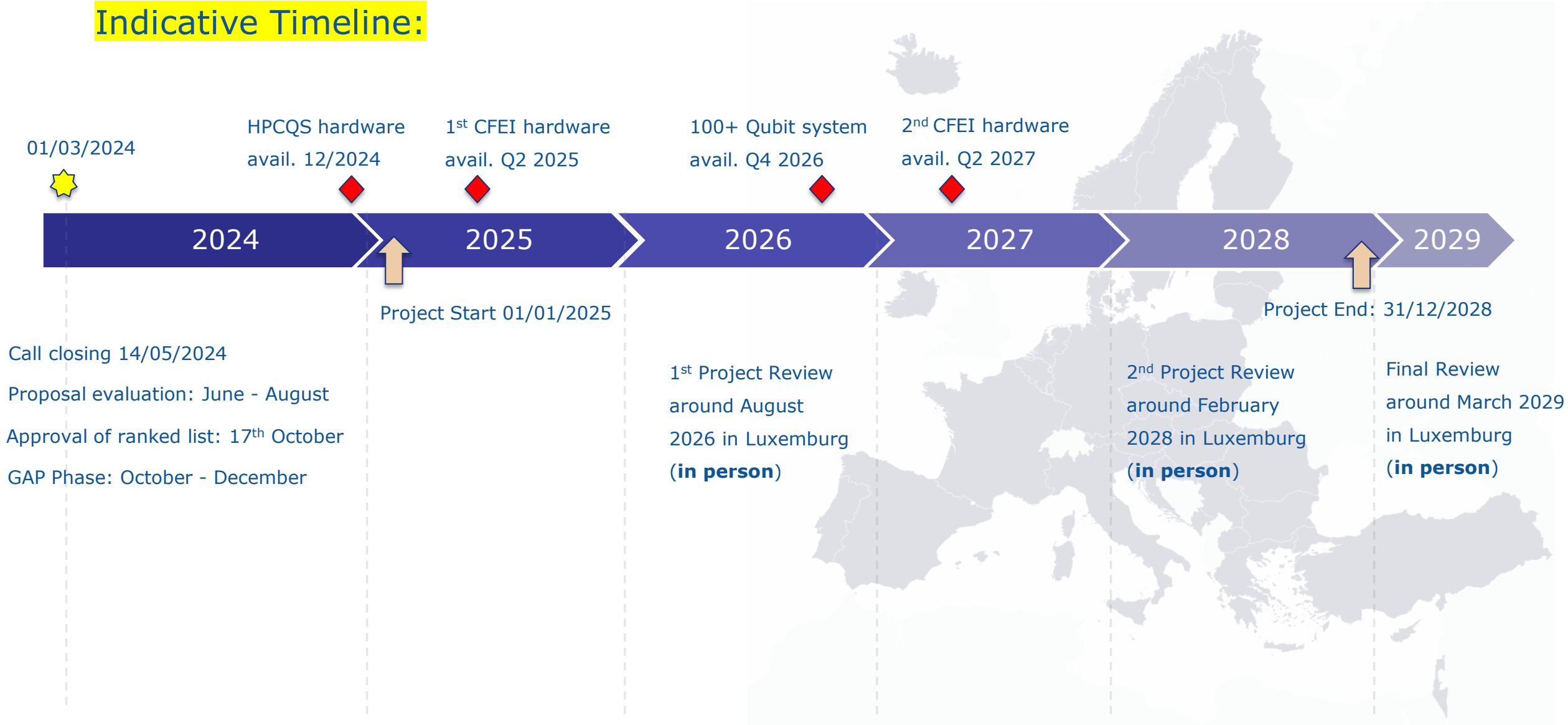
- be **hardware agnostic**
 - be **functional** on as many European Quantum Computer **platforms as possible**
 - allow for **further developing** existing QC applications towards **hybrid operations**
 - allow for **developments of hybrid application software** with a strong focus on **scalability**
- Activities are expected to **start at TRL 4-5** and **to achieve TRL 6-7** by the end of the project

HORIZON-EUROHPC-JU-2023-QEC-05



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Indicative Timeline:



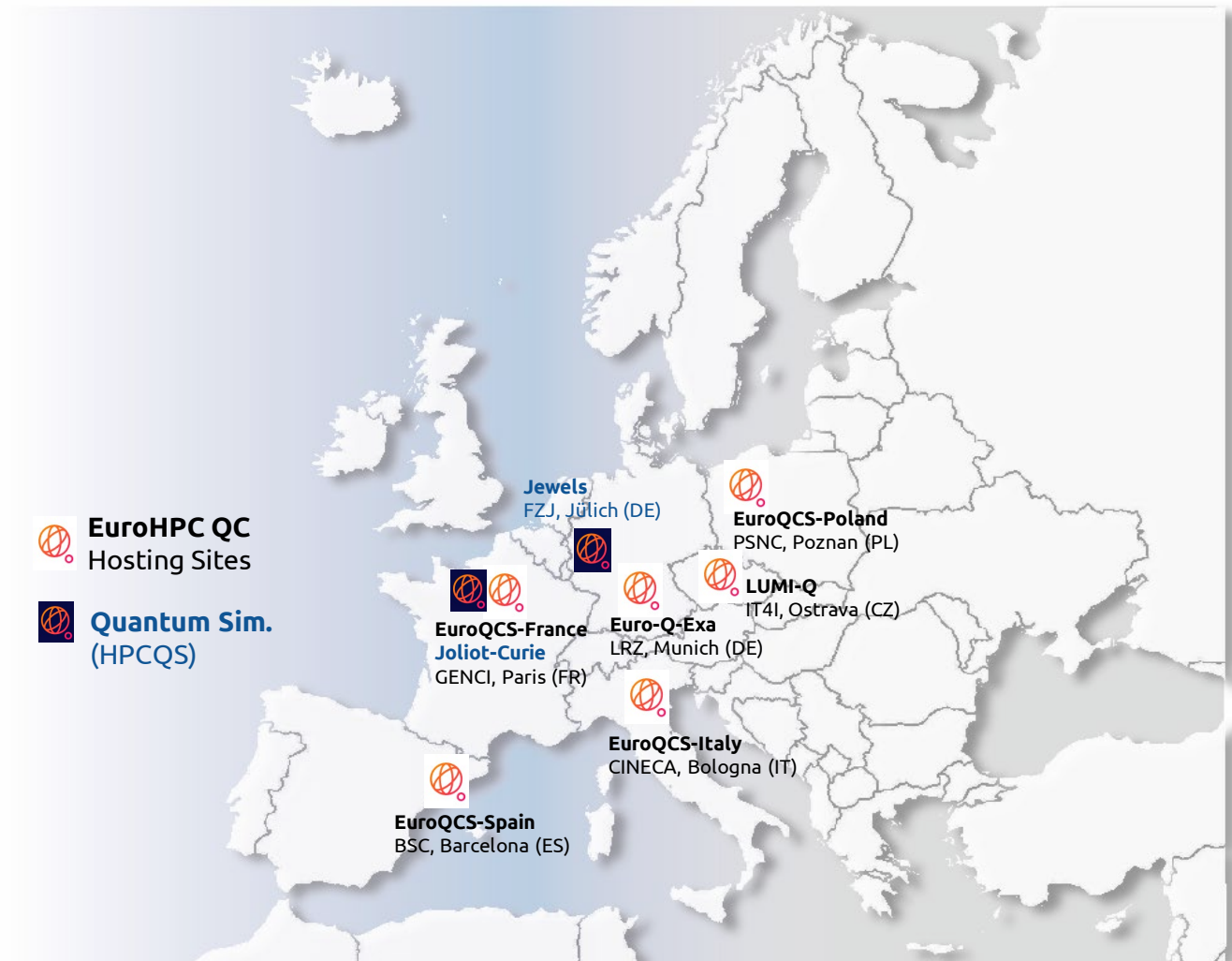
HORIZON-EUROHPC-JU-2023-QEC-05



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Infrastructure:

- **2 Quantum Simulators* (HPCQS)**
 - Jülich: *Jewels – PASQAL QS (Germany) (100+)*
 - GENCI: *Joliot-Curie – PASQAL QS (France) (100+)*
 - Both systems will be operational in **December 2024**
- **6 Selected Hosting “Entities” (Consortia of 30 participants) (1st CFEI)**
 - Euro-Q-Exa, *superconducting Qubits (DE) (50/100)*
 - LUMI-Q, *superconducting Qubits (CZ) (20+)*
 - EuroQCS-Spain, *superconducting Qubits (ES)[†] (10)*
 - EuroQCS-Italy, *neutral atom Qubits (IT)* (100+)*
 - EuroQCS-Poland, *trapped ion Qubits (PL) (20)*
 - EuroQCS-France, *photonic Qubits (FR) (10+)*
 - First systems expected to be operational in **Q3 2025**
- **2-3 Additional Hosting “Entities” (2nd CFEI)**
 - First systems expected to be operational in **Q2 2027**



*) Analogue/ digital Quantum Simulator †) Analogue Quantum Annealer

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Access Time:

- EuroHPC administers **50% of the access time** of its quantum computers (1st CFEI, 2nd CFEI)
- **Access arrangements** with HPCQS hardware exists (two analogue 100 Qubit simulators)
- EuroHPC JU Access Policy **needs to be updated** to incorporate quantum computing
- A **mild peer-review process** might be established to allocate access time with multiple cut-offs during the year in the line of the current “Benchmark and Development Access”

EuroHPC Access Policy:

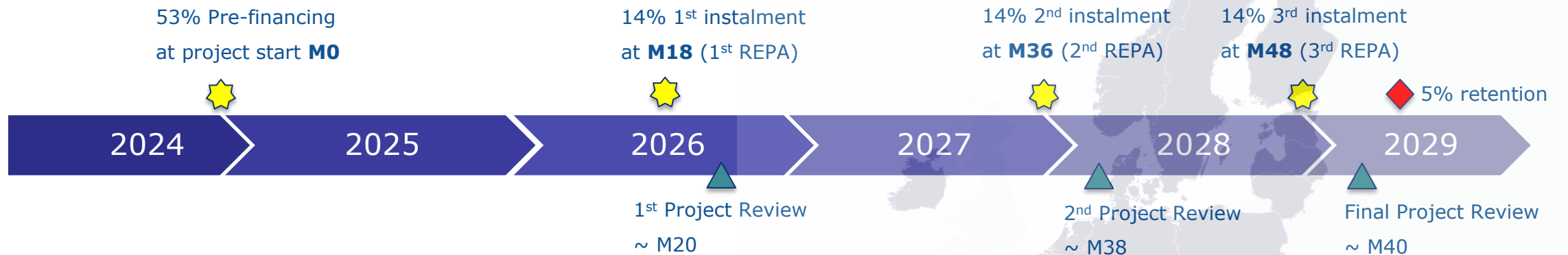
https://eurohpc-ju.europa.eu/access-our-supercomputers/access-policy-and-faq_en

HORIZON-EUROHPC-JU-2023-QEC-05



Project Reporting and Monitoring Duties:

- **Payment structure** for the 50% EU contribution:
→ Please observe that national funding contribution schemes **can deviate!**



- Each beneficiary must **continuously report** on the progress of the action in the forms of deliverables, milestones, outputs/outcomes, critical risks, indicators, etc ...
- Each beneficiary must provide reports to request payments, in accordance with the schedule and modalities set out for interim payments (**interim reports**)
- The financial statements must detail the **eligible costs** and contributions for each budget category
- All eligible costs and contributions incurred should be declared, even if they exceed the amounts indicated in the estimated budget

HORIZON-EUROHPC-JU-2023-QEC-05



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Eligibility Criteria according to Article 22(5)

*"Participation is limited to legal entities (1) established in **Member States**¹ and legal entities (2) established in countries **associated to Horizon Europe that are members of the EuroHPC Joint Undertaking**.² Proposals including entities established in countries outside the scope specified in the call/topic/action will be ineligible"*

→ Restriction has ramifications on **eligible participants** and **project activities**

¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden (27 countries)

² Iceland, Israel, Montenegro, North Macedonia, Norway, Serbia, Turkey (+7 countries)



EuroHPC
Joint Undertaking

Agenda

10:30 – 11:00 : REA information on Participant Registration and “Ownership Control Assessment”

1 MARCH 2024





REA Central Validation Service

Getting started -Registering your organization, Legal validation, Financial capacity assessment and Ownership control

**Radu SORA
Florin PUIU
Charlotte VIANE**

Presentation Outline

REA Central
Validation Service

Registration of
participants

Legal validation and
Legal entity
appointed
representative
(LEAR)

Communication

Financial capacity
assessment

Ownership control
assessment

Guidance
documents

REA Central Validation Service (REA CVS)

- Verifies **legal existence and legal statuses** of entities
- Validates the appointment of **Legal Entity Appointed Representatives (LEARs)**
- Validates **legal changes** of validated entities
- Assesses **universal takeovers (UTROs)** of validated entities
- Encoding **Bank Account requests**
- Prepares the **Financial Capacity Assessment**
- Performs **ownership control assessments** for specific programmes
- Performs ex-post status verifications (e.g. **SME & MID cap status checks**)

Registration of an organisation (at proposal stage)

Participant Register

 Need help?

If you want to participate in a call for proposals or in a call for tenders with eSubmission, your organisation needs to be registered and have a 9-digit Participant Identification Code (PIC). Please quote your PIC in all correspondence with the Commission.

The register contains all participants of EU programmes.

Is your organisation already registered? PIC search

Please check whether your organisation has already been registered. If so, no need to register it again.

Search a PIC

**Search for a
registered
organisation**

Register your organisation

To register your organisation or as a natural person, you need to login into the Portal or, if you are a new user, create your account.

Check what information you need to register in the Online Manual - and keep it to hand during the registration procedure. To start registration, click on the button below.

Register your organisation

**New
registration**

How to register in the Participant Register

The screenshot shows the 'Participant's Register' interface. At the top, there is a progress bar with six steps: 1. Identification (highlighted with a red location pin), 2. Organisation Data, 3. Legal Information, 4. Authorised Users, 5. Summary, and 6. Success. Below the progress bar, the 'Identification' section contains the following fields:

- Legal name * (text input, 240 characters)
- Registration country * (dropdown menu)
- Registration number (text input, 50 characters)
- VAT number * (text input, 20 characters) with a 'not applicable' toggle switch.

At the bottom of the form, there are two buttons: 'Review the Form' (red) and 'Next' (blue).

Identification

(e.g. Legal name, VAT number)



Organisation data



Legal information



Authorised users

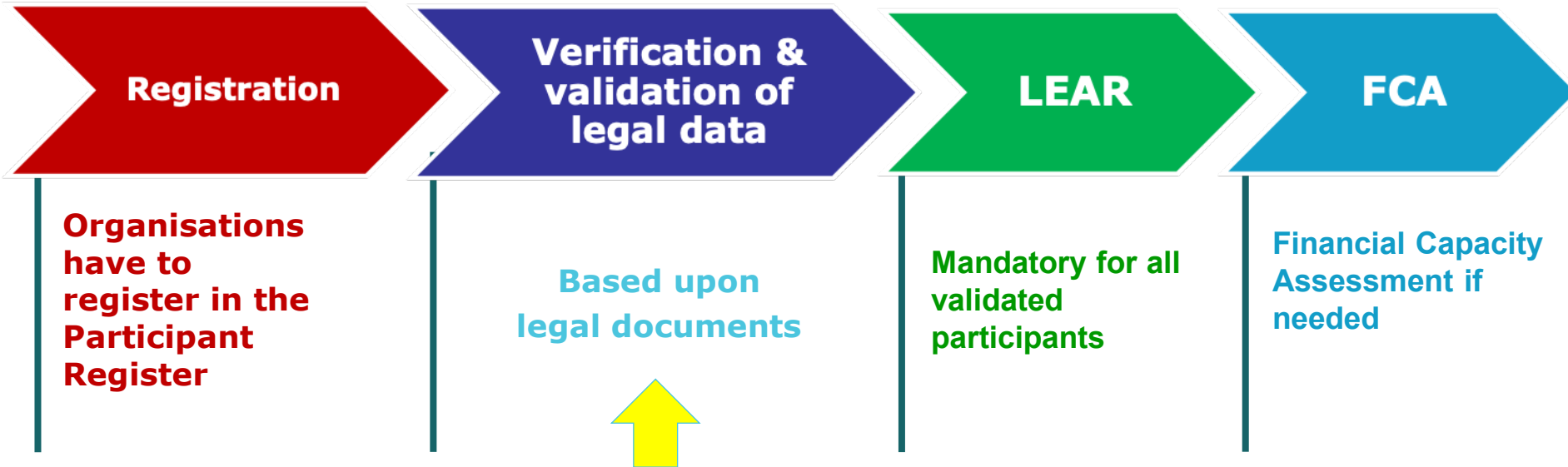
(e.g. Name, e-mail address of the self-registrant and the back-up)

Registration completed



New Participant Identification Code (PIC)
in a "declared" status

Validation Process Overview



COMMUNICATION VIA PARTICIPANT REGISTER

Legal validation

- Registration data is verified by REA Central Validation Service before the signature of the Grant Agreement or Contract
- The legal validation of a participant is done **once**, when the entity has to sign its first Grant Agreement or Contract and it is reused for future participations in EU grant and procurement actions
- Validation is always performed on the basis of supporting documents, in accordance to EU Financial Regulation and the Rules on Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment for EU Grants and Tenders

Legal validation documents

- ✓ **Legal entity form** (template to be completed, dated, stamped and signed)
- ✓ **VAT extract** (< 1 year)
 - ✓ *If not registered for VAT – proof of VAT exemption*
- ✓ **Registration extract** (< 1 year) – for private law bodies
- ✓ **Law/decreed/decision** – for public law bodies
- ✓ **Treaty** – for international organisations
- ✓ **Statutes** – for non-profit organisations

Communication

(e.g. request to submit legal documents or to appoint a LEAR)

All communication is exclusively managed through the Participant Register

European Commission <EC-NO-REPLY-GRANT-MANAGEMENT@nomail.ec.europa.eu>

to me ▾

Europa / Funding & Tenders Portal notification

Dear User,

You have been granted the role of **Self Registrant** for the organisation arquicios.

In order to access your organisation data on the Funding & Tenders Portal/Supplier portal, you need to log in on the F&T Portal/Supplier Portal. If you did not have an EU Login yet, it was launched automatically for a separate e-mail with a hyperlink to finalise your account.

For more information on the Funding & Tenders Portal roles, please refer to the [Online Manual](#) if you participate in the [programmes managed on the Funding & Tenders Portal](#).

For more information on the roles for e-Procurement, please refer to the [e-Procurement wiki page](#), if you participate in a tender call.

With kind regards,
EU Single Electronic Data Interchange Area - F&T Portal team

This email has been auto-generated. Please do not reply to this account. Your email will not be read. For any inquiries please contact the Grants Procurement Systems Support +32 (2) 29 71063 or EC-FUNDING-TENDER-SERVICE-DESK@ec.europa.eu.

Messages are notified via e-mail to the contact person
(i.e. self-registrant or the appointed LEAR)

Access lost to a declared or valid PIC

Declared PIC

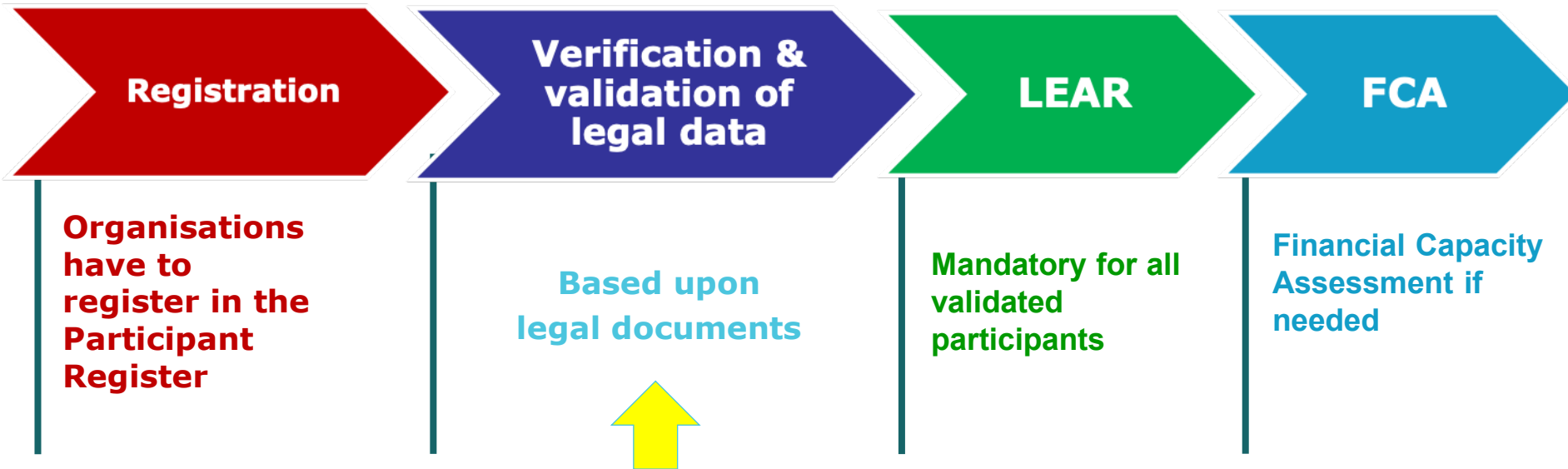
- In case the self-registrant left the organisation and no one has access to a declared PIC – a new PIC needs to be created and REA CVS informed

Valid PIC

- If the LEAR is not available anymore and there are no Account Administrators, a new LEAR needs to be appointed – LEAR recovery procedure

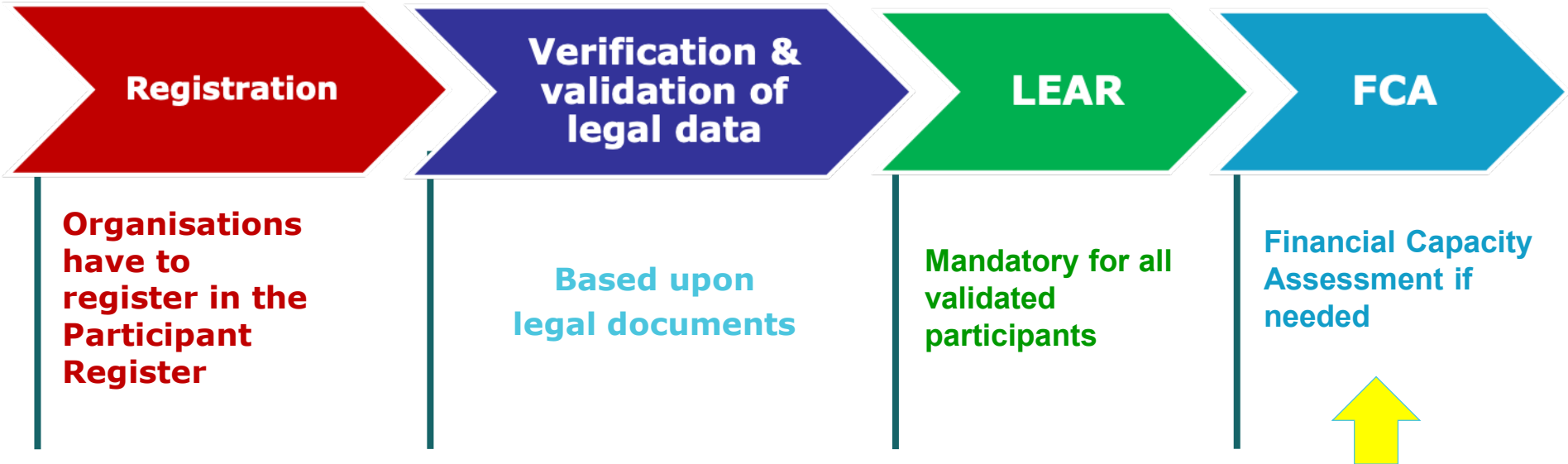
<https://ec.europa.eu/research/participants/urf/lear-recovery/request/>

Validation Process Overview



COMMUNICATION VIA PARTICIPANT REGISTER

Validation Process Overview



COMMUNICATION VIA PARTICIPANT REGISTER

Financial Capacity Assessment (FCA)

Legal basis

- Financial Regulation (2018/1046) articles 196 and 198
- Rules on Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment for EU Grants and Tenders.
- Call for Proposals (see the section “Financial capacity”)

When is the FCA needed?

- ✓ ALL beneficiaries, except for:

Financial Capacity Assessment (FCA)

Legal basis

- Financial Regulation (2018/1046) articles 196 and 198
- Rules on Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment for EU Grants and Tenders.
- Call for Proposals (see the section “Financial capacity”)

When is the FCA needed?

✓ ALL beneficiaries, except for:

public bodies (including local, regional or national authorities)

✓ Individual requested grant amount is **greater than EUR 60,000**

and

If FCA must be checked, you will be contacted by the Central Validation Service via Participant Register in the F&T Portal.

FCA supporting documents

(via Participant Register)

✓ Balance sheet

Balance Sheet

- ASSETS
- LIABILITIES
- EQUITY

FCA supporting documents

(via Participant Register)

✓ Balance sheet

✓ Profit and loss account

Balance Sheet

**Profit & Loss
account**

- REVENUES
- EXPENSES

- Net result

FCA supporting documents

(via Participant Register)

✓ Balance sheet

✓ Profit and loss account

✓ Explanatory notes and/or annexes (if available)

Balance Sheet

**Profit & Loss
account**

**Explanatory
notes**

**Annexes
to the FS**

Details on accounts

Breakdown on items

Additional explanations

FCA supporting documents

(via Participant Register)

✓ Balance sheet

✓ Profit and loss account

✓ Explanatory notes and/or annexes (if available)

✓ Financial audit report

Financial Audit report

Opinion

- Unqualified
- Qualified
- Adverse
- Disclaimer

Balance Sheet

Profit & Loss account

Explanatory notes

Annexes to the FS

FCA supporting documents (via Participant Register)

✓ Balance sheet

✓ Profit and loss account

✓ Explanatory notes and/or annexes (if available)

✓ Financial audit report

...or Self Declaration on the accounts

if the requested EU-contribution exceeds
EUR 750.000 (art. 196 FR)

Financial Audit report

Opinion

- Unqualified
- Qualified
- Adverse
- Disclaimer

Self Declaration on the accounts

I, the undersigned
declare that the
accounts are:

- VALID
- no audit required

Signed

Balance Sheet

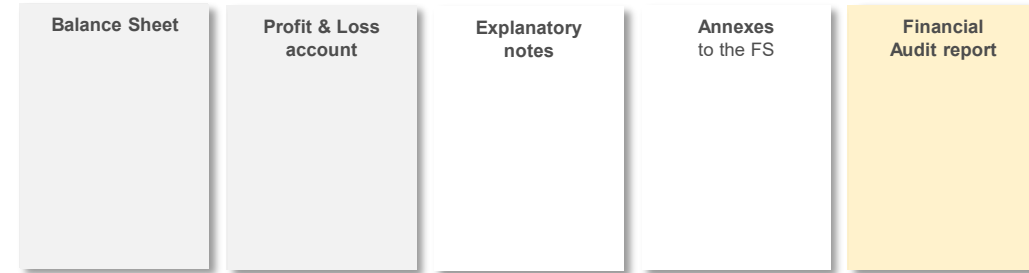
Profit & Loss account

Explanatory notes

Annexes to the FS

FCA supporting documents (via Participant Register)

- ✓ Balance sheet
- ✓ Profit and loss account
- ✓ Explanatory notes and/or annexes (if available)
- ✓ Financial audit report



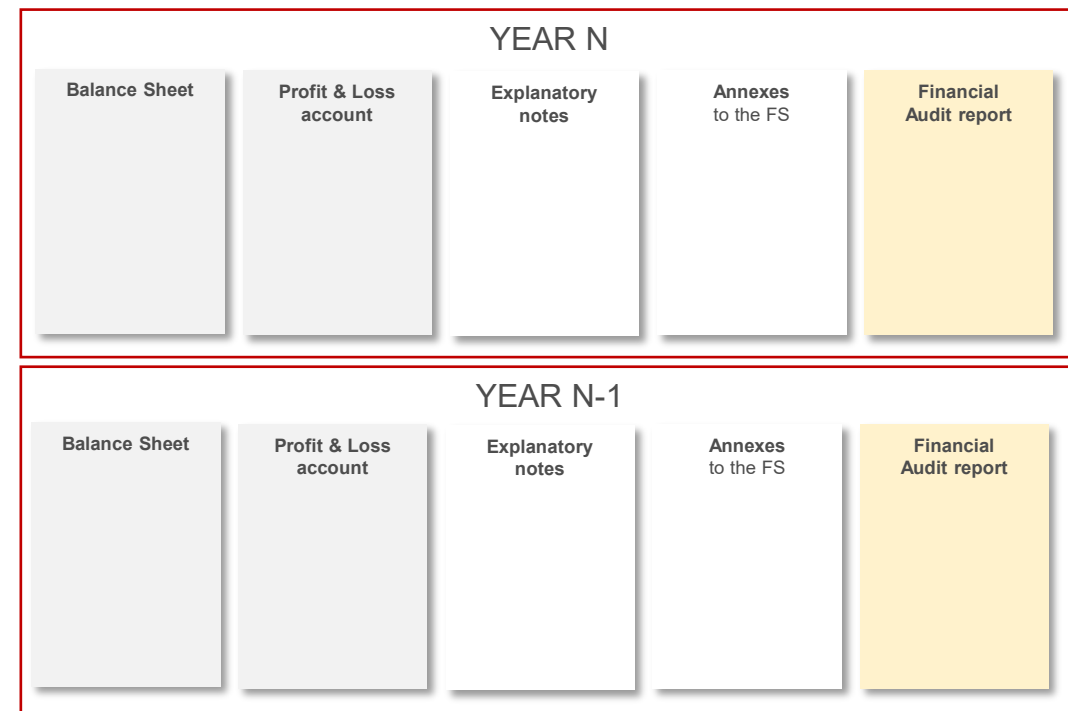
FCA supporting documents (via Participant Register)

✓ Balance sheet

✓ Profit and loss account

✓ Explanatory notes and/or annexes (if available)

✓ Financial audit report



For the 2 most recent closed and approved financial years

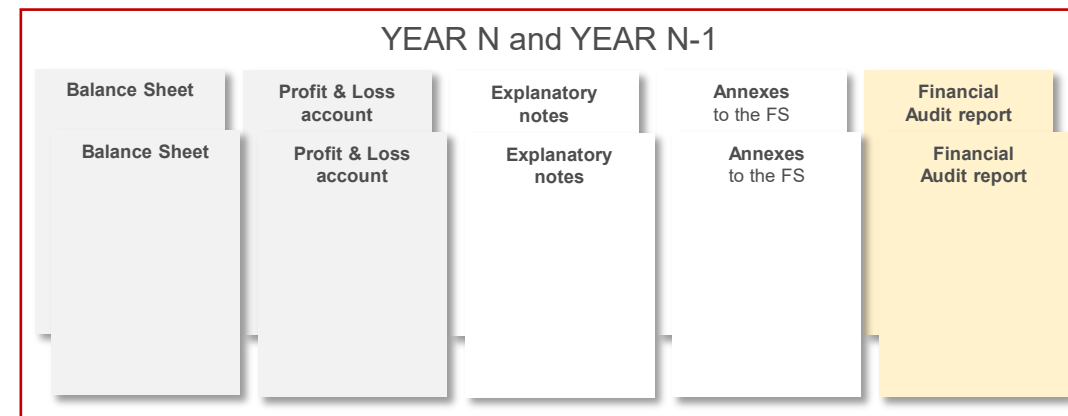
- official language
- dated
- signed

FCA supporting documents (via Participant Register)

- ✓ Balance sheet
- ✓ Profit and loss account
- ✓ Explanatory notes and/or annexes (if available)
- ✓ Financial audit report

Newly established entities

- ✓ Business plan



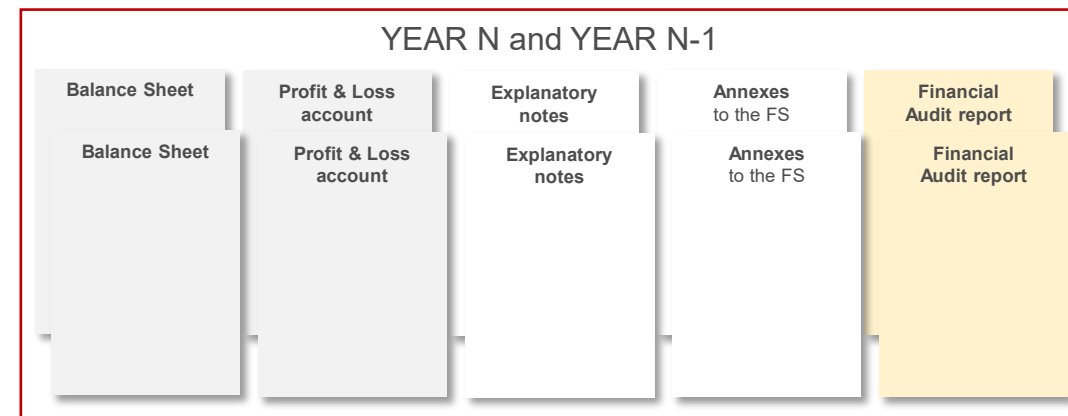
For the 2 most recent closed and approved financial years

- official language
- dated
- signed

Business plan

FCA supporting documents (via Participant Register)

- ✓ Balance sheet
- ✓ Profit and loss account
- ✓ Explanatory notes and/or annexes (if available)
- ✓ Financial audit report



For the 2 most recent closed and approved financial years

- official language
- dated
- signed


Newly established entities

- ✓ Business plan

**Once completed, the assessment is valid for 18 months
from the closing date**

Financial Capacity Assessment: Requests in Participant Register

PIC 890116427

Organisation Data	Legal Information	Authorised users / LEAR	Bank Accounts	Financial capacity 	Messages 1	Documents	SME
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You might be requested to provide additional financial information. In this case you are asked to upload your financial statements containing the balance sheet, the profit & loss account, the corresponding explanatory notes and, under certain conditions, an audit report issued by a certified external auditor or a self-declaration on the validity of the accounts, signed by your legal representative, the template for which is available [here](#).

The financial statements must cover the last two most recent closed years. Note that, once uploaded, the financial statements for an accounting year with a closure date on or before 30 June will be displayed by the IT systems as related to the prior calendar year. [Find out more](#).

Closing date	Status	Actions
	Data Required	Provide necessary financial information

Financial Capacity Assessment: Requests in Participant Register


PIC 890116427

Organisation Data Legal Information Authorised users / LEAR Bank Accounts Financial capacity  **Messages 1** Documents SME

[+ New message](#)

Messages

Read messages of your organisation and send messages to the EC ValidationServices.

Subject ↑	Message	Context ↓	Date ↓	Actions
 * Financial capacity assessment - Request for documents	Dear Participant, Following your recent a...	Financial capacity assessment	06/07/2021	View

« ‹ 1 › »



Ownership control assessment (OCA)



Ownership control assessment (OCA)

- **Legal basis:**

1. Regulation (EU) 2021/695 of The European Parliament and of the Council of 28 April 2021.
2. Rules on Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment for EU Grants and Tenders.
3. Guidance on Participation in Digital Europe Programme (DEP), Horizon Europe (HE) and European Defence Fund (EDF) restricted calls.

- **Exceptions** - OCA is not performed for:

- Entities which are validated as **public bodies**, which are considered as controlled by their country.
- Entities which self-declare to be controlled by a **non-eligible country**.

Ownership control assessment (OCA)

- **Ownership Control Declaration:**

- Submitted with proposal and presenting the current ownership structure and corporate governance based on official supporting documents.
- **Ownership structure:** complete ownership structure, i.e., including all layers of ownership/control up to the ultimate owners.
- **Corporate governance:** the decision-making bodies, rules regarding election, appointment, nomination or tenure, decision-making procedures within your organisation and its shareholders up to the ultimate owners.
- Commercial and financial links or other sources conferring control: if applicable.

Ownership control assessment (OCA)

- Ownership Control Declaration:

EU Grants: Ownership control declaration: V3.0 – 01.10.2023

OWNERSHIP CONTROL DECLARATION

(To be filled in by the project participants as part of the application. All declarations must be assembled by the coordinator and uploaded in a single file in the Portal Submission System.

Beneficiaries and affiliated entities must always provide the form; associated partners and subcontractors must provide it only if required by the call conditions (for HE, associated partners always). Entities that are validated as public bodies by the Central Validation Service are exempted since they will automatically be considered as controlled by their country.

Supporting documents do not have to be provided at application stage, but will be requested later on. You will receive a task notification asking you to upload the documents to your PIC account in the Portal Participant Register.

⚠ The supporting documents should reflect the situation at the moment you sign this declaration. Please be aware that additional evidence may also be requested later on, in case there are open questions about your ownership/control status.

⚠ Please note that the information in this declaration may be reused in case you apply to other EU calls that have ownership/control restrictions.

⚠ Please also note that you must inform the granting authority in case of changes in your shareholding during the project implementation, if these could impact the ownership/control requirements.)

DECLARATION ON OWNERSHIP AND CONTROL	
Participant	
Legal name:	
PIC:	
Legal registration number:	
Place of establishment: (country of registration; full address)	
Headquarters	
Location of global headquarters/head office: (full address)	
Location of the executive management structure: (if different from the location of global headquarters/head office; full address)	
<small>‘Executive management structure’ means a body appointed in accordance with national law, and, where applicable, reporting to the chief executive officer, which is empowered to establish the strategy, objectives and overall direction, and who oversees and monitors management decision-making.</small>	
Listed, subsidiary or controlled	
<small>Supporting documents: report/minutes of the last three shareholders meetings, for each of the listed companies.</small>	
Are you listed on a stock exchange?	Yes/No
Are you a subsidiary of a listed company?	Yes/No
Are you controlled by a listed company?	Yes/No
<small>If the reply is YES to any of these three questions, please provide:</small>	
Which stock exchange?	
Legal name of the listed company:	

EU Grants: Ownership control declaration: V3.0 – 01.10.2023

Share of the float in the total outstanding shares:

‘Floating stock’ is the result of subtracting closely-held shares from the total number of issued shares. It represents the portion available for unrestricted trade on a regulated stock market.

Ownership structure and specific rights

In the table below, detail any owners that:

- detain, directly or indirectly, at least 5% in the capital or at least 5% of the voting rights, including through any content, understanding, relationship⁽ⁱ⁾ or/and intermediary
- have one or more of the following specific rights in relation to their ownership:
 - right to veto a transfer of shares
 - pre-emption rights
 - right to purchase additional shares or investment subject to conditions
 - right to sell shares (only for owners that are not established in eligible countries (i.e. legal entity) or do not have the nationality of one of the eligible countries (i.e. individual) and holding more than 5% of the voting rights).

Supporting documents:

- commercial registry extracts, shareholders book or a declaration signed by the legal representative of the organisation and any other relevant document containing clear mention of the shareholders and their percentage of interest/voting rights.
- shareholders’ agreement, memorandum of understanding among shareholders, statutes, articles of association or other relevant documents regarding the decision-making procedures within the legal entity, investment agreements between the shareholders, etc.
- If there are legal persons as shareholders⁽ⁱⁱ⁾, please provide also a graph describing the different ownership layers/chain of control until the ultimate owners.

⚠ The supporting documents must show the complete ownership structure, for the entity and all its layers of ownership, up to the ultimate owners and should reflect the situation at the moment you sign this declaration.

⁽ⁱ⁾ This includes voting agreements between shareholders that would together have more than 5% of the voting rights or 5% of the capital.

⁽ⁱⁱ⁾ Detaining at least 5% in the capital or at least 5% of the voting rights.

Owner name	Country of establishment/ or nationality	How is the ownership/control held		Specific rights attached to shares
		by share [%]	by voting right [%]	

Corporate governance

Describe briefly:

- the decision-making bodies, their composition as well as their nationality or place of establishment (where applicable);
- the rules regarding election, appointment, nomination or tenure of members of the decision-making bodies or other management positions;
- the decision-making procedures, including information regarding the required majority and/or quorum needed for decisions.

Supporting documents: Documents establishing/describing the decision-making bodies, rules regarding election, appointment, nomination or tenure, decision-making procedures within the legal entity (e.g. articles of association bylaws, reports on corporate governance, etc). You can refer to specific sections of your supporting documents.

⚠ The same documents and information should be provided for each intermediate legal entity holding directly or indirectly 5% or more of the capital or voting rights, up to the ultimate owners of all the layers involved.

Ownership control assessment (OCA)

- **Supporting documents:**

- **Ownership structure:** official documents demonstrating all direct and indirect shareholders, up to the ultimate owners. For instance: trade register extracts, shareholders' book, ...
- **Corporate governance:** official documents describing the decision-making processes within your organisation and its shareholders up to the ultimate owners. For instance: statutes, articles of association, shareholders' agreement, ...
- **Confidentiality:** All data and documents provided in the context of validation processes, including ownership control assessment are treated as confidential.

Guidance documents



Rules on Legal validation, LEAR appointment and financial capacity assessment:
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/rules-lev-lear-fca_en.pdf



How to register in the Participant Register:
<https://webgate.ec.europa.eu/funding-tenders-opportunities/display/OM/Online+Manual>



Online Manual, IT How to, IT and RES Helpdesk and specific FAQs on the Funding and Tenders Portal:
<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/support>



Legal notice on the Funding and Tenders Portal (terms and conditions, data protection):
<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/legalnotice>

Questions, please...



Research Enquiry Service

For questions about research and Horizon Europe, you can contact the Research Enquiry Service via the webform:

[Research Enquiry Service \(europa.eu\)](https://europa.eu)

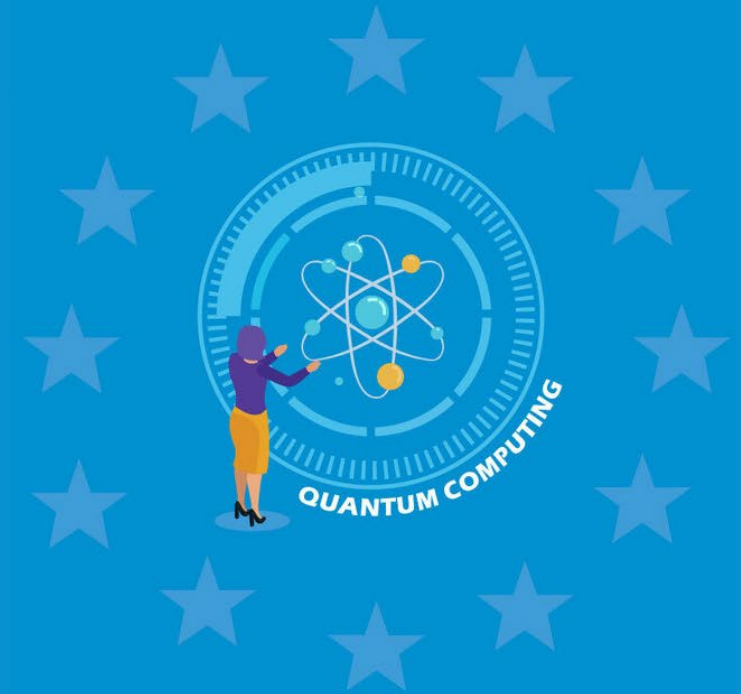


EuroHPC
Joint Undertaking

Agenda

11:00 – 11:30 : FAQ Session

1 MARCH 2024





FAQ:

1. What is the technological scope and the specific application areas for the QECs?

- Focus on fostering QC oriented applications in science and industry
- Technology agnostic and user-driver development of end-user applications
- Develop novel quantum applications/algorithms and open-source software platforms
- Integration of HPC and QC + pathway for development of hybrid applications
- Services supporting different usage models
- Development of algorithms from proof-of-concept stage to implementation of SW packages



FAQ:

1. What is the technological scope and the specific application areas for the QECs?

- Address the full scientific/ industrial workflow including testing, validation of codes and quality assurance
- QECs should focus on QC applications pertinent to relevant sectors like healthcare (e.g. drug discovery), cybersecurity (e.g. encryption) and energy (e.g. clean energy)
- Develop a wide range of QC applications spanning e.g. from quantum simulation to quantum ML algorithms
- Fundamental research on new QC algorithms is **not within the scope** of this call



FAQ:

2. What are the detailed roles and expectations of the QECs?

- Develop and maintain QC application libraries and SW packages
- Offer training, support and capacity building for QC and QC applications
- Foster scalability and optimization of QC applications for industry and academia
- Provide user-driven co-design activities for integration of HPC and QC architectures
- Collaboration with other EuroHPC (HPC/QC Middleware, EuroQHPC-I) and Quantum Flagship activities
- Create synergies with European and national quantum computing initiatives



FAQ:

3. What shall be the focus of the respective QECs?

Scientific QEC:

- Focus on solving scientific problems with applications for the relevant communities, e.g. theoretical physics, quantum chemistry etc.

Industry QEC:

- Focus on industry applications, e.g. logistics and optimization, cybersecurity, pharma

→ Industry partners can participate at the scientific QEC, and academic entities can also be partners for the industry QEC (**no** strict silos).

FAQ:

4. What is the expected collaboration with existing QC infrastructure, including operations and integration with HPC?

The QECs are expected to:

- Integrate quantum computing applications with HPC systems (also hybridization)
- Integrate quantum emulators for training, testing and validation
- Provide continuous integration and automated deployment environments to developers and operation staff
- Share resources and knowledge to enhance the development of QC applications
- Provide documentation for users, developers and operation staff



FAQ:

5. What are the eligibility criteria for individual applicants and entire consortia?

- Applications must demonstrate strong expertise in quantum computing and the ability to contribute to the objectives of the QECs
- Each participant should contribute to **at least 5%** of the personal resources of the total project
- Each participant must have a **justified role** in the project as indicated by the responsibility of deliverable(s)



FAQ:

6. What training and talent development activities are expected within the QECs

The applicants are expected to propose a **comprehensive training program**, including:

- Workshops and courses on quantum computing applications
- Training, support and capacity building in quantum computing and quantum applications
- Contribution to European efforts around QC application training (e.g. EuroHPC Virtual Academy)
- Coordination between the QECs and other relevant EU initiatives (e.g. EuroCC2)



FAQ:

7. What is the expected intellectual property management?

Applicants are expected to **develop a clear IP management plan and licensing policy** that encourages collaboration while protecting the interests of the contributors.

EuroHPC will implement the Horizon Europe (HE) Grant Agreement with its respective Annexes, in particular Annex 5 (pp.100 of the General MGA v1.0):

[Funding & tenders \(europa.eu\)](https://europe.eu)



FAQ:

8. What are the reporting, monitoring and evaluation duties of funded QECs?

Each consortium must implement a **management work package** allowing a robust project monitoring.

The consortia are also expected to:

- Use CI/CD platforms to provide transparency on progress of developments
- Define and uphold KPIs related to technology development, impact outside consortia, user engagement and educational outreach



FAQ:

9. What is the foreseen integration of the QECs with national/local programs and other EU initiatives, including the Flagship program?

It is expected that applications include a **strategic plan** for integration, which includes:

- Identifying synergies with existing programs/ projects
- Establishing partnerships and collaboration agreements
- Sharing resources and knowledge across different initiatives



FAQ:

10. What kind of method development of quantum computing algorithms is expected for the QECs?

- Developing new use-cases of existing QC algorithms for specific industry applications
- Optimize algorithm efficiency and scalability for applications
- Collaborating with industry partners to test and refine QC applications

→ Fundamental research on novel QC algorithms is out of scope



FAQ:

11. Is it important/necessary for an HPC data centre to be directly involved in the QECs?

- No, there is **no requirement** to have EuroHPC data centres or Hosting Entities of EuroHPC quantum computers to be part of a consortium
- EuroHPC will provide access to its quantum computing resources after amending its Access Policy
- Applications should also consult with national QC resources and access modalities



FAQ:

12. What is the financing structure for each QEC?

HORIZON-EUROHPC-JU-2023-QEC-05 is a **Research and Innovation Action (RIA)** and is **co-funded** with a maximum of 50% EU contribution of all eligible costs. The respective national contributions may be subject to national funding laws. It is in the responsibility of applicants to familiarize with national funding opportunities.



FAQ:

13. What is the expected structure of the consortia for each QEC?

- There is **no expected structure** for the consortium apart from the general rules for participation as described in the ***call text***

[Funding & tenders \(europa.eu\)](#)

- the ***HE regulation*** and ***annexes***

[Funding & tenders \(europa.eu\)](#)

- and the ***EuroHPC Work Programme***

[Key Documents - European Commission \(europa.eu\)](#)



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Thank You!



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