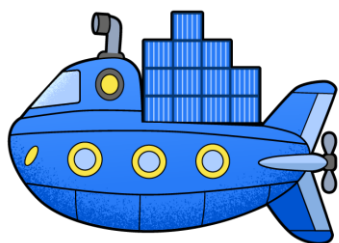


Horizon Europe

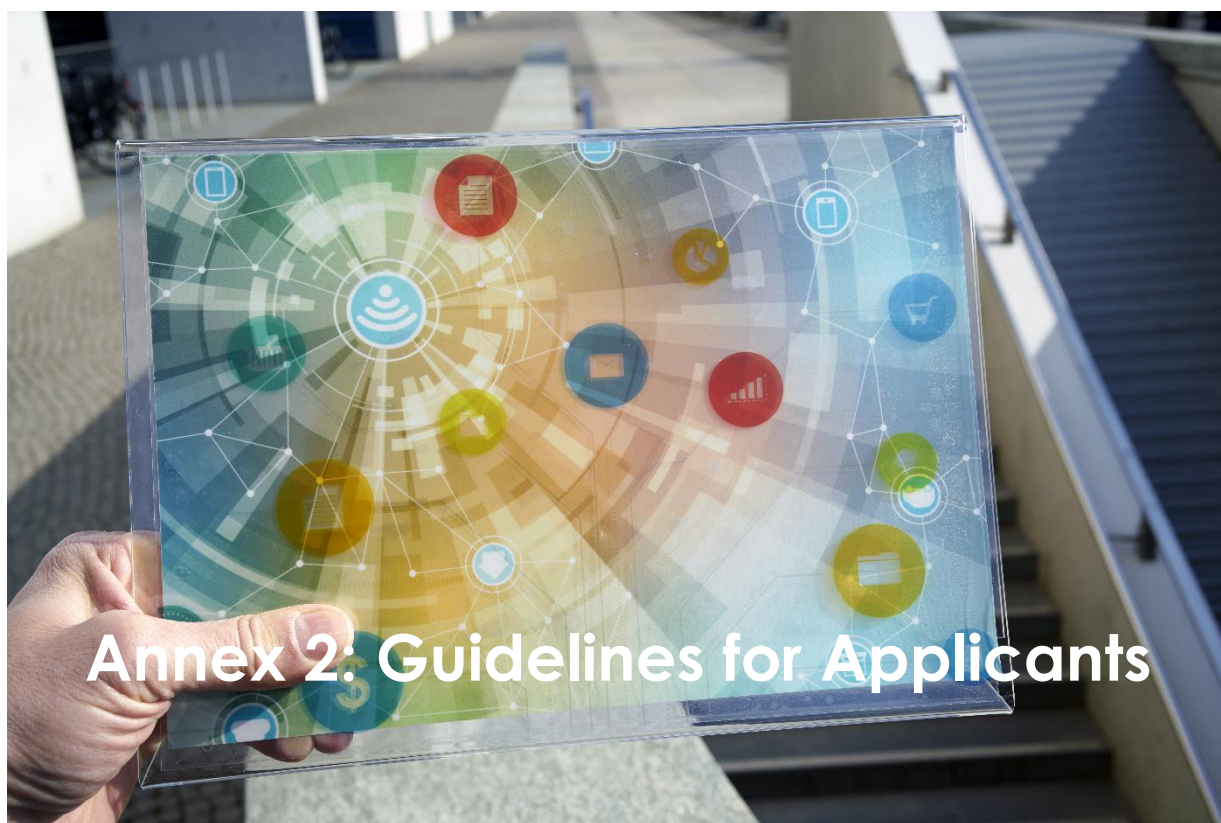
Research & Innovation Program

HORIZON-CL4-2021-DATA: Future European platforms for the Edge: Meta Operating Systems



NEMO

Next Generation Meta Operating System



Annex 2: Guidelines for Applicants

Version 1.0
May 2024

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This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101070118





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Funding Scheme: Research & Innovation Action (RIA) • Theme: HORIZON-CL4-2021-DATA

Start date of project: 01 October 2022 • Duration: 36 months

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List of Abbreviations and Acronyms

AI	Artificial Intelligence
AIoT	Artificial Intelligent Internet of Things
CET	Central European Time
CF-DRL	Cybersecure Federated Deep Reinforcement Learning
CMDT	Cybersecure Micro-services' Digital Twins
DIH	Digital Innovation Hub
DLT	Distributed Ledger Technology
DRL	Deep Reinforcement Learning
DT	Digital Twin
F2F	Face-to-Face
FML	Federated Machine Learning
EC	European Commission
EU	European Union
ML	Machine Learning
mOS	Meta-Operating System
mNCC	meta Network Cluster Controller
RES	Renewable Energy Sources
RTD	Research and Technological Development
SEE	Secure Execution Environment
SLO	Service Level Objective
SME	Small and Medium-sized enterprises
SSI	Self-Sovereign Identity
TL	Transfer Learning
TRL	Technology Readiness Level
VAT	Value Added Tax



1 Introduction

NEMO (Next Generation Meta Operating System) is a project funded under the Horizon Europe framework. Its strategic objective is to unleash the power of AIoT (Artificial Intelligence IoT) in an IoT-to-edge-to-cloud continuum to increase European autonomy in data processing required by future AIoT and hyper-distributed applications.

As a means of enhancing the public awareness, boosting massive adoption and sustainability and ensuring engagement of 3rd parties, NEMO will organize 2 open calls and embrace new members in the NEMO ecosystem. The objectives of the open calls are:

- a) to enhance NEMO with additional (HW/SW) edge cloud/IoT components and plugins that realize or extend NEMO metaOS solution,
- b) to increase awareness and interest on NEMO metaOS components and solutions,
- c) to motivate DIHs and clusters to promote NEMO metaOS to their members and
- d) to engage SMEs active as edge computing, edge cloud software development, native cloud, operating systems, full stack development, IoT applications development stakeholders, decision makers to enter and make sustainable the NEMO ecosystem.

SMEs eligible for Horizon Europe calls will be eligible to submit proposals, except for the consortium's beneficiaries and parties that may have conflicts of interest. In more details:

- The **1st Open Call** aims to **extend NEMO scope and technology**. It opened in September 2023 and ran for 3 full months. Selected projects started in March 2024 and will run for 18 months.
- The **2nd Open Call** aims to **validate user acceptance and boost NEMO massive adoption and sustainability**. It will open in June 2024 and run for 3 full months. Selected projects will start in December 2024 and run for 9 months. The call will invite SMEs to extend the NEMO use cases by porting their new or existing applications and services into the NEMO metaOS, in the verticals of the NEMO Living Labs.

This is the implementation of the 2nd Open Call. The total amount of funding that will be provided is €900,000 while each entity may receive up to €90,000. It is expected that at least 12 applicants will be selected via this open call to enter the process and demonstrate the NEMO functionality.

NEMO Open Call #2 invites EU based SMEs to extend the NEMO use cases by porting their new or existing applications and services into the NEMO metaOS, in the verticals of the NEMO Living Labs. NEMO Open Call #2 objective is to validate user acceptance and boost NEMO massive adoption and sustainability. The proposed applications should leverage NEMO capabilities and demonstrate the metaOS potential in satisfying high-demanding requirements, including (but not limited to):

- a) High device heterogeneity, including low-capable IoT devices
- b) On-device machine learning
- c) Low latency & high bandwidth
- d) Increased energy efficiency and reduced energy footprint of IT operations
- e) Sustainable IT investments through data, resource and/or service monetization.



This document provides a full set of information regarding the Open Call #2 for Proposals for the NEMO project. Annex 1, Annex 3.1, Annex 4, Annex 5, Annex 6 and Annex 7 must also be considered for the submission of a Proposal.

1.1 Background information on NEMO project

NEMO pursues a close collaboration among semi-autonomous IoT nodes, IoT fog clusters, far-edge and near-edge cloud, national and federated cloud infrastructures. Following a **flexible collaboration model**, new generation AIoT nodes will be equipped with intelligence to function in a semi-autonomous mode, reducing the latency and performing a number of complex operations locally, without transporting raw data. Federated on-device learning and data sovereignty and trusted, explicitly attested (edge) cloud nodes will bring AI to environments with limited network coverage. **Local AI models execution (FML, DRL and TL) will result in reduced latency**. This will enable, for example, an industrial wind turbine to be shut down in milliseconds when it recognises an imminent problem, thereby preventing significant damage and saving expensive downtime; an autonomous car to avoid crashing or injuring a pedestrian, even if network connectivity is temporarily or accidentally lost. In parallel, powered by envisioning “free will” based communication, **IoT devices may get support from other IoT nodes in vicinity or a trusted edge cloud node, or the cloud realizing a transparent AIoT-Edge-Cloud continuum**. During off-line training, the federated ML models will be aggregated at an edge node, to be processed and combined through TL. The inter-DLT transactions and the smart contracts will be facilitated by trusted edge nodes, allowing resource constrained nodes to acquire a full “ground truth”. Complex and potentially malicious functions will be executed at the edge nodes using a secure micro-services framework and container-based sandboxing techniques.

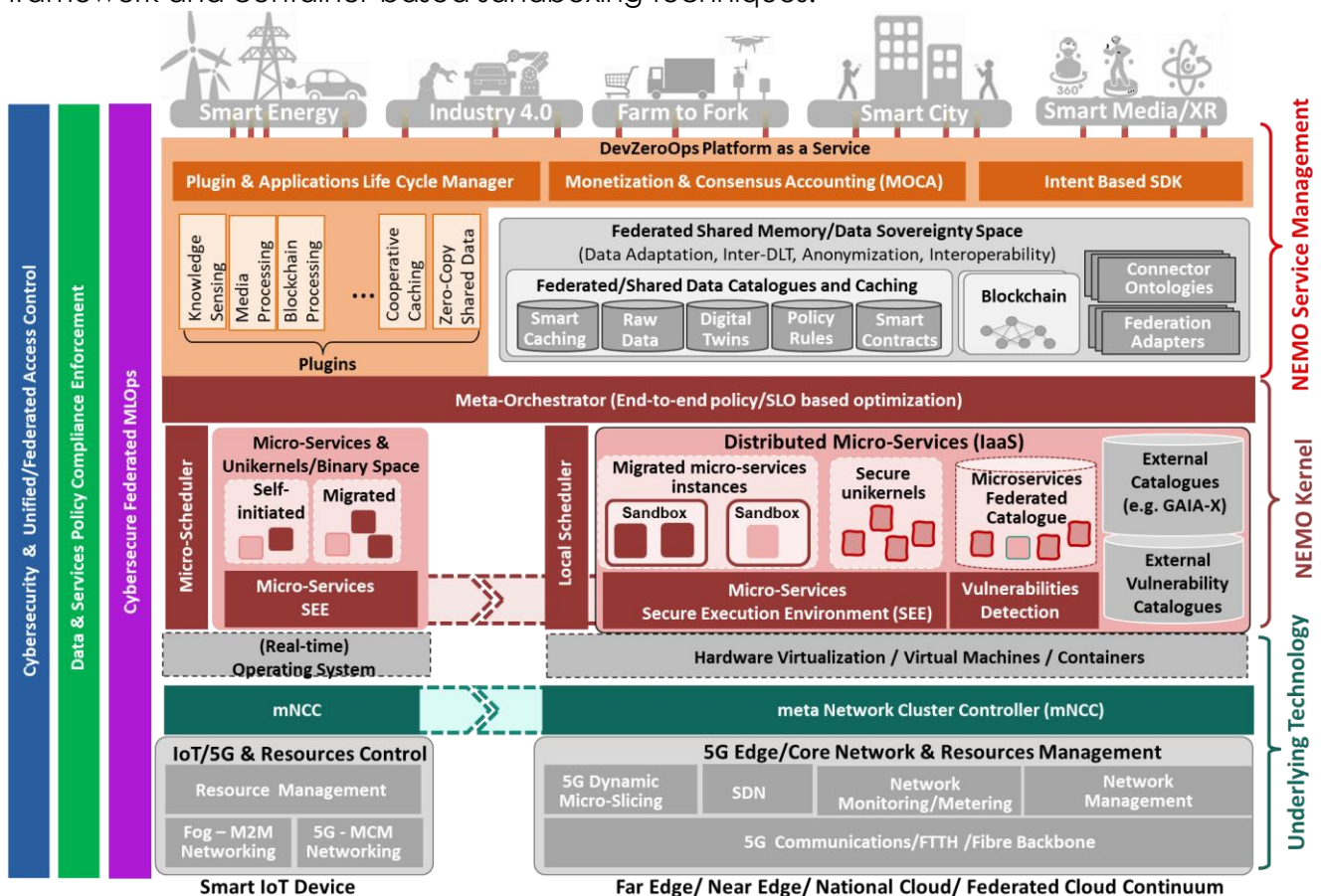




Figure 1: NEMO Functional Stack Vision

Based on the above principles, the core of NEMO will be based on a *loosely-coupled set of components*. As shown in Figure 1, although the lower layers are split between the Smart IoT and the Edge/Cloud Infrastructure, due to the IoT devices constrained environment, in the upper layers there is a “unified” federation that enables transparent execution of vertical semi-autonomous applications and data sharing. In a bottom up approach, NEMO foresees:

- Realisation of **transparent network connectivity**, consisting of a set of IoT/5G/6G network optimization functions and dynamic allocation of self-aware resources into self-constructed/ self-healing and zero-delay failback network clusters. Instead of a single communication technology, NEMO introduces a **meta Network Cluster Controller (mNCC)** that is able to interface independent and different tools and protocols and, where it is possible, to replace one technology with another. To gain accurate information from network resources but still keep flexibility and openness, NEMO interfaces existing Monitoring and Network Management tools to directly request dedicated resources (i.e. micro-slices with specific bandwidth, delay and encryption characteristics), while FML algorithms are utilized for enabling advanced multi-path, multitenant connectivity over IoT and 3GPP data flows. NEMO also leverages on TSN bridge technology and time synchronization aspects to validate service stability, quality and compatibility with IEEE TSN.
- NEMO meta-Architecture features an AI-based **meta-Orchestrator**, which automatically, and in real-time, re-configures the metaOS setup at each node (either IoT, Edge, Cloud, ad-hoc or hybrid Clouds), so that the end-to-end federation operates optimally, matching the applications' SLOs and the policies set by the metaOS administrators. The meta-Orchestrator considers a number of existing solutions such as open source containers' platforms and orchestrators (i.e. Docker, Kubernetes, Minikube, K3S), technological, business and policy priorities, ranging from high availability and low latency to reduced energy consumption and CO₂ footprint to cost and community incentives trade-offs and will dynamically (re-)render micro-service and unikernels or even update automatically the hosting clusters. Of significant importance in the decision making will be the **volume and “greenness” of the consumed energy and the CO₂ footprint**. NEMO introduces transparent migration of containers between federated Data Centres, considering not only the required electricity consumption for IT processing and communications, but also the RES mix and required cooling energy.
- NEMO **Secure Execution Environment (SEE)** implementing operational tasks in close interaction with the micro-services. NEMO SEE manages the complete micro-service life cycle, from image migration and storage to hosting, execution and supervision of both fully trusted/digitally signed micro-services instances along with potentially malicious ones.
- **Federated Data Sovereignty Space**. Though not focus of NEMO, the project follows GAIA-X approach and adopts some of the emerging Self-Sovereign Identity (SSI) technologies. The cybersecurity of data sharing federation is based on DLTs. NEMO introduces the **Cybersecure Micro-services' Digital Twins (CMDT)** concept to offer DLT traceability and Digital Twin (DT) scalability to micro-services instances. Moreover, NEMO **Data Space** is open to support technologies for green and responsible data management (results of the projects accepted respectively in calls DATA-01-01 and DATA-01-03).
- NEMO realizes a **DevZeroOps layer** offering full-stack automated operations, greatest flexibility, improved developers' productivity and direct monetization and sustainability. A



key component for NEMO success is the flexible **Plugin & Applications Life-Cycle Manager** that enables over the air and on-time deployment of required plugins. This approach will keep NEMO “kernel” size tiny, while enabling cognitive auto-configuration. NEMO will also interface external plugins and microservices catalogues (e.g. GAIA-X, SONATA) to offer a “living” collection of functionalities, published under open source license. This approach will also allow 3rd parties to select among the components and create new IoT services.

Beyond horizontal, NEMO also introduces 3 vertical layers that support all metaOS activities:

- NEMO introduces a **Cybersecure Federated ML Operations (MLOps)** layer to offer efficient on-device intelligence in the form of decentralized, cybersecure FML/DRL to be used as integral part of any IoT node decision or (semi-) autonomous operation.
- NEMO enforces **PRESS & Policy compliance** via multi-faced policies able to cope with the different aspects of the applications life cycle (security, privacy, costs, environmental impact, etc).
- **Cybersecurity & Unified/Federated Access Control Layer.** Beyond “by design” traceability and cybersecurity, NEMO offers cloud native cybersecurity, by interfacing various authentication and authorization frameworks (e.g. 5G-AKA, EAP-AKA) and adopting the federated ID approach of GAIA-X, along with encryption and identity verification, adapted to the AIoT capabilities.

The NEMO outcomes will be validated across a multitude of real-life use cases through 6 trials:

- Trial #1: NEMO Integration Infrastructure Technology Lab
- Trial #2: Smart Farming Living Lab
- Trial #3: Smart Energy & Smart Mobility/City Living Lab
- Trial #4: Smart Manufacturing & Industry 4.0 Living Lab
- Trial#5: Smart Media/ City & XR Living Lab
- Trial #6: NEMO multi-Living Labs Federation

NEMO pilots will be federated to enable cross-NEMO services deployment and even cross-living labs micro-services mitigation. The federation will be further extended via the Open Calls. In more details the following technologies are exploited at the pilots.

Table 1: NEMO Technology & Living Labs Federation

Initial Use Case categories	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6
AIoT Architecture	✓	✓	✓	✓	✓	✓
On-device federated MLOps and TL via CF-DRL	✓	✓	✓		✓	✓
Federated mNCC and Network Adapters	✓	✓			✓	✓
IoT/5G Time Sensitive Networking (TSN)			✓	✓		✓
SEE and SLO meta-Orchestrator	✓	✓	✓	✓	✓	✓
Green/FinOps policies, Micro-service sovereignty			✓			✓
Plugins' Life-Cycle Manager	✓		✓		✓	✓
Intent-based migration SDK	✓	✓			✓	✓
Policy Enforcement and Cybersecurity Vertical			✓	✓	✓	✓
Support 3 rd Parties via Open Calls	✓	✓	✓	✓	✓	✓

More information is available at <https://meta-os.eu/>.



1.2 Timeline – Open Call #2

Submission to the Open Call #2 will be enabled on 1st of June 2024 and will end on 31st of August 2024 at 17:00CEST (Brussels time). Selected projects are expected to start on 1st of December 2024 and run for 9 months. Below are presented the dates for the different phases. The opening and closing dates of each phase can be subject to change in case of any modifications in the project's schedule.

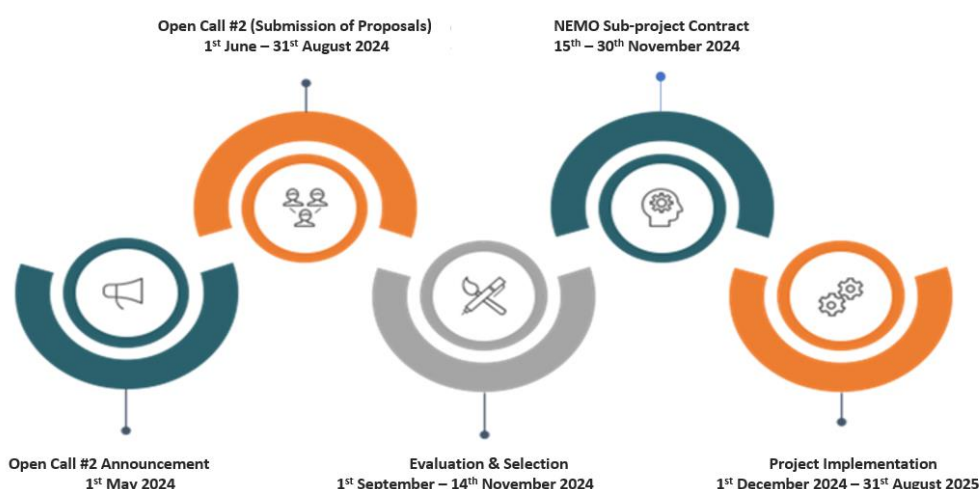




Figure 2: NEMO Open Call #2 timeline

1.3 NEMO Phases and Funding Scheme

As already explained, NEMO will organize two open calls. This is the **2nd Open Call** and aims to **validate user acceptance and boost NEMO massive adoption and sustainability**. The sub-projects selected via Open Call #2 will run for 9 months (1/12/2024 – 31/08/2025) following a "DESIGN-EXPERIMENT-GROWTH" stages' program as shown in the next table.

Table 2. NEMO Open Call #2 stages

Stage	Overview
DESIGN 	<ul style="list-style-type: none"> • <i>Duration:</i> 2 months, the applicant will work remotely and occasionally participate in integration and testing activities. • <i>Number of SMEs:</i> Top 12 projects selected via the Open Call. • <i>Activities:</i> The applicant will fine-tune their application concept, prepare a detailed design deliverable (potentially including a mock-up or early prototype) and tech-business presentation • <i>Funding:</i> 20% (lump sum) per sub-project, associated to successful completion of the DESIGN phase, assessed by external reviewers.
EXPERIMENT 	<ul style="list-style-type: none"> • <i>Duration:</i> 6 months, the applicant will work remotely and occasionally participate in integration, validation and testing activities • <i>Number of SMEs:</i> Top 10 projects.



	<ul style="list-style-type: none"> • Activities: The applicant will be developing the proposed applications or services, provide a MVP (Minimum Viable Product) and validate it. Delivery of open-source versions of tools and/or applications (under proper license) is mandatory. • Funding: Up to 90% (lump sum) per sub-project, associated to successful completion of the EXPERIMENT phase, assessed by external reviewers.
<p>GROWTH</p>	<ul style="list-style-type: none"> • Duration: 1 months, the applicant will work remotely and participate in several meetings and events where they can promote their projects goals and outcomes. • Number of SMEs: Top 6 projects. • Activities: The applicant will develop activities associated with the promotion and exploitation of their project, aiming to engage new customers and/or partners and/or investors. • Funding: Up to 100% (lump sum) per sub-project, associated to successful completion of the GROWTH phase, assessed by external reviewers.

The funding for each new participant will be up to 90K€ and it is expected that at least 10 new companies will join the NEMO ecosystem via this open call. The selected partners of Open Call #2 will be funded as follows:

Table 3. NEMO Open Call #2 funding schema

Phase	Number of projects	Schedule	Cumulative Funding (€)	Condition / Event	Justification
DESIGN	12	Jan 2025	18 000€	Successful project design phase review	Acceptance of DESIGN phase deliverable(s)
EXPERIMENT	10	Apr 2025	51 000€	Successful project MVP sub-phase review	Acceptance of MVP sub-phase deliverable(s)
	10	July 2025	81 000€	Successful project Validation sub-phase review	Acceptance of Validation sub-phase deliverable(s)
GROWTH	6	Aug 2025 ¹	90 000€	Successful project final review	Acceptance of GROWTH phase deliverable(s)

*It should be noticed that:

- All payments to be made promptly after the coordinator receives the same from EC. The Coordinator is entitled to withhold any payments due to a Defaulting Party except the amount of contribution that the Funding Authority, after acceptance of reporting, decides to be provided to the Defaulting Party.

¹ The final payment will take place after NEMO coordinator has received the final payment from EC



2 General information

2.1 Means of submission

The F6S platform (<https://www.f6s.com/nemo-2nd-open-call/apply>) will be the entry point for all proposals' submission to NEMO Open Calls. Submissions received by any other channel will be automatically discarded. Documents required in subsequent phases will be submitted via dedicated channel, which will be indicated by NEMO consortium during the sub-granted projects execution.

2.2 Language

English is the official language for NEMO open calls. Submissions done in any other language will not be evaluated. English is also the only official language during the whole execution of the NEMO programme. This means any requested submission of deliverable will be done in English in order to be eligible.

2.3 Documentation formats

Any document must be submitted electronically in PDF format without restrictions for printing.

2.4 Data protection

To process and evaluate applications, NEMO will need to collect Personal and Industrial Data. ATOS, as the Project coordinator will act as Data Controller for data submitted through the F6S platform. The F6S platform's system design and operational procedures ensure that data is managed in compliance with the General Data Protection Regulation (EU) 2016/679 (GDPR). Each applicant will accept the F6S terms to ensure coverage. Please refer to <https://www.f6s.com/terms> to check F6S platform data privacy policy and security measures. Please also note that NEMO requests the minimum information needed to deliver the evaluation procedures or introduce the new partners to the consortium. For example, *Annex 6: Bank account information* is provided just for reference and will only be requested if the applicant is accepted in the NEMO consortium.

2.5 Origin of the funds

Any selected proposer will be associated with NEMO via a sub-project contract.

The funds to the selected applicants come directly from the funds of the European Project NEMO, funded itself under the EC Horizon Europe Framework Programme (HORIZON), and remain therefore, property of the EU until the payment of the balance, whose management rights have been transferred to the project partners in NEMO via European Commission Grant Agreement Number 101070118.

This relation between the new partners and the EC carries a set of obligations².

² More information at https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf



3 Proposal Eligibility Criteria

NEMO invites EU based SMEs to extend the NEMO use cases by porting their new or existing applications and services into the NEMO meta-OS, in the verticals of the NEMO Living Labs. The proposed applications should leverage NEMO capabilities and demonstrate the meta-OS potential.

3.1 SME Definition

An SME will be considered as such, if complying with the European Commission Recommendation 2003/361/EC [1] and the SME user guide [2]. As a summary, the criteria which define an SME are:

- a. Independent (not linked or owned by another enterprise), in accordance to Recommendation 2003/361/EC.
- b. Headcount in Annual Work Unit (AWU) less than 250.
- c. Annual turnover less or equal to €50 million OR annual balance sheet total less or equal to €43 million.

3.2 SME Eligibility Criteria

An SME is considered eligible for the Open Call if it complies with ALL the following rules:

- i. It is a legal entity, that comply to the SME definition as defined in section 3.1³.
- ii. It is established and based in one of the EU Member States or a Horizon Associated country as defined in Horizon Rules for participation [3].
- iii. It is an IT technology provider, active in edge computing, edge cloud software development, native cloud, operating systems, full stack development, IoT applications development.
- iv. SMEs should be able to prove their financial stability and capacity and pass any financial check required by the European Commission, including **Financial capacity assessment** [4]. Moreover, the SMEs should take into consideration that all funds are directly associated with the NEMO project funding and any funding issue, including delays, in the NEMO project financing is directly applied to the selected Open Call applicants/ sub-contracts.
- v. In case an SME is awarded a sub-contract, it will remain eligible even if, at a certain point during the project execution, it does not fulfil criteria (b) or (c) of section 3.1.
- vi. Have not been convicted for fraudulent behaviours, other financial irregularities, unethical or illegal business practices.
- vii. Are not under liquidation or an enterprise under difficulty according to the Commission Regulation No 651/2014 art. 2.18.

Please note that signed version of **Annex 4: Honour Declaration** and **Annex 5: SME Financial Stability Declaration** are mandatory for a proposal submission.

³ In case you are not sure if the legal entity that you represent is an SME, run the EC self-evaluation test <https://ec.europa.eu/growth/tools-databases/SME-Wizard/>



3.3 Proposal Eligibility Criteria

The following proposal's eligibility criteria also apply:

- i. The scope of the proposal should be porting their new or existing applications and services into the NEMO metaOS satisfying high-demanding requirements, including (but not limited to):
 - a) High device heterogeneity, including low-capable IoT devices
 - b) On-device machine learning
 - c) Low latency & high bandwidth
 - d) Increased energy efficiency and reduced energy footprint of IT operations
 - e) Sustainable IT investments through data, resource and/or service monetization
- ii. Proposals must offer **open access to their software components**. Any developed HW/SW component within NEMO will be tested in NEMO pilots and provided as **Open Source**.
- iii. Proposals must have a **clear European dimension, facilitate Edge cloud/IoT based innovation** and contribute towards EU digitization, **targeting clear economic and societal impact**.
- iv. **Each applicant may submit only one (1) proposal at each NEMO open call. Multiple submissions per call is a disqualify factor**. In case an entity submits more than one proposal, all proposals that they have submitted will be automatically excluded from the evaluation process.
- v. **It is considered as Conflict of Interest and the relevant proposals will be automatically considered not eligible, in case an individual participates, controls, submits or is associated in any way with more than one proposals**. As indicative example, without excluding other cases, it is not allowed for an individual to be in the project team or the advisory board of more than one proposals. Moreover, it is not allowed for an individual to have a legal, administrative, technical, advisory or financial position or capacity in more than one applicant or is in the position to access or influence in any way more than one proposals.
- vi. **An SME may participate in maximum one (1) accepted application**. Applicants that are accepted via Open Call #1 are automatically excluded from participating in Open Call #2 even if they submit a different proposal.
- vii. **An SME is not allowed to receive funding in more than one HORIZON-CL4-2021-DATA: "Future European platforms for the Edge: Meta Operating Systems" Open Calls**.



4 Open Call submission and selection process

NEMO Open Call #2 targets SMEs. The following figure summarizes the open call process:

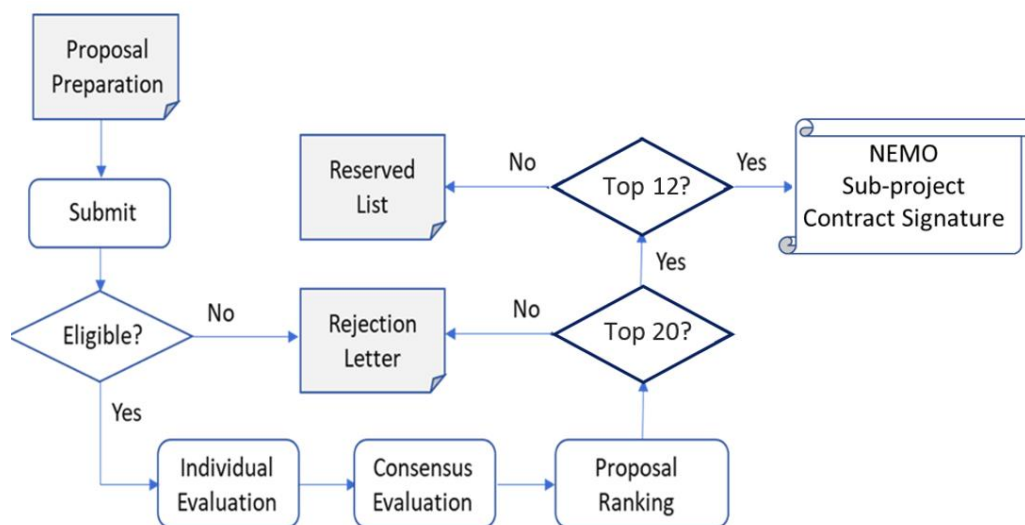


Figure 3: NEMO Evaluation process summary

4.1 Open Call Submission

The Open Call submission will follow the steps that are listed in this section:

4.1.1 Open Call publication

The Open Call #2 will be published on the dates shown in section § 4.1.4. It will be supported by:

- **Annex 1: Open Call text**, which provides a full set of information regarding the Open Call for Proposals for the NEMO project.
- **Annex 2: Guidelines for Applicants**, this document.
- **Annex 3: Proposal Template**, an online application form, available at F6S platform (<https://www.f6s.com/nemo-2nd-open-call/apply>).
- **Annex 3.1: Proposal Supplement Template**, a word document to be completed and submitted together with the proposal. It includes information on proposal concept, schedule, applicant/team, Ethical & Security details.
- **Annex 4: Honour Declaration**, which declares that all conditions of the Open Call are accepted by the SME legal representative.
- **Annex 5: SME Financial Stability Declaration**, which evaluates the status of the SME and its financial stability.
- **Annex 6: Bank account information**, collecting information on the applicant's bank account where the NEMO payments will be sent to (for reference at submission time).
- **Annex 7: Frequently Asked Questions & Answers**, a document with Q&A.



4.1.2 Applicants Registration

Interested applicants should register at the NEMO F6S page (<https://www.f6s.com/nemo-2nd-open-call/apply>). This will be the central interface for managing the proposal applications for the remainder of the open calls.

4.1.3 Proposal Preparation

Please follow the steps:

1. For the proposal preparation, the applicants are requested to apply online and answer to all mandatory questions (with no exception) at <https://www.f6s.com/nemo-2nd-open-call/apply>.
2. Applicants that do not accept the terms and conditions and do not sign and upload to the f6s platform the completed **Annex 4: Honour Declaration** and **Annex 5: SME Financial Stability Declaration** will not be eligible.
3. Be concrete and concise. Questions have character/page limitation. Please read carefully all open call documents/Annexes (<https://meta-os.eu/index.php/open-calls/>).
4. It is highly recommended to submit your proposal well before the deadline. If the applicant discovers an error in the proposal, and provided that the call deadline has not passed, the applicant may request its proposal to be withdrawn so that they may re-submit it (for this purpose please contact us at opencalls@meta-os.eu). **However, NEMO consortium is not committed that the submitted proposal will be withdrawn in time in case the request for resubmission is not received by the NEMO team at least 48 hours before the call deadline.**

It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including network communications delays or working from multiple browsers or multiple browser windows, is not acceptable as an extenuating circumstance. The time of receipt of the application as recorded by the submission system will be definitive.

4.1.4 Proposals reception

Submissions will be done ONLY via the F6S platform on <https://www.f6s.com/nemo-2nd-open-call/apply>. A full list of proposers will be drafted containing their basic information for statistical purposes and clarity (which will be also shared with EC for transparency).

The application reception will close at **17:00 CEST (Brussels time) on 31st of August 2024**. There will not be any deadline extensions unless a major problem caused by the submission platform (and not by the proposers), makes the system unavailable.



4.2 Evaluation Procedures

4.2.1 Step 1.1: Eligibility

A semi-automatic filtering will automatically discard non-eligible proposals and create a short list. Eligibility criteria check will verify that:

- The proposing entity is a legal entity eligible for EC funding under the rules of Horizon Europe [Y/N]
- The participation rules as expressed in **§3.2. "SME Eligibility Criteria"** are followed for all SMEs of the consortium [Y/N]
- The participation rules as expressed in **§3.3. "Proposal specific Eligibility Criteria"** are followed [Y/N]
- The proposal and all associated documents are written in the English Language [Y/N]
- All required annexes i.e. **Annex 3.1**, **Annex 4** and **Annex 5** are correctly completed, signed, stamped and submitted [Y/N]

Proposals being marked as non-eligible will get a rejection letter including the reasons (points a. to e. above) for being catalogued as non-eligible. No further feedback on the process will be given.

4.2.2 Step 1.2: External remote evaluation

Two (2) expert evaluators external to NEMO consortium with experience in OS, Edge computing/cloud, IoT technologies and business development will evaluate each proposal, scoring it based on the following evaluation criteria:

Criteria	Description
Criterion 1: Concept and Innovation	<ul style="list-style-type: none"> Innovation and feasibility of the proposed subsystem objectives Design, reliability, feasibility, and quality of the proposed subsystem. Level of innovation and technological challenges addressed. Added value of proposed technology/mechanism/component/plugin
Criterion 2: Technology	<ul style="list-style-type: none"> Analysis of the technological and implementation capacity (existing and target TRL). Quality and feasibility of the workplan (including proposed milestones). Quality of the alignment with the NEMO project. Details on how the proposed components will be tested and validated at the NEMO pilots/living labs.
Criterion 3: Impact	<ul style="list-style-type: none"> Economic and societal impact of the proposed subsystem. Market potential and go to market strategy. European dimension, cross-sector/-border business scalability. Exploitation / business plan and commercialization milestones. Explicit statement that SW development is offered as open source
Criterion 4: Applicant Entity/Team	<ul style="list-style-type: none"> Capacity of applicant entity/team to perform the task. Knowledge, technological and business expertise. Financial viability/stability and capacity. Commitment of the company and the team. Allocation and justification of requested resources.



Each criterion will get a mark between 1 and 10. Half point scores are not given. For each criterion under examination, score values will indicate the following assessments:

- **1-2: Fail.** The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information.
- **3-4: Very poor.** The criterion is addressed in an unsatisfactory manner.
- **5: Poor.** There are serious inherent weaknesses.
- **6-7: Good.** While the proposal broadly addresses the criterion, there are significant weaknesses that would need correcting.
- **8-9: Very Good.** The proposal addresses the criterion well, although certain improvements are possible.
- **10: Excellent.** The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

The threshold for each criterion will be **six (6)**, while the overall score threshold will be **twenty-six (26)**. It means that if a proposal receives less than 6 in one criterion or less than 26 overall score it is automatically rejected.

Each evaluator will record his/her individual evaluation/opinion of each proposal on an Individual Evaluation Report. After individual evaluation, the experts will communicate to prepare a single consensus Evaluation Summary Report (ESR) for each proposal, representing opinions and scores on which the evaluators agree and which they will sign.

4.2.3 Step 1.3: Final Ranking and Selection

At the end of the evaluation process all proposals will be ranked in a single list. The criteria for the ranking of the proposals will be semi-automatic following the rules below:

- **Rule 1:** The proposals will be ranked based on their overall score (sum of criterion 1 to 4 scores).
- **Rule 2:** In case following Rule 1 there are proposals in the same position, priority will be given to innovation of the concept (Criterion 1).
- **Rule 3:** In case following Rule 2 there are proposals in the same position, priority will be given to proposals that their technology better fits to NEMO scope (Criterion 2).
- **Rule 4:** In case following Rule 3 there are proposals in the same position, priority will be given to proposals that have higher impact and market potential (Criterion 3).
- **Rule 5:** In case following Rule 4 there are proposals in the same position, priority will be given to the application that has lower funding request.
- **Rule 6:** In case following Rule 5 there are proposals in the same position, priority will be given to the number of female researchers participating in the team.
- **Rule 7:** In case following Rule 6 there are proposals in the same position, priority will be given to the application that increases NEMO project footprint in Europe.

In case following Rule 7 there are still proposals in the same position, which are in the top 10 proposals, the NEMO consortium will invite at least 1 additional evaluator to read the specific proposals and break the conflict by re-evaluating them.

At the end, and based on the requested funding, at least 10 proposals will be selected, while 10 additional proposals will remain in a reserve list. In case one or more selected proposals



fail during contract preparation, the list of accepted proposals will be filled with proposals in the reserved list.

All proposals will receive an acceptance or rejection letter together with an anonymized version of their proposal Consensus Evaluation Report.

4.2.4 Step 1.4: Contract Preparation & Signature

After the Open Call evaluation conclusion and projects selection, the NEMO coordinator will inform the EU for the results and start the sub-project contract preparation in collaboration with the applicants that have been evaluated in the short list. Contract preparation will go via an administrative and financial checking (and potentially into technical or ethical/security negotiations) based on evaluators' comments. On a case by case approach, at least one phone call or teleconference may be needed for clarification.

The objective of the contract preparation is fulfilling the legal requirements between the European Commission, the NEMO consortium and every selected beneficiary SME of the call. The items covered will be:

- To address the comments (if any) in the Evaluation Summary Report of the proposals.
- To validate the status information of the applicant. At least the following documents will be required:
 - **Legal existence.** Company Register, Official Gazette or other official document per country showing the name of the organisation, the legal address, the official founding date, ownership and a copy of a document proving VAT registration (in case the VAT number is not shown on the registration extract or its equivalent).
 - **Financial Stability.** It includes the headcount (AWU), balance, profit & loss accounts of the latest closed financial year and the relation, upstream and downstream, of any linked or partner company. In the event the applicant declares being non-autonomous, the balance sheet and profit and loss account (with annexes) for the last period for upstream and downstream organizations should also be provided.
 - In cases where the **number of employees and/or the ownership is not clearly identified:** any other supporting documents which demonstrate headcount and ownership such as payroll details, annual reports, national regional association records, etc. should be provided.
- **To sign the NEMO Consortium Agreement, Attachment 2: “Declaration of Accession”.**
- **To provide the applicant Bank account information:** The account where the funds will be transferred will be indicated via a form signed by the Applicant legal representative and the bank representative. The account should be a business bank account of the applicant company.

It should be emphasised that each **SME should provide at contract preparation time a valid VAT⁴. Failure to provide the VAT number will automatically result in proposal rejection.**

⁴ To be checked at EC services such as http://ec.europa.eu/taxation_customs/vies/



In general, the contract preparation (including all the above documentation) should be concluded within 2 weeks. An additional week may be provided by the NEMO coordinator in case of a significant reasoning. In case negotiations have not been concluded within the above period, the proposal is automatically rejected and the next proposal in the reserve list is invited.

The provided funding remains property of the European Commission until the payment of the balance, whose management rights have been transferred to the project partners in NEMO via European Commission Grant Agreement Number 101070118.

4.2.5 Redress process

Within 3 working days of the delivery of a rejection letter considering the proposal as non-eligible, a proposer may submit a request for redress if s/he believes the results of the eligibility checks have not been correctly applied, or if s/he feels that there has been a shortcoming in the way his/her proposal has been evaluated that may affect the final decision on whether to enter the NEMO Consortium or not.

In that case, an internal review committee of the NEMO consortium will examine the request for redress. The committee's role is to ensure a coherent interpretation of such requests, and equal treatment of applicants.

Requests must be:

- Related to the evaluation process or eligibility checks.
- Clearly describe the complaint.
- Received within the time limit (3 working days) from the reception of a rejection letter considering the proposal as non-eligible or the ESR information letter delivered.
- Sent by the applicant legal representative that has also submitted the proposal.

The committee will review the complaint and will recommend an appropriate course of action. If there is clear evidence of a shortcoming that could affect the eventual funding decision, it is possible that all or part of the proposal will be re-evaluated.

Please note:

- This procedure is concerned only with the evaluation and/or eligibility checking process. The committee will not call into question the scientific, technical or impact judgement of appropriately qualified experts.
- A re-evaluation will only be carried out if there is evidence of a shortcoming that affects the final decision on whether to include the partner in NEMO consortium or not. This means, for example, that a problem relating to one evaluation criterion will not lead to a re-evaluation if a proposal has failed anyway on other criteria.
- The evaluation score following any re-evaluation will be regarded as definitive. It may be lower than the original score.

Only one request for redress per proposal will be considered by the committee. All requests for redress will be treated in confidence and have to be sent to Project Coordinator via the F6S platform.



5 Execution, Reviews & Financial Planning

The progress of the subproject execution and the deliverables' quality will be reviewed by external experts in months 2, 5, 8 and 9 as shown in Table 4. Projects successfully passing the review will receive the relevant funding.

Table 4. NEMO Open Call #2 funding schema

Phase	Number of projects	Schedule	Cumulative Funding (€)	Condition / Event	Justification
DESIGN	12	Jan 2025	18 000€	Successful project design phase review	Acceptance of DESIGN phase deliverable(s)
EXPERIMENT	10	Apr 2025	51 000€	Successful project MVP sub-phase review	Acceptance of MVP sub-phase deliverable(s)
	10	July 2025	81 000€	Successful project Validation sub-phase review	Acceptance of Validation sub-phase deliverable(s)
GROWTH	6	Aug 2025 ⁵	90 000€	Successful project final review	Acceptance of GROWTH phase deliverable(s)

*It should be noticed that:

- All payments to be made promptly after the coordinator receives the same from EC.
- The Coordinator is entitled to withhold any payments due to a Defaulting Party except the amount of contribution that the Funding Authority, after acceptance of reporting, decides to be provided to the Defaulting Party.

It should be noticed that the above payments will be associated with NEMO funding. Especially the last payment will be made after EC has made the final NEMO payment.

5.1 DESIGN Phase Execution & Review

After the proposal has been accepted and the sub-grant agreement has been signed, the SME will enter the DESIGN phase. The DESIGN phase will last for two (2) months.

During this phase the SME should clarify the details of the sub-project, including both the technical and the business parameters, provide a detailed design, an API (preferable in tools such as Swagger [5]) along with the potential economic/business impact in the NEMO related domains and the European dimension/scale.

At least 5 working days before the end of the DESIGN phase the applicants should provide at least one deliverable entitled: **D1 “Detailed Application Design”** with the following content (appropriately adapted if needed):

- a) Motivation and technological background of the proposed Application (2-4 pages)
- b) Detailed design of the SW component(s)/plugins including functional and non-functional requirements (10-15 pages)

⁵ The final payment will take place after NEMO coordinator has received the final payment from EC



- c) Detailed API of the SW component(s)/Plugins (2-5 pages)
- d) Economic/business impact potential (2-4 pages)

5.1.1 DESIGN Phase Review

At the end of the sub-project's month M2 (end of Jan 2025), the 10 SMEs of the DESIGN phase will be remotely evaluated using a teleconference platform (e.g. Skype, Zoom or Webex) by external experts to determine a) if the DESIGN phase is completed successfully and b) if the subproject is qualified to enter the EXPERIMENT phase.

The evaluation committee will consist of:

- Two External Experts
- One NEMO consortium member acting as moderator

During the meeting, the applicant will provide a set of slides in PowerPoint or a similar tool format and make a presentation of the sub-project idea/concept focusing on the technological dimension and the implementation/experiment workplan and answer to questions of the evaluation team. Moreover, they may provide a mock-up of the proposed application.

Each SME should be well prepared for the meeting as it should last 25-30 minutes. The evaluation team may extend the technical evaluation if they consider that it is necessary.

At the end of the evaluation, each committee member will score each SME/proposal with two marks between 1 and 10: one for their technical excellence and one for the IoT Application business potential.

The score given by each committee member will be equal and independent from each other. **The DESIGN Technical Evaluation Score (DTES) will be the average of the experts individual technical evaluation scores and the DESIGN Business potential Evaluation Score (DBES) will be the average of the experts individual business evaluation scores.**

In case the SME has not delivered on time the **D1: "Detailed Application Design"** deliverable or does not participate at the DESIGN Review, both its DTES and DBES will be zero (0) and the DESIGN Phase is considered unsuccessful.

5.1.2 DESIGN Phase Ranking and Qualification for the EXPERIMENT phase

At the end of the evaluation day the sub-projects will be ranked based on their evaluation scores. The **DESIGN Evaluation Score (DES)** will be evaluated as follows:

$$\text{DES} = 0.7 \times \text{DTES} + 0.3 \times \text{DBES}$$

The final ranking of the sub-projects will be based on the DES. In case there are two or more sub-projects that have equal DES, the one with higher DTES will be ranked higher. In case they have equal DTES, the external experts' committee will vote on the final ranking.

Although the sub-projects will be informed for their own DTES and DBES, the sub-projects final ranking will not be announced. Instead of this, the top 10 sub-projects will be announced to enter the EXPERIMENT phase. **The remaining 2 sub-projects will be automatically terminated.**



5.1.3 Funding release for the DESIGN Phase

Given that DES is greater or equal to five (5.0), the DESIGN phase is considered to have completed successfully irrespective of the selection to enter the EXPERIMENT phase or not.

The sub-projects that have successfully completed the DESIGN phase will be requested to send to the NEMO Open Call coordinator **within 5 working days** a financial statement F1 (template will be provided) requesting the DESIGN Phase funding. This funding should be less or equal to 18000€ of the overall sub-project funding. The NEMO Open Call coordinator after receiving the financial statement will proceed with the payment of the DESIGN phase funding (provided in a lump sum mode).

In case an SME has not successfully completed the DESIGN phase or does not submit the above documentation within the foreseen timeframe, their sub-grantee contract may be automatically terminated, and no DESIGN phase payment will be made.

After providing the DESIGN phase funding to the SME beneficiaries, the DESIGN phase is completed and the EXPERIMENT phase starts.

5.2 EXPERIMENT Phase Execution & Review

5.2.1 MVP implementation sub-phase

After the DESIGN phase evaluation, the sub-projects will enter the first step of the EXPERIMENT phase, which is the MVP implementation sub-phase. The duration of this sub-phase will be approximately 3 months, covering project months M3 to M5 (April 2025).

During this sub-phase, the SME should implement their NEMO MVP prototype, which should reach a readiness level of at least TRL 4-5.

At the end of sub-project's month M5, a remote review will take place to evaluate the progress of the sub-project. Five (5) working days before the review, the sub-project coordinator should submit all sub-phase deliverables, including at least deliverable **D2: "MVP Documentation"**, analysing in detail the sub-project and the implementation approach, including detailed analysis and screenshots of the application. Short analysis of the impact potential and draft business considerations may also be included.

The MVP sub-phase review will be remote via a teleconference platform (e.g. Skype, Zoom or Webex). The review committee will consist of:

- Two External Experts
- One NEMO consortium member acting as moderator

The evaluation will last for one (1) hour. The sub-project will make a short presentation of the sub-project (10-15 minutes) and a detailed demonstration of the application (25-30 minutes), keeping 15-20 minutes for questions and answers.

After the review, the sub-project coordinator will receive a review report, including comments and potential recommendations. The report will also state if the MVP implementation is considered successful or not.

- On successful evaluation of MVP sub-phase and acceptance of the relevant deliverable(s), the sub-project coordinator will be requested within five (5) working days after receiving the evaluation report to:



- a) publish at a provided public repository (e.g. GitLab) the source code of the MVP component that has demonstrated as open source code and
- b) submit a financial statement F2 (template will be provided) requesting the intermediate voucher of the MVP sub-phase. This payment, including the DESIGN phase payments request, should be less or equal to the 51000€ of the overall sub-project funding.

Given the above, the coordinator will release the MVP sub-phase payment.

- On rejection of the D2 deliverable or in case of not satisfactory review, the sub-project coordinator will be requested to continue the EXPERIMENT phase without receiving the voucher of the MVP sub-phase. The rejected D2 deliverable may be (re-)submitted at the end of the EXPERIMENT phase, hence qualifying for its payment, together with the amount due in the Validation sub-phase evaluation, if and when D2 deliverable is approved.

5.2.2 Validation sub-phase

After the MVP sub-phase review, the sub-projects will enter the last part of the EXPERIMENT phase, which is the Validation sub-phase.

During this sub-phase, the SME must finalize their component(s), integrate them with NEMO metaOS and test/validate them in the verticals of the NEMO Living Labs. The duration of this sub-phase will be approximately 3 months, covering project months M6 to M8.

One week before the end of the Validation sub-phase, the sub-project coordinator should submit the relevant deliverables including at least Deliverables:

- **D3: “Test and Validation”**, a report describing the system prototype integration and testing within the NEMO metaOS development, along with the initial results. This deliverable will also include a section (3-5 pages) describing the exploitation plan and the business potential.
- **D4: “Project Video”**, a video with a duration of 5-10 minutes describing the SME, the application and the results. This video will be published at the NEMO website.

At the end of sub-project month M8 (July 2025), an EXPERIMENT phase review will take place. The NEMO consortium reserves the right to select at that point if the EXPERIMENT review will take place remotely or with physical presence. **In case of a physical review, it will be mandatory that at least one SME representative/member appears at the event, signs the participants list and actively participates in the evaluation process.** Moreover, if for any reason sub-project's D2 deliverable has not been previously accepted, participants may re-submit it at this evaluation phase.

During the Validation sub-phase review, each SME will have a meeting with a review committee that will consist of:

- Two External Experts
- One NEMO consortium member acting as moderator

The evaluation will last for one (1) hour. The sub-project will make a short presentation of the sub-project (3-5 minutes), a presentation of the application, how it is integrated with NEMO metaOS and the associated testing results (20-25 minutes), a presentation of the business and exploitation strategy (10-15 minutes), while keeping 10-15 minutes for questions and answers.



5.2.3 EXPERIMENT Phase Ranking and Qualification for the GROWTH phase

After the Validation sub-phase review event, the external experts will score each sub-project with a mark between 1 and 10 based on their business and exploitation strategy and the quality of deliverable D4: "Project Video". The value of the score of each committee member will be equal and the **EXPERIMENT Evaluation Score (EES)** will be the average of the individual scores.

At the end of the Validation sub-phase review, the sub-projects will be ranked based on the EES. In case two or more sub-projects have equal EES, the external experts' committee will decide on the final ranking based on each sub-project impact potential and probability to achieve the results.

At the end of the event the project Open Call coordinator will announce the top 6 sub-projects that will enter the GROWTH phase. **The remaining 4 sub-projects will be automatically terminated.**

5.2.4 Funding release for the EXPERIMENT Phase

Successful evaluation of the deliverables, presentation and demonstration of the solution to the committee will result in successful completion of the EXPERIMENT Phase.

Following the Validation sub-phase review and within **5 working days**, all sub-project coordinators that have successfully completed the EXPERIMENT Phase should send to the NEMO Open Call coordinator the financial statement F3 (template will be provided) requesting up to the 81000€ of the overall sub-project funding (including all previous received funding). The NEMO coordinator after receiving the above mentioned financial statements will proceed with the payment (provided in a lump sum mode).

In case an SME, either has not participated in the review, or has not successfully completed both EXPERIMENT sub-phases or has not submitted the financial statements with the foreseen timeframe, their sub-grantee contract will be automatically terminated, and no compensation will be provided.

5.3 GROWTH phase Execution & Review

After the NEMO EXPERIMENT phase, the sub-projects will enter the GROWTH phase. The duration of this phase will be approximately 1 month, covering project month M9 (Aug. 2025). During this phase, the SMEs should participate in various events, have f2f meetings with potential investors and finalize their business and market plans. In parallel they should proceed with improving their solution targeting a product of TRL 6-7.

One week before the end of the GROWTH phase, the sub-project coordinator should submit all deliverable(s) associated with this phase, including at least deliverable **D5: "Exploitation & Sustainability"**, a report describing the dissemination, exploitation and commercialization activities and the sustainability potential.

In case the D5 deliverable has not been submitted, the sub-project will not be allowed to participate at the GROWTH Review process.

At the end of sub-project month M9 (Aug. 2025), a remote evaluation will take place. The review will be in the form of a public pitch to the NEMO consortium. Additional external



audience (e.g. VCs, Business Angels, EC officials, ...) may also participate. During the review/pitch, the selected project will have 20 minutes each to:

- a) Describe their application
- b) Present the Exploitation, Dissemination and Commercialization Activities
- c) Analyze the Commercialization Potential

Just after the GROWTH review event, and within **5 working days**, all sub-project coordinators that have successfully completed the GROWTH phase should send to the NEMO coordinator a financial statement F4 (template will be provided) requesting up to 100% of the sub-project funding (including all funding already received). The NEMO coordinator after receiving the above documents will proceed with the payment (provided in a lump sum mode).

In case an SME, either has not participated in the GROWTH review or has not submitted the financial statements within the foreseen timeframe, their sub-grantee contract will be automatically terminated, and no compensation will be provided.

All sub-projects are also committed to participate at the NEMO final review event (either physically or remotely) should they be invited.



6 Responsibilities of beneficiaries

The selected SMEs become beneficiaries of European Commission HORIZON framework funding. As such, they are responsible for the proper use of the funding and comply with obligations under Horizon Europe specific requirements as described in Horizon Europe Model Grant Agreement [6]. The obligations that are applicable to the recipients include⁶:

6.1 Participation to the NEMO project

A non-exhaustive list of benefits and responsibilities include:

- The application and consortium applicants selected from the Open Call will be communicated to the European Commission and listed at the NEMO web site
- All new NEMO components/plugins will be offered as Open Source.
- Sub-project participants may be invited in NEMO activities, including consortium/WP meetings and phone calls, pilot and dissemination activities, reviews from the EC. Participation at least to one event/ review during the VALIDATE phase review may have a mandatory nature.

6.2 Conflict of Interest

The applicant must take all measures to prevent any situation where the impartial and objective implementation of the proposed tasks are compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify to the NEMO Open Call coordinator without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation. The NEMO Open Call coordinator may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

6.3 Data Protection & Confidentiality

During implementation of the action and for five years after the end of the NEMO project, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at Consortium Agreement signing time ('confidential information').

Additional rules for data protection & confidentiality are part of the NEMO consortium agreement. It should be noticed that all software/embedded software implemented within the NEMO project is considered open source, covered by the relevant Open Source License. During the Open Call sub-contract Agreement signature, the new beneficiary may describe in a specific Annex of the Consortium Agreement any background knowledge or asset that they are willing to remain as background knowledge.

⁶ The obligations described here are not binding and may be modified, refined or additional obligations may be inserted during the sub-project negotiation if needed.



6.4 Give visibility to the EU funding

The sub-project SMEs must promote the participation in the NEMO project and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner and to highlight the financial support of the EC.

Unless otherwise defined in the NEMO Consortium Agreement, or the European Commission or the NEMO coordinator requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.), any publicity, including at a conference or seminar or any type of information or promotional material (brochure, leaflet, poster, presentation etc.), and any infrastructure, equipment and major results funded by the grant must:

- (a) display the EU emblem;
- (b) display the NEMO logo and
- (c) include the following text:

For communication activities: *"NEMO project has received funding from the European Union's Horizon Research & Innovation programme (Grant Agreement No 101070118)".*

For infrastructure, equipment and major results: *"This [infrastructure][equipment][insert type of result] has been funded from the European Union's Horizon Europe Research & Innovation programme under project NEMO (grant agreement No 101070118)".*

When displayed in association with a logo, the European emblem should be given appropriate prominence. This obligation to use the European emblem in respect of projects to which the EC contributes implies no right of exclusive use. It is subject to general third-party use restrictions which do not permit the appropriation of the emblem, or of any similar trademark or logo, whether by registration or by any other means. Under these conditions, the Beneficiary is exempted from the obligation to obtain prior permission from the EC to use the emblem. Further detailed information on the EU emblem can be found on the Europa web page.

Any publicity made by the beneficiary SME in respect of the project, in whatever form and on or by whatever medium, must specify that it reflects only the author's views and that the EC or NEMO project is not liable for any use that may be made of the information contained therein.

The EC and the NEMO consortium shall be authorised to publish, in whatever form and on or by whatever medium, the following information:

- the name of the beneficiary SME;
- contact address of the beneficiary SME;
- the general purpose of the new tasks/components;
- the amount of the financial contribution foreseen for the new beneficiary and after the final payment, the amount of the financial contribution actually received;
- the geographic location of the activities carried out;
- the list of dissemination activities and/or of patent (applications) relating to foreground;
- the details/references and the abstracts of scientific publications relating to foreground and the published version or the final manuscript accepted for publication;



- any picture or any audio-visual or web material provided to the EC and NEMO in the framework of the project.

The beneficiary shall ensure that all necessary authorisations for such publication have been obtained and that the publication of the information by the EC and NEMO does not infringe any rights of third parties.

Moreover, all software developed within NEMO will be available as Open Source, under the relevant license.

Upon a duly substantiated request by the beneficiary, the NEMO coordinator, if such permission is provided by the EC, may agree to forego such publicity if disclosure of the information indicated above would risk compromising the beneficiary's security, academic or commercial interests.

6.5 Financial audits and controls

The European Commission (EC) will monitor that NEMO beneficiaries comply with all the Horizon Europe Grant Agreement obligations and responsibilities [6].

Moreover, the EC may at any time during the implementation of the NEMO project and up to 5 (five) years after the end of the NEMO project, arrange for financial audits to be carried out, by external auditors, or by the EC services themselves including the European Anti-Fraud office (OLAF). The audit procedure shall be deemed to be initiated on the date of receipt of the relevant letter sent by the EC. Such audits may cover financial, systemic and other aspects (such as accounting and management principles) relating to the proper execution of the grant agreement. They shall be carried out on a confidential basis.

The beneficiary shall make available directly to the EC all detailed information and data that may be requested by the EC or any representative authorised by it, with a view to verifying that the grant agreement is properly managed and performed in accordance with its provisions and that costs have been charged in compliance with it. This information and data must be precise, complete and effective.

Each sub-project beneficiary shall keep all project deliverables and all documents relating to the activity for up to five years from the end of the project. These shall be made available to the EC where requested during any audit under the grant agreement.

In order to carry out these audits, the beneficiary shall ensure that the EC's services and any external body(ies) authorised by it have on-the-spot access at all reasonable times, notably to the sub-project applicant offices, to its computer data, to its accounting data and to all the information needed to carry out those audits, including information on individual salaries of persons involved in the project. They shall ensure that the information is readily available on the spot at the moment of the audit and, if so requested, that data be handed over in an appropriate form.

On the basis of the findings made during the financial audit, a provisional report shall be drawn up. It shall be sent by the EC or its authorised representative to the beneficiary concerned, which may make observations thereon within one month of receiving it. The Commission may decide not to take into account observations conveyed or documents sent after that deadline. The final report shall be sent to the beneficiary concerned within two months of expiry of the aforesaid deadline.

On the basis of the conclusions of the audit, the EC shall take all appropriate measures which it considers necessary, including the issuing of recovery orders regarding all or part of the payments made by it and the application of any applicable sanction.



The European Court of Auditors shall have the same rights as the EC, notably right of access, for the purpose of checks and audits, without prejudice to its own rules.

In addition, the EC may carry out on-the-spot checks and inspections in accordance with Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities.



7 Checklist

- 1) **Does your planned work fit with the call for proposals?** Check that your proposed work does indeed address the topics open in this call.
- 2) **Does your proposal address NEMO technology?** Check that your proposed work does indeed address the NEMO technologies (IoT, Edge computing/cloud, Operating System, full stack development of IoT-Edge-Cloud continuum).
- 3) **Is your proposal eligible?** The eligibility criteria are given in chapter 3. In particular, make sure that you satisfy the minimum participation requirements (SME from eligible countries).
- 4) **Is your proposal complete?** Have you completed all mandatory questions and uploaded all necessary documents/Annexes?
- 5) **Does your proposal fulfil questions requests/comments?** Proposals should be precise, concise and must answer to requested questions, which are designed to correspond to the applied evaluation. Omitting requested information will almost certainly lead to lower scores and possible rejection.
- 6) **Have you maximised your chances?** There will be strong competition. Therefore, edit your proposal tightly, strengthen or eliminate weak points.
- 7) **Have you submitted your proposal before the deadline?** It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including network communications delays, is not acceptable as an extenuating circumstance. The time of receipt of the message as recorded by the submission system will be definitive.
- 8) **Do you need further advice and support?** You are advised to communicate with the NEMO team via the NEMO blog.

Do not forget that it is mandatory the applicant to have a valid PIC and VAT number during contract preparation time.



8 Contacts

The NEMO consortium will provide information to the applicants only via the F6S blog, so that the information (question and answer), will be visible to all participants.

No binding information will be provided via any other means (e.g. telephone or email).

More info at: <https://meta-os.eu/index.php/open-calls/>

Apply via: <https://www.f6s.com/nemo-2nd-open-call/apply>

F6S support team: support@f6s.com

Online Q&A: <https://www.f6s.com/nemo-2nd-open-call/discuss>

Other support⁷: opencalls@meta-os.eu

⁷ For non-binding information



9 References

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- [4] European Commission, "EU Funding & Tenders - Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment," 2022. [Online]. Available: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/rules-lev-lear-fca_en.pdf.
- [5] "Swagger," [Online]. Available: <https://swagger.io/>.
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