

11 January 2024

(MUSIC_PRT-N)(2024)0001

**EXERCISE REPMUS¹ 24****INFORMATION FOR INDUSTRY****REPMUS 24 - INFORMATION TO INFORM POTENTIAL INDUSTRY PARTICIPANTS**

1. REPMUS is a Portuguese-led experimentation exercise which focuses on maritime unmanned² system (MUS) experimentation, capability development and interoperability. It is conducted annually and is designed to allow large-scale operational experimentation (OPEX), where operational communities engage with industry and academia to promote the integration of MUS in multi-domain operations. Experimentation activities comprise the testing of MUS during focused trials, as well the test and validation of experimental tactics (including EXTACs) to address key operational problems (KOP).
2. **The exercise will be conducted in the North Atlantic Portuguese Exercise Areas between 9-27 September 2024.**
3. The NATO Maritime Unmanned Systems Initiative (MUSI) is one of the co-organisers of REPMUS 24³ - collaborating, advising and assisting the Host Nation, Portugal, in the planning and coordination of the exercise.
4. Industry are key partners across the planning and delivery of REPMUS 24. Industry participation is through national sponsorship rather than by direct entry through NATO or any other mechanism, although NATO may act as a broker to connect interested and relevant industry to the correct national sponsorship (preferably on request of the industry partner).
5. This information document:
 - a. Encourages early understanding for industry about the nature of REPMUS 24 and industry partner commitment or engagement through a sponsoring Navy.
 - b. Outlines the planning cycle to which industry partners will be expected to contribute through their sponsoring Navies.
 - c. Provides an overview of NATO objectives.
 - d. Outlines the criteria for industry participation.

¹ Robotic Experimentation and Prototyping with Maritime Unmanned Systems.

² NATO uses the term “Unmanned”, some nations prefer the use of the term “Uncrewed” The use of the term “unmanned” in the NATO context is entirely gender neutral.

³ Other co-organisers are University of Porto, NATO Centre for Maritime Research and Experimentation (CMRE) and European Defence Agency (EDA).

Overview of the planning cycle

6. An overview of the REPMUS 24 planning cycle and key planning events is at the Annex. Presence at the Main Planning Conference and Final Coordination Conference is mandatory for participation at REPMUS 24.

7. Industry will be expected to provide an appropriate contribution of expertise into the planning cycle, with SMEs invited to join relevant WGs and syndicates.

NATO objectives for REPMUS 24

8. NATO's objectives are drawn from planning priorities and will build upon the success of REPMUS 23. Although still under development, they are expected to span:

- a. Drive the development of STANAG 4817.
- b. Accelerate MUS integration across warfare domains to address KOPs.
- c. Inform the delivery of MUS capabilities to fulfil NATO maritime capability gaps, aligned with the NATO Defence Planning Process (NDPP) capability targets.
- d. Deliver MUS technology and capabilities that contribute to [Digital Ocean](#) - enhancing maritime situational awareness from seabed to space.
- e. Support the ASW Barrier Smart Defence Initiative, including the Allied Underwater Battlespace Mission Network.
- f. Continue the operational integration of MUS to deliver a cross domain Common Operational Picture (COP).
- g. Foster experimentation with new and emerging MUS and associated technology.

Criteria for Industry Participation in REPMUS 24

9. The participation of industry and contractors will be on the understanding that participation in REPMUS 24 will not create any liabilities or obligations on the part of the Host Nation, Portugal, or of any NATO entity.

10. The criteria for allowing industry personnel to participate falls into two categories:

a. Directly contracted industry personnel supporting a national MUS development programme (industry partner commitment):

- i. Personnel in this category are those who form part of a contract arrangement between industry and the Navy or MOD of the contracting nation.
- ii. Such personnel will be treated like military or MoD personnel from the nation concerned, can attend all planning or operational briefings and meetings, and be allowed to work within the confines of REPMUS unescorted (specific national rules will apply for embarkation to warships and government-owned vessels).
- iii. Such personnel must be cleared to the same basic security level as other Military and MoD staff from the contracting nation.

- iv. All data sharing, IPR provision and liability issues are inherently covered in the contract arrangements between the nation and the industry contracted.
 - v. Non-Disclosure Agreements will not be required as this is considered to be inherent in the contractual arrangements between the industry entity and the contracting nation.
 - vi. Nations which have personnel contracted that do not meet the requirements above, must bring this to the attention of the REPMUS planning team.
- b. **Industry sponsored to attend by a participating nation (industry engagement):**
- i. The participation of sponsored industry is limited to industry headquartered in NATO nations; those of Host Nation, Portugal; invited nations; and those of official NATO MUSI partner nation participants, unless otherwise specifically approved by the REPMUS 24 Core Planning Team overseeing the exercise.
 - ii. Personnel in this category are those from an industry entity invited by a sponsor nation to attend to demonstrate or integrate a specific system into REPMUS in order for it to be evaluated by all participants. This may be at the industry partner's own expense or financially supported by the sponsoring nation.
 - iii. Such personnel can be invited by the sponsor nation to attend specific planning and operational briefings where they are pertinent to the system being demonstrated and its integration into REPMUS. Whilst such personnel may be security cleared, this will not be mandatory. However, if personnel do not possess a clearance then the sponsor nation must provide a NATO / Military / MoD escort at all times that such personnel are on exercise sites ashore and afloat.
 - iv. Sponsored industry personnel may be asked to sign a Non-Disclosure Agreement undertaking not to disclose sensitive or commercial information not directly related to the demonstration of their specific system, which they may learn or be exposed to during the exercise.

Points of Contact

Portuguese Navy REPMUS 24 Overall Coordinator: Lt Cdr Catarina Fradique (PRT-Navy)

(ema.divinov.experimentacao@marinha.pt)

MUSIC^2 Integration and Industry Engagement Director: Cdr Guy Phlipppo (BEL-Navy)

(phlipppo.guy@hq.nato.int)

MUSIC^2 Director: Cdr Chris Bennett (GBR-Navy) (bennett.chris@hq.nato.int)



Chris Bennett
Cdr GBR-N
Director MUSIC^2
+32 2707 1138



João Piedade
Cdr PRT-N
Portuguese Naval Staff
Innovation and Transformation Division
REPMUS 24 PRT lead
+351 211 593 105

Annex:

1. Planning Cycle Overview

REPMUS 24 Outline Planning Cycle

