


Proposal Evaluation Form

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|  | EUROPEAN COMMISSION European Defence Fund (EDF) | Evaluation Summary Report |
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Call: EDF-2024-LS-RA-SMERO
Type of action: EDF-LS
Proposal number: 101224198
Proposal acronym: SALMS
Duration (months): 40
Proposal title: Semi-Autonomous Advanced Loitering Munition Swarm
Activity: EDF-2024-LS-RA-SMERO-NT

| N. | Proposer name | Country | Total eligible costs | % | Grant Requested | % |
|---------------|---|---------|----------------------|--------|------------------|--------|
| 1 | SENTECH SRL | IT | 1,035,070.58 | 25.94% | 1,035,070.58 | 25.94% |
| 2 | CY.R.I.C CYPRUS RESEARCH AND INNOVATION CENTER LTD | CY | 1,076,546.44 | 26.98% | 1,076,546.44 | 26.98% |
| 3 | CITD ENGINEERING & TECHNOLOGIES S.L | ES | 398,783.6 | 9.99% | 398,783.6 | 9.99% |
| 4 | COXPACE, ENGINEERING AND MANUFACTURING HARNESS S.L. | ES | 26,000 | 0.65% | 26,000 | 0.65% |
| 5 | Synergy Simulation and Training Ltd. | BG | 399,715 | 10.02% | 399,715 | 10.02% |
| 6 | DRONE HOPPER SL | ES | 302,049.77 | 7.57% | 302,049.77 | 7.57% |
| 7 | RECTANGLE SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA | PL | 101,371.89 | 2.54% | 101,371.89 | 2.54% |
| 8 | Laran Business | IT | 149,453.75 | 3.75% | 149,453.75 | 3.75% |
| 9 | SIGNALGENERIX LIMITED | CY | 399,866.97 | 10.02% | 399,866.97 | 10.02% |
| 10 | UNIVERSITETET I SOROST-NORGE | NO | 101,250 | 2.54% | 101,250 | 2.54% |
| Total: | | | 3,990,108 | | 3,990,108 | |

Abstract:

The project SALMS aim to design and develop a demonstrator of a Semi-Autonomous Loitering Munition Swarm with advanced characteristics.

Research activities will be focused mainly on AI & swarming algorithms, novel platform design and new materials, insensitive and multipurpose or target associated warheads, intra-swarm anti-jamming and anti-spoofing resiliency, cyber resistant RF datalink. Such research activities will allow SALMS LM to operate in spoofing, cyber or jamming attack conditions and allowing optimized effects on selected targets.

SALMS Demonstrator will have the main following characteristics:

Detection of target types and position on the battlefield in real time; Optimized target neutralization via multipurpose warhead or target associated warhead type; Exploitation of acquired targets to C2 and indirect fire support via Laser Target Designator; Ability to conduct mission in GNSS denied/spoofed areas; Portable tube launched system and multi-launch platforms compatibility; Design of Recoverable & Reusable platform via parachute After Launch Recovery; Advanced on board AI algorithms for Friend or Foe Discrimination, target identification, future impact point for moving target strike; Selectable angle of attack.

Demonstrator will include:

2 Loitering Munition platforms, 2 portable remote controls, 1 C2 (Command & Control) station, 2 tube launchers. Loitering Munition developed platforms will include EO/IR gimbal payload, LRF (Laser Range Finder), LTD (Laser Target Designator), Flight control unit with swarming and striking capabilities (ISR & Seeker modalities), anti-jamming RF links.

An integrated scenario simulator will be developed for feasibility study and preliminary test purposes.

Relevant environment tests of Demonstrator will be conducted in order to consent a Critical design review activity at the end of the project.

Evaluation Summary Report

Evaluation Result

Total score: 36.50 (Threshold: 30)

Result of DEFIS evaluation

Score: 36.50 (Threshold: 30 / 45.00 , Weight: -)

*Criterion 1 - Excellence (5,0 - increment of 0,5) – Weight x2
Contribution to excellence or potential of disruption in the defence domain, in particular by showing that the expected results of the proposed action present significant advantages over existing defence products or technologies
Score (5,0 - increment of 0,5) 3,5*

Comments

The proposal is ambitious and articulates sound main ideas. The suggested methodology and research focus is relevant for the action. However, the proposed approach is not sufficiently supported in the description of some applied technologies.

The proposed action complies very well with the specific challenge and scope of the topic as set out in the call. The functional requirements are clearly addressed and the targeted activities align overall with the call's scope, suggesting significant advantages at industrial, technological and operational level. The expected impact of the action is positive and very plausible.

Arguments are made for the potential superiority at an advantage at strategic, technological and defence operational level of the suggested approach compared existing defence products. However, it is not convincingly shown that the objective of the proposed action and its expected outcome would present a significant positive difference from existing defence products and technologies.

*Criterion 2 - Innovation (5,0 - increment of 0,5) – Weight x2
Contribution to the innovation and technological development of the European defence industry, in particular by showing that the proposed action includes ground-breaking or novel concepts and approaches, new promising future technological improvements or the application of technologies or concepts previously not applied in defence sector, while avoiding unnecessary duplication
Score (5,0 - increment of 0,5) 4,0*

Comments

The proposed concepts and technologies are very relevant and described with above average precision and detail. Proposed approaches to algorithms and networks are sufficiently identified. In addition, the proposal introduces a convincing number of innovative solutions. However, several of these are previously known and some technologies and methodologies are not described detailed enough to convincingly demonstrate sufficient innovation potential.

The proposal provides a comprehensive list of previous R&D activities for each participant and a plausible overview of existing, relevant civilian and military projects and initiatives. It convincingly integrates existing knowledge while avoiding unnecessary duplication and it promotes synergies with other R&D projects by drawing references from various EU-funded projects.

The proposal addresses several convincing and promising spin-off opportunities related to defence products.

*Criterion 3 - Competitiveness and Growth (5,0 - increment of 0,5) – Weight x1
Contribution to the competitiveness and growth of defence undertakings throughout the Union, in particular by creating new market opportunities.
Score (5,0 - increment of 0,5) 2,5*

Comments

The proposal has promising potential to provide a competitive advantage across the Union and beyond. However, arguments for potential advantages over existing

technologies are not convincingly presented. Furthermore, the proposal lacks sufficient information to assess the balance between performance and cost-efficiency of the future solution, and existing product competitors are not sufficiently identified, which are weaknesses.

The proposal delivers a credible analysis of the Union's internal market and the global market, indicating a growing total market, and contributes to the realization of this growth with possible second-order positive consequences to many related business areas. However, the proposal does not sufficiently quantify the expected potential to accelerate the growth of the participating companies within and outside the Union.

The IP strategy is plausible and convincing, and the approach is likely to support the competitiveness and growth of the companies. However, the proposal does not provide sufficient detail on the AI management plan.

Criterion 4 – Contribution to autonomy and security and defence interest (/5,0 - increment of 0,5) – Weight x1

Contribution to the autonomy of the EDTIB, including by increasing the non-dependency on non-Union sources and strengthening security of supply, and to the security and defence interests of the Union in line with the priorities referred to in Article 3 of EDF Regulation.

Score (/5,0 - increment of 0,5) 5,0

Comments

The proposal's expected outcomes excellently reinforce the Union's industrial and technological no-dependency from third countries.

The proposal provides excellent, clear and very granular projection of future supply chain with very positive impact on the European security of supply.

The proposal is fully consistent with defence capability priorities commonly agreed upon by Member States, particularly in the context of the CDP.

Criterion 5 - Creation of cross-border cooperation (/5,0 - increment of 0,5) – Weight x2

Contribution to the creation of new cross-border cooperation between legal entities established in Member States or associated countries, in particular SMEs and mid-caps with a substantial participation in the action, as recipients, subcontractors or as other legal entities in the supply chain, and which are established in Member States or associated countries other than those where the legal entities cooperating within a consortium which are not SMEs or mid-caps are established.

Score (/5,0 - increment of 0,5) 5,0

Comments

The proposal excellently brings together the entities which collaborate for the first time. It also exhaustively explains how the proposed action will create new cross-border cooperation, especially compared to declared former activities in the technological area and considering the specificity of the market, which is mostly ruled by single major companies.

The outlined plans for continued cooperation are highly plausible and open to a significant number of inherent new opportunities for defence research.

The values added by the participating SMEs are highly relevant, excellently specified and represent a dominant part of the total budget and the content of the work. The industrial and technological complementarity of the cross-border SMEs to the project is outstanding and credibly provides significant added value in crucial project areas.

Criterion 6 – Quality and efficiency of implementation (/5,0 - increment of 0,5) – Weight x1

The quality and efficiency of the carrying out the action

Score (/5,0 - increment of 0,5) 4,0

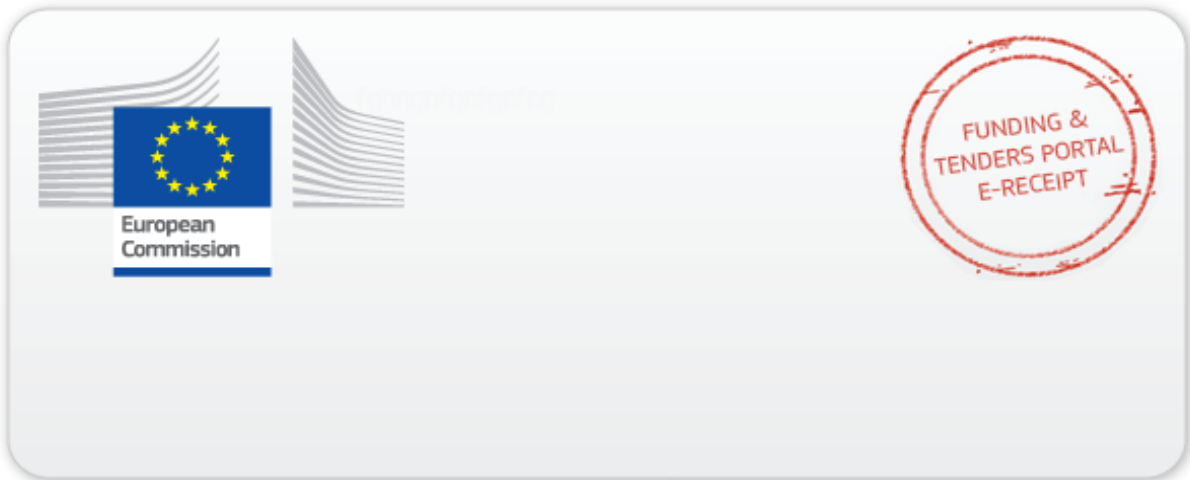
Comments

The organization and general structure of the work plan is very well articulated, convincingly making a case for practicality and high effectiveness in execution. The overall work breakdown is fully aligned with the complexity of the proposal. Objectives, work packages and tasks are very convincingly timed with very clear inter-relations.

Suitable, coherent and clear mechanisms and criteria for ensuring measurable, realistic and achievable work progress towards reaching the milestones are very well presented. However, the usefulness and comprehensiveness of milestones and deliverables are only fairly explained, and specific information regarding each individual milestone is less than sufficiently detailed.

The management structure and procedures properly reflect the complexity of the proposed action and show very clearly the decision-making mechanism and respective entities' roles. The risk management plan is well outlined. However, the risk analysis does not sufficiently describe some technical and operational risks specific to the proposal as well as their mitigation.

The proposal provides a highly convincing allocation of tasks and work share to the respective participants. Roles are very clearly defined, as are responsibilities and resources assigned to each consortium member. Methods for cost management including resource planning, cost estimating, budgeting, and control are also convincingly described.



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