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**INTEGRATED AIR & MISSILE DEFENCE  
CENTRE OF EXCELLENCE**

Souda Air Base, 73100, Chania  
<https://www.iamd-coe.org>



**1<sup>st</sup>/2024 Steering Committee Meeting  
POINT PAPER**

<b>Our Ref:</b>	NU. 680	<b>Tel.:</b>	+302821440712
		<b>NCN:</b>	302 - 6154012
<b>Date:</b>	02 Aug 2024	<b>E-mail:</b>	info@iamd-coe.org

**TO:** See Distribution

**SUBJECT:**

- "Biomimetics for Unmanned Aerial Vehicles (BioDrone)" Study - Intended Contract with the Foundation for Research and Technology - Hellas (FORTH)
- "Modern Air Combat Environment Extended Warfare (MACE EW) Software" - Intended Supply from BattleSpace Simulations Inc. (BSSIM)
- (a) Shared Budget 2024 - Transfer of funds between/within Chapters
- (b) Procurement procedure (tender requirements in case of prospective contracting with FORTH & BSSIM)

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**PURPOSE:** To seek the SC's approval for the budget and procurement requirements related to contracting the study "Biomimetics for Unmanned Aerial Vehicles - Bio-drone" and the procurement of the Modern Air Combat Environment Extended Warfare (MACE EW) software licence.

**BACKGROUND:** Based on pre-solicitation conferences with the Foundation for Research and Technology - HELLAS (FORTH - registered in Greece), the intended research project concerning Biomimetics for Unmanned Aerial Vehicles and Systems is characterized by the following key elements:

- a. Duration: 7 months;
- b. Expected deliverables (as further details depicted in Point Paper No. 10 - NU.678/02 Aug 24/IAMD COE): (a) Establishing a technical literature database on Biomimetic Unmanned Vehicles and Systems, (b) Delivering an in-depth report of the related findings titled "Biomimetics for Unmanned Aerial Vehicles and Systems: advantages and disadvantages", with a particular focus on biomimetic UAV/UAS, striving to highlight specific advantages that may be combined to produce a novel BioDrone able to exploit, inter alia, AI algorithms to enhance its performance - applicability, and (c) Disseminating the outcomes through presenting and the submission of respective paper(s);
- c. Total budget: 28.175 €.

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Moreover, following exploratory contacts with BattleSpace Simulations Inc. (BSSIM - headquartered in the United States), the Centre has negotiated the prospective acquisition of the MACE software under the following terms:

- a. Licence including Extended Warfare (EW) version and Augmented Reality Mission Observational and Rehearsal (ARMOR) plug-in, encompassing significant additional capabilities over the base version;
- b. A 6-month trial licence provided to the Centre, allowing for experimentation and adjustment/utilisation of the software to meet our specific needs;
- c. A 10% discount off the international price has been secured (≈3.350 €);
- d. Total budget: 36.000 \$ (≈33.575 €).

ANALYSIS &  
STATUS:

In order to initiate the procurement process of these projects, the Centre has explored the potential capabilities of funding through the current budget, striving to avoid any burden, if possible, of the following years' budgets while remaining within the figures of the Medium-Term Financial Plan.

Considering the estimated project costs, the following bidding and award procedures as set in Annex F of FAPs have been reviewed:

*" 3.3.14 Supplier Eligibility: As a general rule, the IAMD COE's suppliers must be from the FN and SNs. Exceptionally, for purchases of goods and services with an estimated cost below Level A of the EFL (2.500,00 €) and in order to achieve cost-effectiveness and efficiency, suppliers from (other non-funding) NATO nations will also be considered as eligible sources. In any other case, a decision by the SC must be taken. For this purpose, a proposal of the Director must be submitted to the SC taking into account the following choices in order of precedence: 3.3.14.1 Sources from NATO nations; 3.3.14.2 Sources from Partner nations; 3.3.14.3 Sources from non-NATO, non-Partner nations.*

*4.2.1.3 Goods and services of which the cost is estimated to exceed the equivalent of Level B of the EFL (20.000,00 €) but below Level C of the EFL (30.000,00 €) shall be procured after market research and through soliciting offers from at least three (3) economic operators/suppliers known to meet the technical and commercial standards, by publishing a call for bidding in the (Greek) Central Electronic Register of Public Contracts, at least five (5) days before issuing the contract award decision;*

*4.2.1.4 Goods and services of which the cost is estimated to exceed the equivalent of Level C of the EFL (30.000,00 €) but below Level D of the EFL (139.000 €) shall be procured through soliciting from at least five (5) economic operators/suppliers known to meet the technical and commercial standards.*

*5. Deviations from the above requirements may only be authorized by the Director in the interests of security, urgency, standardization of equipment, or/and exceptional circumstances. When the total amount exceeds the equivalent of Level C of the EFL (30.000,00 €) annually, such cases shall be reported to the SC for decision (as paragraph 3.4.1.3).*

FINANCIAL  
CONSIDERATIONS  
& FUNDING:

Given the special technical specifications and nature of the intended projects, a deviation from the standard bidding-award procedure is required to allow for a fruitful tender process in case of a unique bid/quote. Market surveys indicate that meeting the minimum number of bidders (3 for the Biomimetics project and 5 for MACE EW software) may not be feasible.

In order to initiate the procurement process for these projects, the Centre has thoroughly examined the potential funding capabilities within the current budget (≈61.750 €). The aim is to avoid imposing any financial burden on future budgets while ensuring alignment with the figures/ceilings outlined in the Centre's Medium-Term Financial Plan (MTFP). The analysis has concluded the following:

- a. The projects can be funded within the approved budget of year 2024 of 280.000 € through internal transfers of appropriations, without requiring additional contributions.
- b. This funding approach will not raise any issues regarding the fulfillment of other activities and requirements of the Centre for the current year.

To achieve this, a reallocation of funds between the Chapters of the Shared Budget 2024 is recommended, as detailed in Annex A, in accordance with the provisions of FAPs (par 19.1 - under SC approval).

Furthermore, to ensure a successful tender process, it is deemed necessary to adopt deviations from the standard procurement procedures. This would allow the award in case of a single bid/quote, as market surveys indicate that meeting the minimum required number of tenders (3 for the Biomimetics project and 5 for the MACE EW software) may not be feasible under the established rules.

It should be noted that:

- a. Upon approval of the proposed transfers of funds within the Shared Budget 2024, these projects will be funded without creating any burden on future budgets.
- b. Since the deliverables of both items are expected within the next year (2025), the committed funds from the current Shared Budget (≈61.750 €) will be reported to be carried-forward (according to the provisions of FAPs, par. 17.5).

RECOMMENDATIONS  
& DECISION:

SC members are requested to unanimously approve (in accordance with the provisions of par. 4.3 of Operational MOU):

- a. The proposed budget allocation Shared Budget 2024, as internal transfers of appropriations depicted in Annex A.
- b. The consideration of BSSIM as an eligible supplier (registered Head Office in the United States: NATO Nation), as per par. 3.3.14 of Annex F of FAPs, and the direct procurement of MACE EW from BSSIM as the

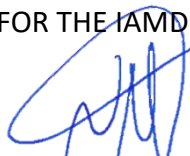
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parent/unique company providing this software pursuant to the provisions of par. 5 of Annex F of FAPs.

c. By way of exception, the deviation from rules regarding the procurement process required for the Biomimetics study, allowing the award without a minimum number of bids according to the provisions of par. 5 of Annex F of FAPs.

FOR THE IAMD COE:



B. Gen (OF-6) Nikolaos MAKRYGIANNIS GRC (AF)  
IAMD COE Director

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## **ANNEXES**

### **A. Proposed Transfers of Appropriations Between Chapters of Shared Budget 2024**

#### DISTRIBUTION (via e-mail if not otherwise stated)

##### External

Action: IAMD COE SC Members

Information: -

##### Internal

Action: FINCON

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ANNEX A TO POINT PAPER  
NU. 680/02 Aug 2024

**PROPOSED**  
**TRANSFERS OF APPROPRIATIONS BETWEEN CHAPTERS OF SHARED BUDGET 2024**

Chapter	CISI	Description	Initial Budget Approved	Proposed Transfer of Credits	Final Budget (after transfers to be approved by SC)	Justification/ Remarks
71	710101	Consultants and Temporary Staff	8.500,00	0,00	8.500,00	
	710102	Academic Expenses	5.500,00	0,00	5.500,00	
	710103	Research Project Contracts	0,00	+28.175,00	28.175,00	An increase of 28.175 € of the available appropriations is necessary to fund the intended research project (study "Biomimetics for Unmanned Aerial Vehicles- Biodrone").
	710201	Transportation (courses-training)	7.680,00	0,00	7.680,00	
	710202	Course fee (courses-training)	8.323,00	0,00	8.323,00	
<b>CHAPTER 71</b>			<b>30.003,00</b>	<b>+28.175,00</b>	<b>58.178,00</b>	
72	720101	Printing and Photocopying Rental/Lease	0,00	0,00	0,00	
	720102	Printing and Photocopying Consumables	2.150,00	0,00	2.150,00	
	720201	Public Affairs Supplies	12.000,00	0,00	12.000,00	
	720202	Hospitality and Representation	23.000,00	0,00	23.000,00	
	720301	Electricity	17.200,00	-10.000,00	7.200,00	Final budget balance is estimated to be sufficient given the current pricing of utility bills (and use of current facilities by the end of current year)
	720302	Water and sewage	2.000,00	0,00	2.000,00	
	720303	Heating and Cooling	900,00	0,00	900,00	
	720401	Rental of Minor Facilities	6.500,00	-675,00	5.825,00	Final budget balance is estimated to be sufficient for hosted activities/ events
	720402	Minor Building maintenance	500,00	0,00	500,00	
	720403	Facilities and Buildings Equipment maintenance	500,00	0,00	500,00	
	720404	Facilities and Buildings Services	16.000,00	-11.500,00	4.500,00	Final budget balance is estimated to be sufficient given the current pricing of utility bills (and use of current facilities by the end of current year)
	720501	Computers Rental and Operational Lease	0,00	0,00	0,00	
	720502	Computers Spare/Repair Parts	300,00	0,00	300,00	
	720503	Computers Maintenance	300,00	0,00	300,00	
	720504	Computers Services	10.000,00	0,00	10.000,00	
	720601	Communication Systems Rental and Operational Lease	0,00	0,00	0,00	
	720602	Communication Systems Spare Parts and Consuma-	800,00	0,00	800,00	
	720603	Communication Systems Maintenance	100,00	0,00	100,00	

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Chapter	CISI	Description	Initial Budget Approved	Proposed Transfer of Credits	Final Budget (after transfers to be approved by SC)	Justification/ Remarks
72	720604	Communication Systems Services	3.700,00	0,00	3.700,00	
	720701	Mission carriers Rental and Operational Lease	7.000,00	-1.000,00	6.000,00	Final budget balance is estimated to be sufficient for activities hosted/organised by the Centre (funds saved following the established contract)
	720702	Mission carriers Maintenance	1.700,00	0,00	1.700,00	
	720703	Mission carriers Fuel Costs	3.700,00	0,00	3.700,00	
	720704	Mission carriers Insurance	0,00	0,00	0,00	
	720801	Transportation (activities)	32.160,00	0,00	32.160,00	
	720802	Participation fee (activities)	1.600,00	0,00	1.600,00	
	720901	Literature and Periodicals	2.900,00	-2.500,00	400,00	No further requirements for literature and periodicals for the current year
	720902	Office supplies	2.000,00	0,00	2.000,00	
	720903	Bank charges	287,00	0,00	287,00	
	720904	Postal/shipping services	100,00	0,00	100,00	
	720905	Miscellaneous Supplies	5.700,00	-2.500,00	3.200,00	Final budget balance is estimated to be sufficient for current needs
	720906	Miscellaneous Services	2.400,00	0,00	2.400,00	
<b>CHAPTER 72</b>			<b>155.497,00</b>	<b>-28.175,00</b>	<b>127.322,00</b>	
73	730001	Computers	27.000,00	0,00	27.000,00	
	730002	Communications	49.000,00	0,00	49.000,00	Balance of available funds is deemed sufficient for the procurement of MACE EW licence (≈33.575 €)
	730003	Furniture and Office Equipment	15.000,00	0,00	15.000,00	
	730004	Vehicles	0,00	0,00	0,00	
	730005	Machinery	3.500,00	0,00	3.500,00	
	730006	Installed Equipment	0,00	0,00	0,00	
	730007	Buildings	0,00	0,00	0,00	
<b>CHAPTER 73</b>			<b>94.500,00</b>	<b>0,00</b>	<b>94.500,00</b>	
<b>TOTAL</b>			<b>280.000,00</b>	<b>0,00</b>	<b>280.000,00</b>	