



Research & Development

LoD – 14 – 18<sup>th</sup> Meeting

09 September – Brussels – Belgium

# Key Meeting Points

- Mil Drone Challenge:
- Mechanism of students' exchange
- Sciences & Technologies Applied to Defense – STAD26 Conference



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# Mil Drone Challenge - Goals

- Stimulate innovation and applied knowledge
- Promote student collaboration
- Acquire engineering experience
- Design an innovative and operative UAV



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# Mil Drone Challenge - Contest

- **Challenges**

- Technical Design and Innovation
- Autonomous Flight (Waypoint Navigation)
- Obstacle Avoidance
- Payload Delivery (Optimum Path, Target Precision, etc.)
- Compliance with Annual Concept

- **Awards**

- Gold/Silver/Bronze Champion (overall score)
- Innovation and Design
- Best Flight Performance
- Worthy Opponent (participants voting)



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# Mil Drone Challenge - Rules

## ○ **Restrictions**

- Up to 6 Propeller Motors
- Takeoff Weight (depends on the annual concept)
- Maximum Projection Area (1 x 1 m)
- Vertical Takeoff and Landing
- Min Set of Sensors (GPS, cameras, altimeter, tachymeter)
- Telemetry Mandatory
- Sponsors Encouraged

## ○ **Teams**

- Coaches (up to 5)
- Cadets (up to 15 - no restriction in their specialization or domain)
- Event Participants (number of representatives decided by the Host Institution)



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# Mil Drone Challenge - Rules

- **Grading System – Static Score [35/100]**

- Drone Technical Presentation [5]
- Development Process [15]
- Innovation [15]

- **Grading System – Dynamic Score [65/100]:**

- Autonomous Flight (Waypoint Navigation) [15]
- Obstacle Avoidance [15]
- Payload Delivery (Optimum Path, Target Precision, etc.) [25]
- Compliance with Annual Concept [10]



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# Mil Drone Challenge – Schedule - Site

- **14 November 2025:** Expression of Interest
- **01 December 2025:** Challenge Presentation
- **February 2026:** Deadline of Registrations
- **February-June 2026:** Development Period
- **July 2026:** Contest Week
  
- Host: Hellenic Air Force Academy
- Contest Site: Athletics Complex or Runway
- Free meals & accommodation for cadets
- Cultural Visits



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# Mechanism of students' exchange

List departments along with PoCs and main axes of research

Advertise on the Emilyo website.

Students chose a thesis as a function of the country of stay and research field they're interested in



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# Conference on Sciences & Technologies Applied to Defense – STAD26 Conference

- 20-22 Apr 2026
- Location: Tunis, Tunisia as offered by the Center for Military Research in Tunisia



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# Conference on Sciences & Technologies Applied to Defense – STAD26 Conference

Hotel: Mövenpick hotel Gammarth, Tunis



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# Conference on Sciences & Technologies Applied to Defense – STAD26 Conference - Topics

- **Conference Topics :**

- Rapid Dynamics: Protection Against Explosions and Ballistics
- Detection and Defense Systems
- Data Science and Artificial Intelligence for Defense
- Secure Communications and Cryptography
- Protection Against NRBCE Threats
- Autonomous systems
- Naval platforms
- Arial platforms
- Land platforms
- Weapon systems
- Engines & propulsion

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# Conference on Sciences & Technologies Applied to Defense – STAD26 Conference - **Schedule**

- Lecturers, researchers, PhD and Master thesis students interested in presenting a scientific paper within the conference topics are invited to submit an abstract by **15 November 2025** via [stad26.colloque@crm.tn](mailto:stad26.colloque@crm.tn)
- Notification of abstract acceptance before **15 December 25**. The full paper needs to be submitted by **15 February 2026**. The authors will be notified of acceptance of their paper by **10 March 2026**. Papers requiring revision should be re-submitted before **25 March 2026**. The conference proceedings will be indexed.
- Scientific committee with professors and PhD's from the EMILYO group



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# Way Ahead

- Finalize the details of the Mil Drone Contest
- Collect research topics along with PoCs
- R&D Conference for EU Military Academies: presentation of selected student thesis research Bachelor and Master thesis topics for exchange



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