

# Digital Solutions for Fusion Office

*Update on list of priority tasks to be considered  
in case of underspending*

**F. Jenko (DSO Head)**

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## Urgent Change Request: Mission funds for 2026

### CR1: Increase *mission funds* for 2026 by 28 k€

- **Justification:**

Mission funds available to WPAC activities in 2026/27 are *extremely* limited. Once the costs of the 2nd E-TASC General Meeting and the ACH coordination meeting are taken into account, **no funds remain to support further WPAC activities.**

- **Objective:**

The Digital Twin Environment (DTE) projects are new within the E-TASC framework and, due to the timing of the 2026 planning cycle, were not included in the ACH support allocation. To address this, it is proposed to organize a **one-week in-person hands-on meeting (DTE + ACH)** to foster early integration and accelerate progress toward the development of Digital Twins.

### CR2: Increase *mission funds* for 2026 by 15 k€

- **Justification:**

Mission funds available to WPAC activities in 2026/27 are *extremely* limited. TSVVs organizing their meetings request attendance of ACH teams (1-2 expert). Travel **funds to cover ACH attendance were not foreseen either in WPTM or WPAC.**

- **Objective:**

Support TSVV meetings with ACH participation.

COMMENT: 2027 activities would require a similar top up of WPAC travel funds



# Strongly increased funding for Artificial Intelligence in the U.S.

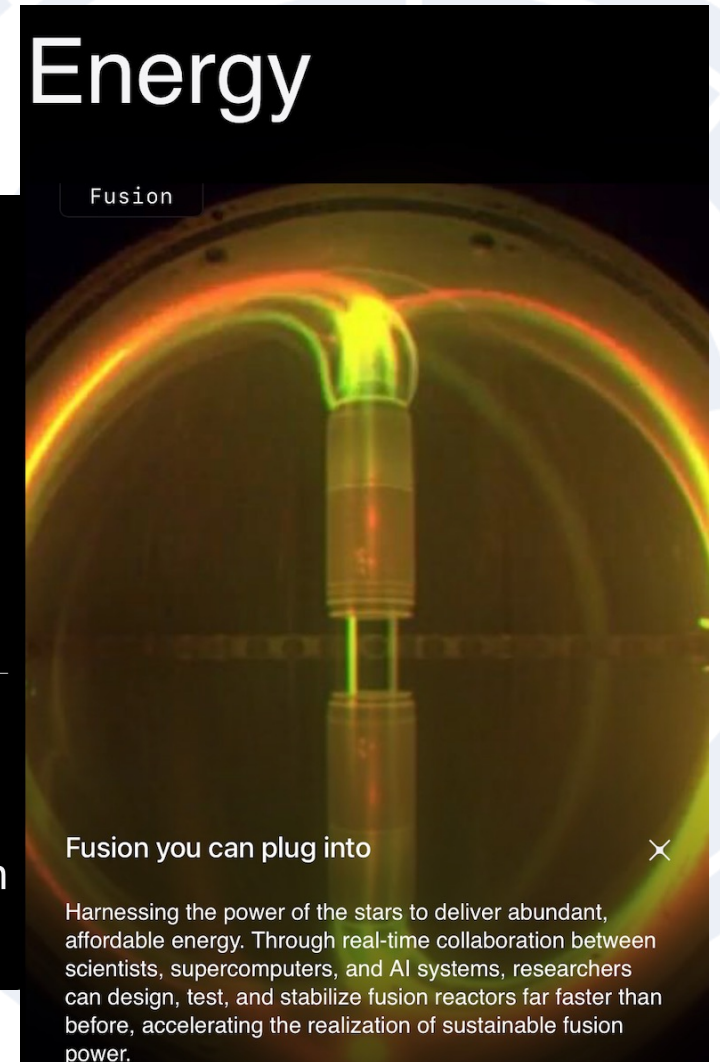
“**Genesis Mission**” was recently announced as DOE-wide AI initiative. One of the *lighthouse challenges* is **fusion**.

Genesis Mission is a national initiative to build the world's most powerful scientific platform to accelerate discovery science, strengthen national security, and drive energy innovation.

Goal

Genesis Mission will develop an integrated platform that connects the world's best supercomputers, experimental facilities, AI systems, and unique datasets across every major scientific domain to double the productivity and impact of American research and innovation within a decade.

<https://genesis.energy.gov>





## Request for increased funding of AI in 2026/27 and beyond

- EUROfusion must position itself **at the forefront of the AI revolution**
- Regrettably, due to significant budget cuts during the 2025–2026 transition, the **number of active AI projects was reduced from 14 to 2**
- Should additional funding become available in 2026–2027, the following activities should be prioritized for reinstatement:
  - Pilot projects on **applications of agentic AI models** (e.g., AI-assisted IMASification of JET data)
  - Use of **AI techniques for the development of EUROfusion Standard Software** (code development, optimization, porting, IMASification, etc.)
  - Establishment of an **updated, AI-ready data ecosystem**: accelerating DMP development toward full Scenario C and Scenario D compliance
  - Integration of **stellarator data and simulations**
  - Development of **surrogate models** for real-time plasma control and Digital Twins

# Priority tasks to be considered

*\* Priority is defined here in terms of urgency*

Topic	Required Resources (PM, hardware, facilities, ...)	Associated EC budget [k€]	Priority* (High, Medium, Low)	Comment
AI-assisted IMASification of JET data in preparation for wider use	3 ppy	169.1	High	Utilizing agentic AI tools
Building agentic AI expertise in ACHs for accelerated code development	2 ppy	112.8	High	Utilizing tools like Claude Code
DMP acceleration of development towards scenarios “C” and “D”	2 ppy	112.8	High	
Integration of stellarator data (from experiments & simulations) into IMAS	1 ppy	56.4	Medium	
Design of a Digital Twin framework	1 ppy	56.4	Low	