Technologies and generic building blocks for Electrical Propulsion

This topic aims at increasing the effort for maturing technologies and generic building blocks towards both incremental and disruptive technologies for Electric Propulsion systems products up to TRL 5/6 for thruster components, electric power architecture and products, as well as fluidic management systems and components.

Scope:

- R&I on generic building blocks technologies for thruster components (anode configuration, magnetic nozzle, cathode, materials, alternative propellants, new manufacturing processes);
- R&I on electrical power architecture and related components (PPU, direct drive, etc.):
- R&I on fluidic management system and related components.

Topics:

- Strengthen the European capacity to compete worldwide in electric propulsion satellites and missions;
- Technologies matured to at least TRL 5/6 at component level;
- Matured industrialisation aspects for high TRL solutions;
- Contribution to the preparation of the evolution of electric propulsion systems including HET, GIE, HEMPT, in four power classes (very low up to 0,3 kW; low: 0,3-1,5 kW; medium 3-7 kW; high 12-20 kW).





The indicative budget for this category is EUR 5.10 (Million).

Reference:

HORIZON-CL4-2022-SPACE-01-12

Innovation Action

Opening: 28 Oct 2021

Deadline: 28 Feb 2022

Call overview, Produced 01/10/2021. Visit our website www.opencalls.space

Countries

all

Technology



Electric Propulsion, TRL %,, HET, GIE,HEMPT, disruptive

Activities



R&I, electric power architectures, Manufacturing processes,

Contact



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