

Activities of the Strategic Research Cluster In-Space Electric Propulsion (2015-2021)

ESTORIL 10/05/2022

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 640199
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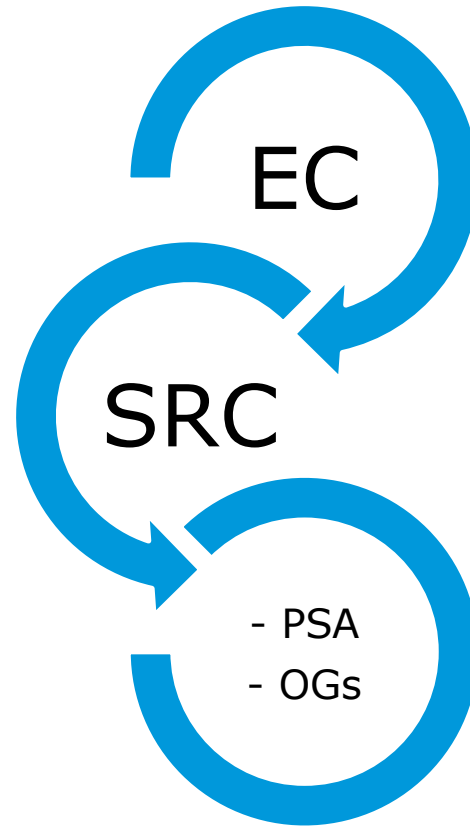
Summary

- Introduction
- Electrical Propulsion Strategic Research Cluster (SRC)
- EPIC Roadmap
- Guidelines & Requirements
 - ✓ Incremental Technologies line
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- Conclusions & future challenges

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Introduction

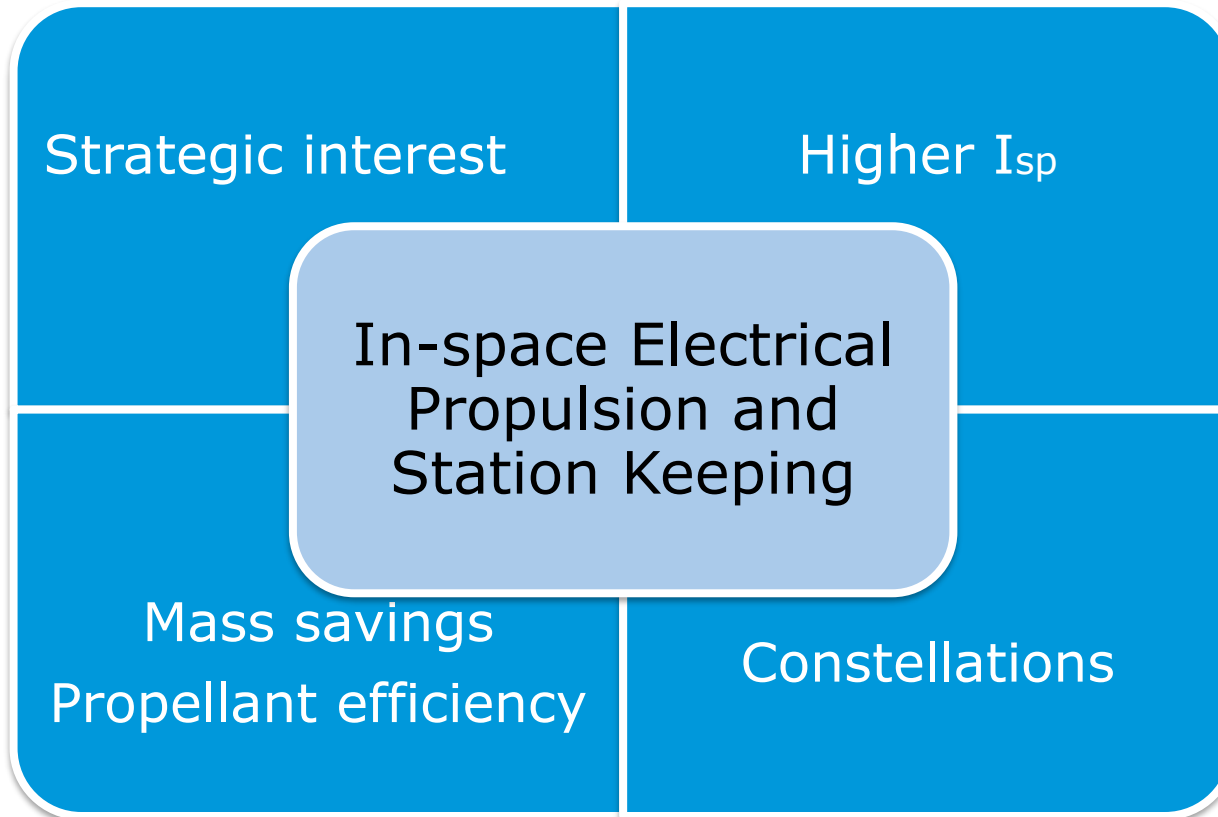
Strategic Research Cluster



- Programme Support Activity
- Operational Grants

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Electrical Propulsion Strategic Research Cluster (SRC) (1/3)



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Electrical Propulsion Strategic Research Cluster (SRC) (2/3)

2014

- EPIC starts

2016

- First Call for proposal – incremental & disruptive

2019

- Second Call - disruptive

2020

- Third Call - incremental

2022

- Last Call – generic building blocks (proposal selection ongoing)

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Electrical Propulsion Strategic Research Cluster (SRC) (3/3)

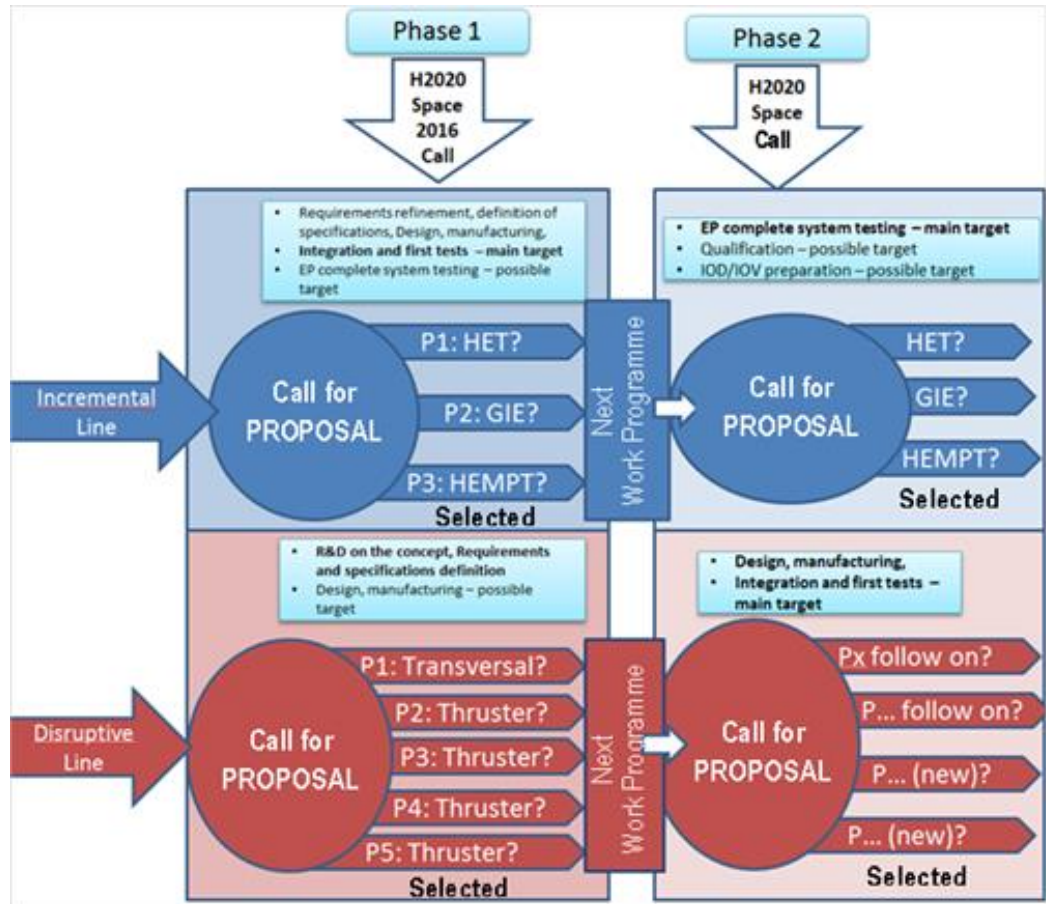
Programme Support Activity



Electric Propulsion Innovation & Competitiveness

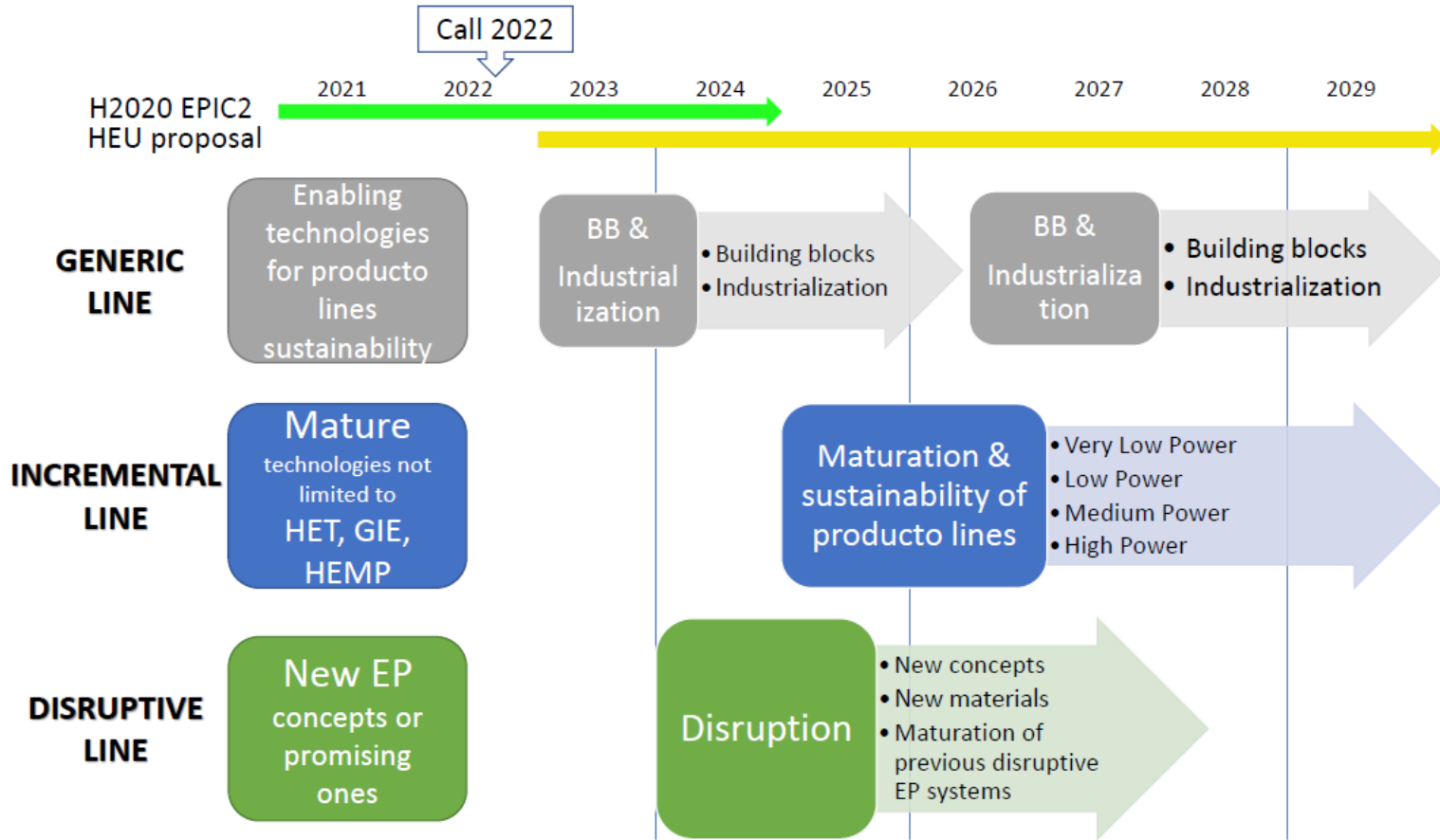
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EPIC roadmap (1/2)



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EPIC roadmap (2/2)



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Guidelines & requirements

Incremental

HET, GIE, HEMPT

Commercial
market

Improve perf.
Cost reduction

Disruptive

HPT, ECRT, MPDT,
PPT, FEET

New materials,
alternative
propellants

Innovative PPU's
and more

Generic Building Blocks

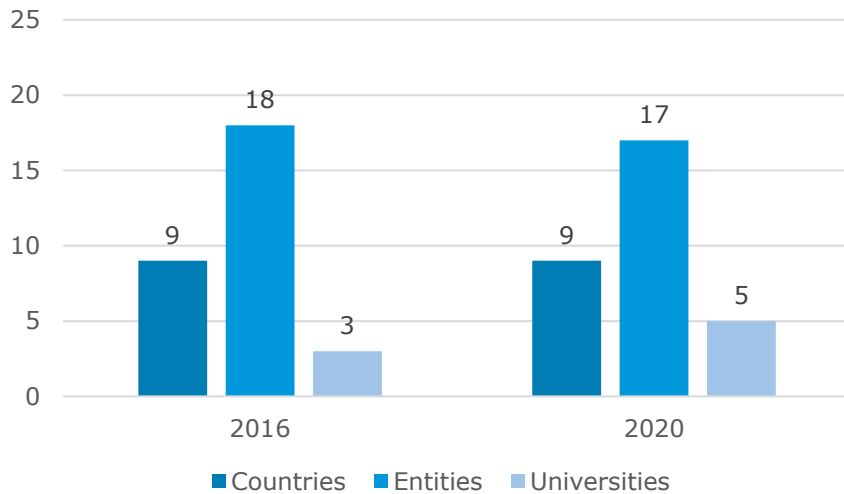
Plug & play

Standardization
Industrialization

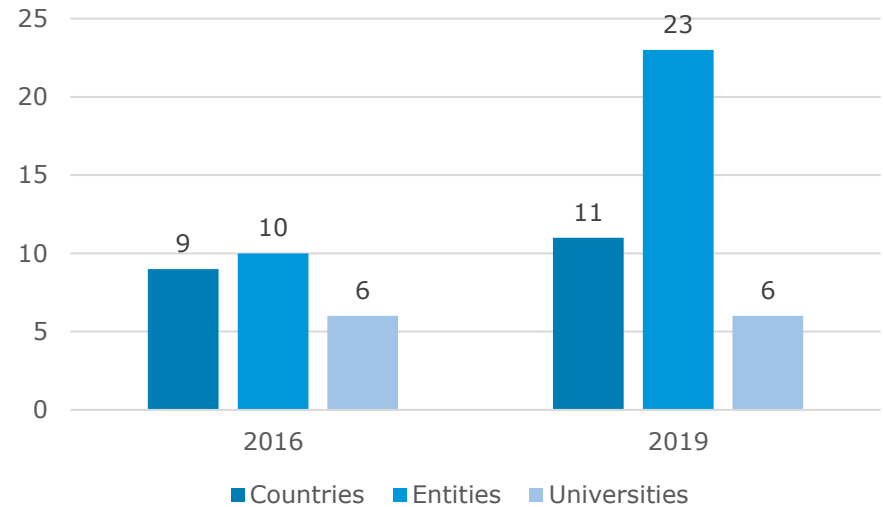
IOD/IOV

Call evaluation results

Incremental Call Results

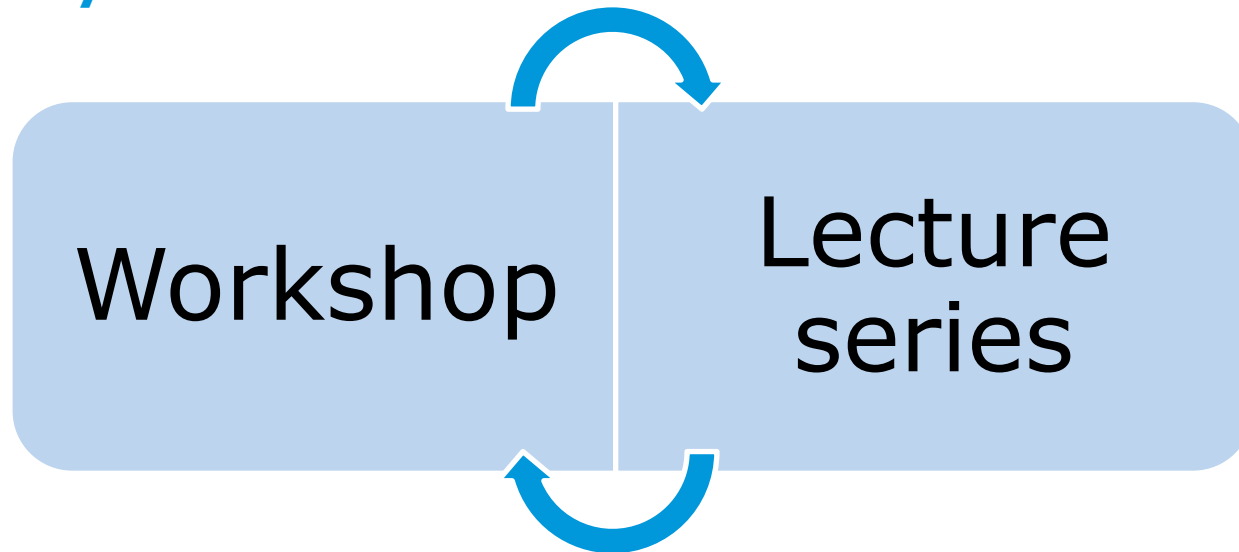


Disruptive Call Results



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PSA Activity



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Conclusions & future challenges

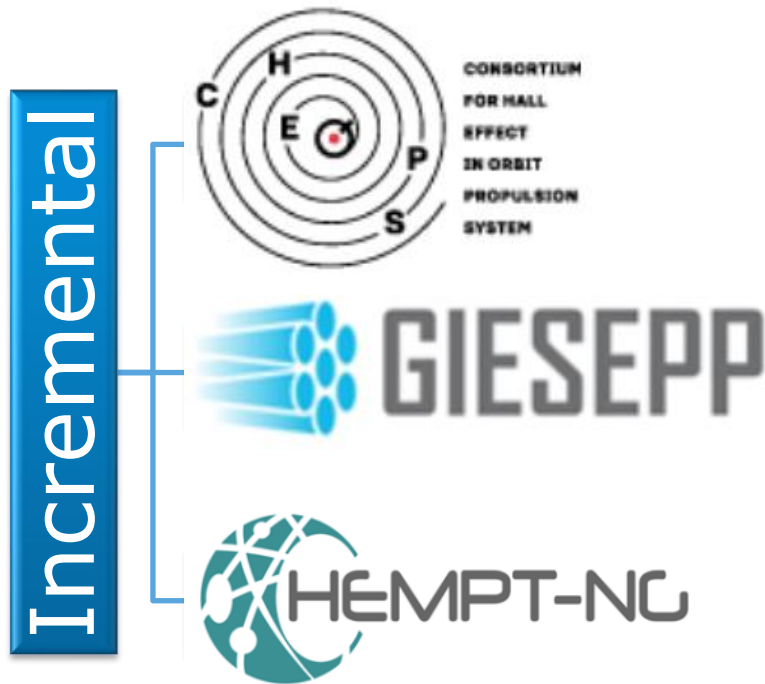
- In-space Electric Propulsion & Station Keeping Strategic Research Cluster has contributed to:
 - ✓ the consolidation of the Electric Propulsion industry in Europe.
 - ✓ increase the european autonomy on this strategic technology.
 - ✓ coordinate several projects with a common goal.
 - ✓ promote the collaboration between entities, universities and research institutes from several european countries.
- The continuation of EPIC activities will ensure the evolution of the technology to join the Future Space Ecosystem and accomplish with the European Green Deal.

Thank you for your attention

Questions?

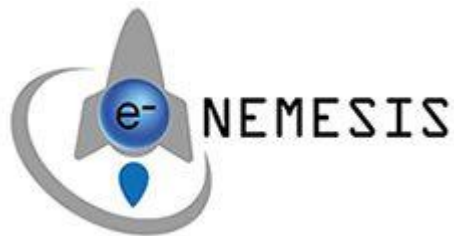
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Call evaluation results - 2016



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Call evaluation results – 2019



Disruptive



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Call evaluation results – 2020



Incremental



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