

ALFAMA

Advanced lightweight and Flexible Array with Mechanical Architecture

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Challenges and Ambition

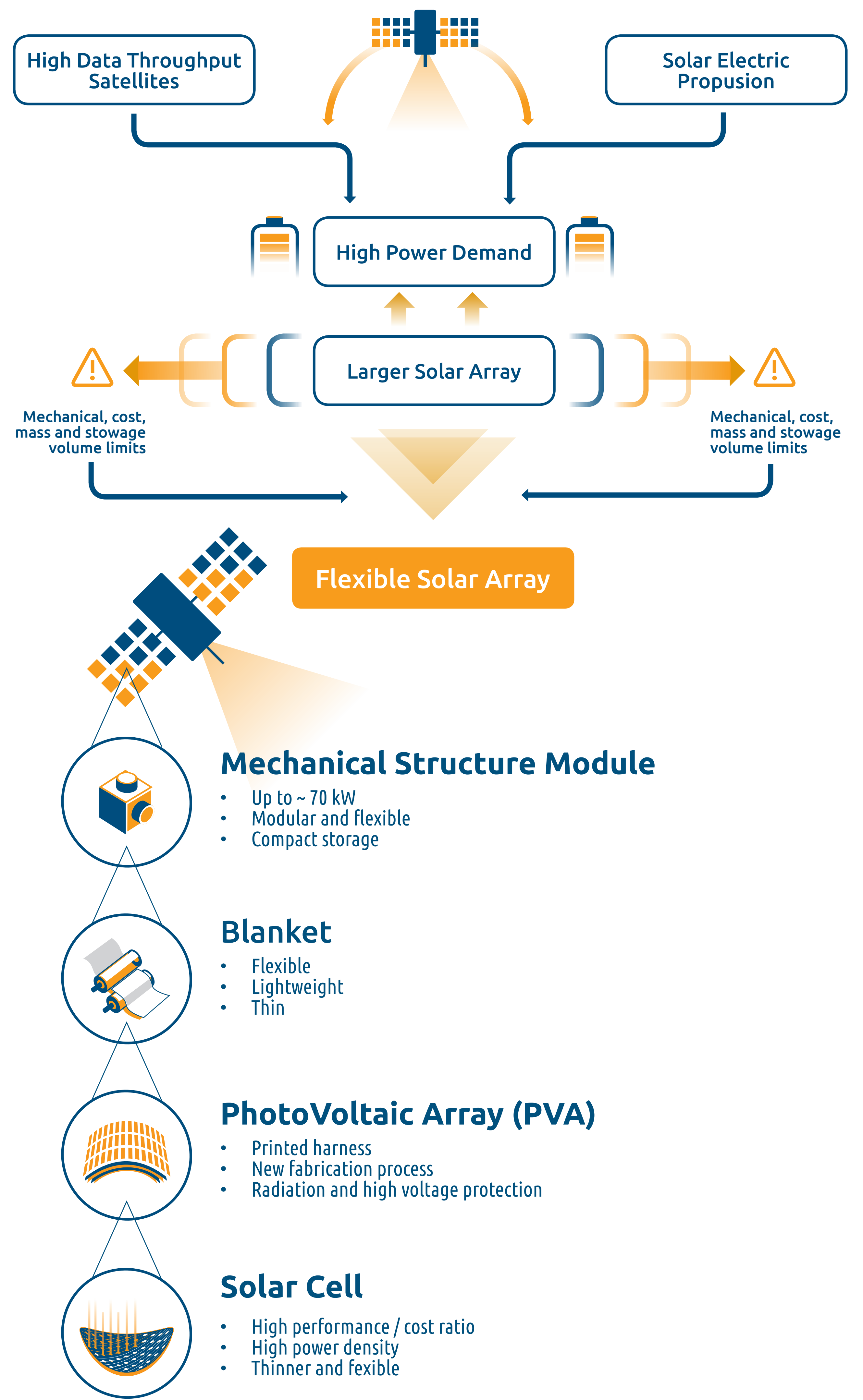
Optimising each level of the solar array to answer high-power challenges

The ALFAMA project aims to develop an innovative photovoltaic solution thanks to 4 main development streams:

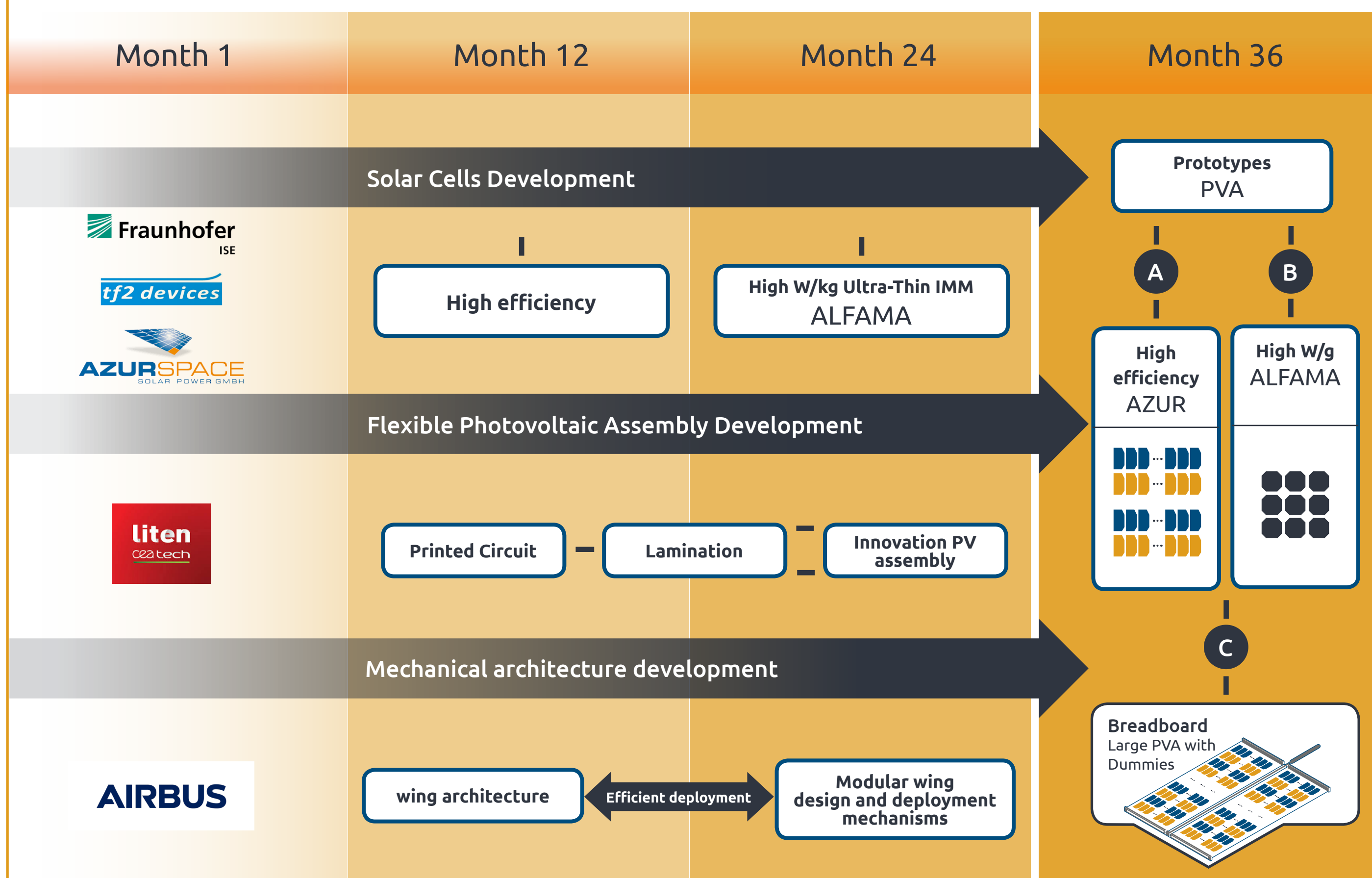
- Cost reduction, with its innovative manufacturing process
- High power per mass ratio, with high efficient ultra-thin solar cells & PVA
- Reduce stowed volume
- Modular mechanical architecture adapted to large PVA (up to ~ 70kW capability), addressing all missions

ALFAMA's drastic improvements will enhance the EU space sector competitiveness, enable new missions and build synergies between space and non-space activities.

The Alfama Concept

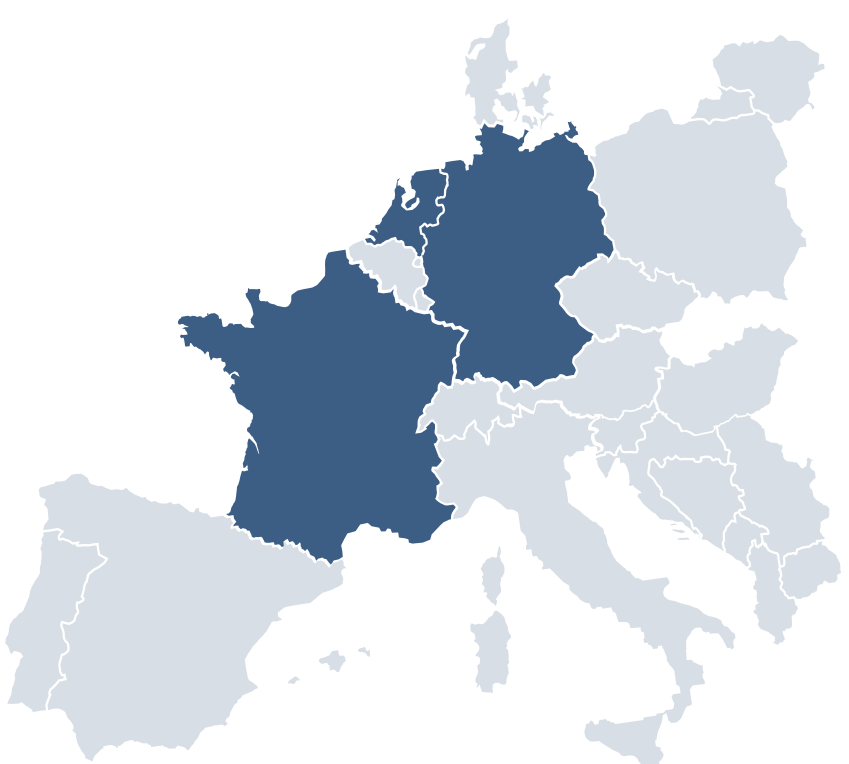


Work Distribution



Expected results

- European ELO IMM 3J cells development, manufacturing and testing
- 2 PVA prototypes proof of concept will be manufactured and tested
- 1 deployment structure for large flexible SA



AIRBUS

liten
cea tech

Fraunhofer
ISE

AZURSPACE
SOLAR POWER GMBH

tf2 devices

absiskey
INNOVATION SPIRIT

<http://alfamaproject.eu>

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Project ALFAMA

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