



Socio-economic impact assessment of the ARTES 4.0 programme Case study portfolio

European Space Agency

13th December 2024

## S-EDGE ARTES Space Systems for Safety & Security (4S)

Satellite and 5G for Law Enforcement application in Italy

-Cutting-edge satellite, drone and 5G technology combined to revolutionise law enforcement and public safety





## LEVERAGING ESA'S SUPPORT

- Access to **ESA's extensive network and partnerships**
- Facilitated the relationship with the user providing due diligence and guidance
- Project value ~ €1M with 65% of ESA funding
- Credibility gained within ESA stamp



"The integration of advanced technology with drones, 5G connectivity and satellite technologies are an added value for law enforcement agencies and civil protection, helping them ensure the safety of the citizens"

## **COMMERCIAL SUCCESS & GROWTH**

- Successful demonstration in Turin in December 2022 transitioned the project into potential operational use
- "Automatic periodically planned" and "on demand" patrolling missions demonstrated in final test at Fucino Space Center in April 2023.
- Product launched into the market with interest from a private entity

## **IMPROVING PUBLIC SAFETY**

- Surveillance service provided by fleet of drones equipped with 5G and/or satellite connectivity and optic/ thermal imaging.
- Al-powered tools analyse images for subjects of interest.
- Patrolling, crowd management, and search and rescue missions aided by this revolutionary technology



LE 4 London Leonomics

**TECHNOLOGY** 

**APPLICATION** 

END-TO-END SYSTEM

