

# THE EUROPEAN GATEWAY TO SPACE

Avio presentation to
United Nations Office for Outer Space Affairs (UNOOSA)

Vienna, Feb, 10<sup>th</sup> 2023

avio.com

# Avio: the European pure player in Space launchers





European heavy launcher (10.5 tons in GTO) **Avio: Strap-on boosters** 







European light launcher (2.3 tons in LEO) **Avio: System integrator** 

### The launch segment: the gateway to the Space economy worth almost 400 \$ Bn



#### Global space value chain (2021)

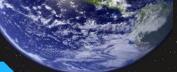












Launch<sup>(1,2)</sup> \$ 5.7bn

**Satellites** \$ 13.7bn

Ground(3) \$ 142bn

Services<sup>(2,4)</sup> \$ 118bn

End users

#### Government \$ 107bn



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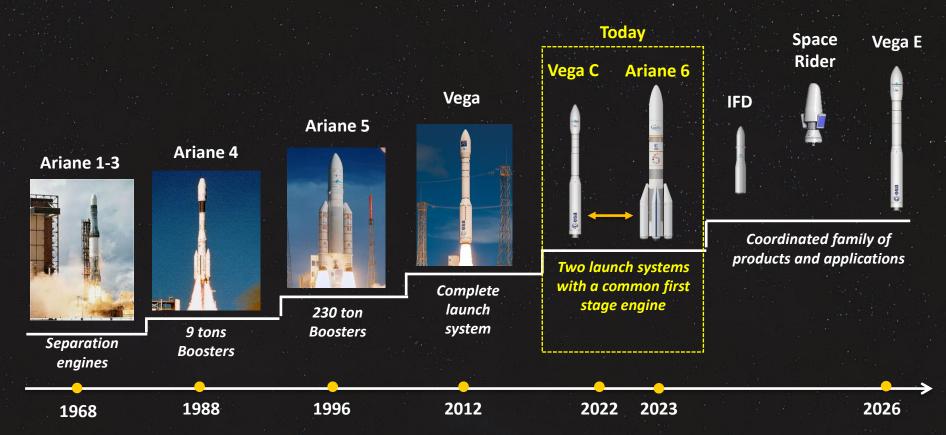






### 50 years of track record in Space launch





#### Industrial operations in Europe and French Guiana





Colleferro, Rome (GMT +1) N41.727 E13.0030

- SRM design, production
- Mission analysis
- Flight Software
- Stage integration
- Testing

Main stage integration



**Propellant mft & casting** 

French Guiana (GMT -3) N4.003 E52.999 Avio runs three facilities at the European Spaceport :

- SRM casting and integration
- Vega launcher operation



SRM Manufacturing



**Paris** 

Large SRM

design/integration

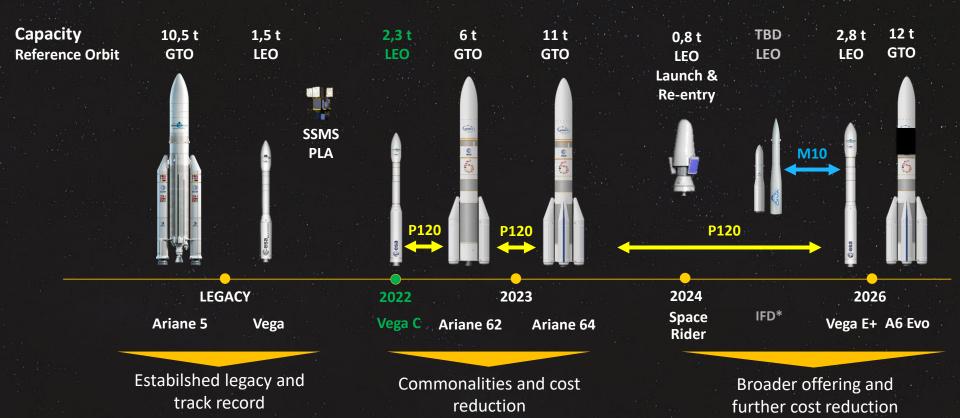
(GMT +2) N48.856 E2.351

Upper stage integration

# European Launchers – Product Range Evolution Roadmap







# Vega C Maiden Flight on July, 13 2022 – The video



The Vega C Maiden Flight Video

#### Our Partnership with UNOOSA



The «Accessing Space with Vega C» Program will give the opportunity to Non-SpaceFaring Countries to develop their space capabilities

Avio, along with Arianespace (Launch Service Provider) and its Supply Chain, is giving the opportunity to launch free of charge 3 CubeSats on board Vega C

The Kenyan CubeSat is the first example of this cooperation

Other CubeSats will follow



# THANK YOU

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