

MISSION DESCRIPTION

Arianespace's first launch of 2024 with the last Vega launcher will place its passenger into **Sun-synchronous orbit**. The launcher will be carrying a total payload of 1, 143 kg.

The launch will be performed from **Europe's Spaceport in Kourou**, French Guiana.



DATE AND TIME

Liftoff is planned on **3 September**, **2024**, at exactly:

- 10:50:27 p.m. Kourou time,
- 01:50:27 a.m. Universal time (UTC), September 4.

MISSION DURATION

57 minutes and 27 seconds.

Satellite **signal acquisition** is expected **within 12 mins**



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(%)

SATELLITE

Operator: European Space Agency (ESA) End-customer: European Commission



TARGETED ORBIT

Inclination: 98.57°

VEGA STANDARD SUN-SYNCHRONOUS ORBIT





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SENTINEL-2C A European Copernicus Earth Observation satellite

DID YOU KNOW?

Sentinel-2C is part of the European Commission's Copernicus Earth Observation program, the world's most advanced Earth observation system. Copernicus provides continuous, independent, and reliable Earth observation data and services to public authorities, companies and citizens around the globe. The program is co-funded by the EU and ESA.



SATELLITE	SENTINEL-2C
CUSTOMER	European Commission within the scope of a contract signed with the European Space Agency (ESA)
MANUFACTURER	Airbus Defence and Space
MISSION	Earth observation
MASS AT LAUNCH	1, 143 kg
INSTRUMENT	MSI: 10m max resolution; 13 bands in VIS/NIR & SWIR
COVERAGE AREA	Global land and coastal areas
LIFETIME	Designed for 7 years, expected to operate at least 10 years

The Copernicus Sentinel-2C satellite, with its wide swath, high-resolution, and multi-spectral imaging capabilities, will support a broad range of operational applications including agriculture, water quality monitoring, natural disaster management (e.g., wildfires, volcanoes, floods) and methane emissions detection. For agriculture, the mission helps to monitor crop health, predicts yields and enables precision farming. Images are used to detect crop type and to determine biophysical variables such as leaf area index, leaf chlorophyll content and leaf water content to monitor plant growth and health.

- Sentinel-2C will be the 5th Copernicus satellite launched by Arianespace
- Sentinel-2C will be the 50th satellite launched by Arianespace for the European Space Agency
- Sentinel-2C is the 144th spacecraft built by Airbus Defence and Space launched by Arianespace

VEGA LAUNCHER





DID YOU KNOW?

Vega is the Avio launch vehicle operated by Arianespace designed to send small satellites into Low Earth Orbit (LEO). It provides great flexibility of mission at an affordable cost. Together with Ariane 6, it represents the European solution for space accessibility.

The rocket consists of four stages, the first three equipped with solid propellant motors and the last one using liquid propulsion. It can carry multiple payloads at a time in any orbit up to 1,500 kg on missions to a 700-km circular orbit.

Vega's inaugural flight took place in February 2012. Following the success of this first launch, the project has grown in importance and the launcher has gained a very good track record of successful flights, putting various types of cargo into orbit, including numerous smallsats for various private, institutional and government customers.

In all, counting this final upcoming mission, Vega will have carried out a total of 22 launches throughout its years in service and the mission will mark the handover to the Vega C launcher, scheduled to flight by the end of 2024.

LAUNCH CAMPAIGN

03/09/2024Final launch countdown. Liftoff.02/09/2024Arming of fairing
Launch Readiness Review (LRR)
Final preparation of launcher and final inspection of
the fairing27/08/2024Integration upper composite on launcher26/08/2024Finalser of upper composite to Vega Launch Zone22/08/2024Integration of Sentinel-2C in payload fairing21/08/2024Integration of the payload on the payload adaptor16/08/2024Fueling of Sentinel-2C

- **19/08/2024** Arrival of Sentinel-2C in S1A on Europe's Space Port facilities
- 18/07/2024 Arrival of Sentinel-2C in French Guiana on board Canopée, the first sail-assisted cargo ship
- 12/07/2024 Campaign start review





STAKEHOLDERS OF THE MISSION



ARIANESPACE

Arianespace uses Space to make life better on Earth by providing launch services for all types of satellites into all orbits, since 1980.

Arianespace is responsible for operating the new-generation Ariane 6 launcher, developed by ESA, with ArianeGroup as the prime industrial contractor. Arianespace will also operate the Vega/Vega C launches up until mission VV29, point at which Avio will become the sole operator and launch service provider of Vega.

Arianespace is headquartered in Evry, near Paris, and has a technical facility at the Guiana Space Center in French Guiana, plus local offices in Washington, D.C., Tokyo and Singapore.

Arianespace is a subsidiary of ArianeGroup, which holds 74% of its share capital, with the balance held by 15 other shareholders from the Ariane and Vega European launcher industry, and ESA and CNES as censors.

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AVIO

Avio is a leading international group engaged in the construction and development of space launchers and solid and liquid propulsion systems for space travel. The experience and knowhow built up over more than 50 years puts Avio at the cutting edge of the space launcher sector, solid, liquid and cryogenic propulsion and tactical propulsion. Avio operates in Italy, France and French Guiana with five facilities, employing approx. 1,000 highly-qualified personnel, of which approx. 30% involved in research and development.

Avio is a prime contractor for the Vega program and a sub-contractor for the Ariane programme, both financed by the European Space Agency, placing Italy among the limited number of countries capable of producing a complete spacecraft. Avio also manufactures the Vega C launcher and participates in the development of the Ariane 6 launcher thanks to its new solid propellant engines P120C and the Vinci and Vulcain liquid oxygen turbopumps.

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EUROPEAN SPACE AGENCY

ESA is an intergovernmental organisation with the mission to shape the development of Europe's space capability and ensure that investment in space delivers benefits to the citizens of Europe and the world. ESA coordinates the financial and intellectual resources of its 22 member states, which allows it to undertake programmes and activities far beyond the scope of any single European country.

ESA is working in particular with the EU on implementing the Galileo and Copernicus programmes as well as with Eumetsat for the development of meteorological missions.

ESA manages Europe's space transportation programs.

It was responsible for the Vega launch system development and is its Launch System Qualification Authority. ESA also heads the integrated Vega programme team and owns the Vega launch complex (ZLV).

Press contact: media@esa.int



European Commission (DEFIS)

The Directorate General for Defence Industry and Space (DG DEFIS) plays a crucial role in developing and enforcing the regulatory frameworks that govern space activities within the European Union.

It implements the Union's Space Programme while assessing current trends, identifying emerging challenges, and ensuring that the objectives of the Space Programme are aligned with broader EU priorities such as innovation, economic growth, and security.

DG DEFIS also actively supports the growth and competitiveness of the European space industry. It does so by providing targeted incentives (with a special focus on SMEs), fostering collaboration between the public and private sectors, promoting technology transfers, and facilitating access to finance and markets.

Press contact: DEFIS-PRESS@ec.europa.eu



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STAKEHOLDERS OF THE MISSION (continued)



CNES

CNES (Centre National d'Études Spatiales) is the government agency responsible for shaping France's space policy and implementing it in Europe. Its task is to conceive and orbit satellites, invent the space systems of the future and nurture new services to aid us in our daily lives. Founded in 1961, it is the initiator of major space projects, launch vehicles and satellites, and the partner of choice for industry fueling innovation. CNES comprises some 2,400 men and women with a passion for space working to open up new and infinite fields of applications in five core areas of focus: Ariane, science, Earth observation. telecommunications and defence

The agency is a key player driving technology innovation, economic development and industrial policy for the nation. It also fosters scientific collaborations and has forged numerous international partnerships. France, represented by CNES, is one of the leading contributors to the European Space Agency (ESA).

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Airbus

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide efficient and technologically-advanced solutions in aerospace, defence, and connected services.

In commercial aircraft, Airbus designs and manufactures modern and fuel-efficient airliners and associated services. Airbus is also a European leader in space systems, defence and security. In helicopters, Airbus provides efficient civil and military rotorcraft solutions and services worldwide.

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