

An artistic illustration of the Mars Sample Return mission. In the foreground, a Mars lander with solar panels is on the surface. A rover is visible in the mid-ground. A large ascent stage is being launched from the lander, with a bright plume of fire and a curved trajectory leading towards a satellite in orbit. The background shows the reddish-orange landscape of Mars and a small satellite in the sky.

# EXPLORE MARS SAMPLE RETURN

## NASA/ESA Joint MSR Planning Status

For the **MEPAG** Meeting  
July 26, 2019

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# MSR Preparation Status

- Throughout 2018/2019: NASA/ESA have been converging campaign requirements, completing mission trade studies, refining mission concept designs, and maturing plans for jointly implementing MSR, potentially launching as early as 2026
- On April 26, 2018: NASA and ESA signed Joint SOI at the Berlin Airshow to jointly develop plans for MSR by the end of 2019
  - Within NASA - conducted multiple studies leveraging Agency competencies across Centers
  - Within ESA - completed four industry phase B1 studies: 2 ERO and 2 SFR
- On July 12, 2019 NASA conducted an Acquisition Strategy Meeting for MSR
  - HQ approved the proposed roles & responsibilities developed in the joint NASA/ESA planning
- On July 23, 2019: ESA released an Invitation to Tender (ITT) for an Earth Return Orbiter (ERO)
- On November 26-28, 2019: ESA Ministerial Council will meet and consider approval of MSR
- Anticipate ~February, 2020 the President will submit his FY2021 Budget Request to Congress
  - Both FY19 Appropriation and FY20 President's Budget Request support preparation for MSR
- Studies have prepared NASA and ESA to make an informed decision on MSR late 2019 / early 2020