

IAF SPACE PROPULSION SYMPOSIUM (C4)  
Liquid Propulsion (1) (1)

Author: Mr. Dimitri Telitschkin  
ArianeGroup, Germany

Mr. Michael Biehler  
ArianeGroup, Germany  
Mr. Mohamad El Atrach  
ArianeGroup, Germany  
Mr. Stefan Lentz  
ArianeGroup, Germany  
Mr. Thomas Maier  
ArianeGroup, Germany  
Mr. Martin Riehle  
ArianeGroup, Germany  
Dr. Stefan Ziegenhagen  
ArianeGroup, Germany  
Mr. Timo Krone  
ArianeGroup, Germany  
Mr. Eric Chocheyras  
ArianeGroup SAS, France

OVERVIEW OF EQUIPMENT AND SUBASSEMBLIES FOR THE ESM PROPULSION SYSTEM FOR  
ARTEMIS MOON EXPLORATION PROGRAM**Abstract**

The Artemis program is an international robotic and man-rated Moon exploration program led by NASA in cooperation with space agencies of Europe, Japan, Canada and United Kingdom and under involvement of the major space industrial in Europe. The European Service Module (ESM), provided by ESA is the core element of the Orion spacecraft. Under the lead of the industrial prime Airbus Defence and Space, ArianeGroup is a major supplier for propulsion elements and services. The purpose of the paper is to provide the portfolio of the propulsion elements, sub-assemblies and services of the ArianeGroup resulted in contribution to the ESM propulsion system, to provide their qualified operation capabilities based on set of the key requirements for the man-rated applications.