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## CERTIFICATION AND APPROVAL OF SUB-ORBITAL AND ORBITAL AIRCRAFT (SOA): CHALLENGES AND PERSPECTIVES

## Abstract

Annex 8 of the International Civil Aviation Organization (ICAO) to the Chicago Convention defines an aircraft as "any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface". Thus, Sub-orbital and Orbital Aircraft (SOA) generating aerodynamic lift during the atmospheric part of their flight are considered to be aircraft.

Therefore, their airworthiness, crew and operations in the atmosphere would fall under the remit of aviation safety regulators, which would have a role in relation to civil suborbital and orbital flights, that is to certify SOAs and approve their operations.

This paper intends to present the latest developments and challenges to accommodate sub-orbital and orbital aircraft flights into the existing regulatory system.