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## SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6) Commercial Point-to-Point Safety & Insurance Issues (2-D2.9)

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## SUBORBITAL POINT TO POINT TRANSPORTATION FLIGHT CREW AND PASSENGERS SAFETY ISSUES

## Abstract

We will soon be confronted with regular operation of suborbital vehicles providing commercial passengers, cargo and hybrid cargo and passengers (combi) transportation from one point on earth to another. These vehicles will deliver a novel commercial transportation value proposition to contracting third parties which will always involve the participation of flight crew or flight crew and passengers, and for which there is not yet a specific safety framework.

Taking into consideration the ambiguity which exits in national and international regulation in this realm, commercial entities (carriers) considering holding out to the public to provide suborbital point to point revenue generating flights have fostered lengthy debates over defining the appropriate safety regime to govern the various aspects of these flights. Health and other human factors issues related to normal, abnormal and emergency flight regimes, actions required and performance tolerances expected and required from both flight crew and passengers are among the main focus areas in this study. These areas will be identified and their status quo described and evaluated, in preparation for future definitions, tests and regulatory frameworks necessary to foster a true commercial and international passenger, cargo and combi point to point transportation viable commercial industry. The proposed paper intends to give an overview of the main issues associated with the safety of flight crew and passengers of commercial point to point suborbital flights and to advance the discussion of possible national and international safety regulatory frameworks. The paper will highlight all areas needing further clarification and the co dependency of the existing aviation and spaceflight safety frameworks to make them suitable to support future point to point commercial spaceflight activities.

The study will also consider other safety related foreseeable impact areas requiring regulatory frameworks including, but not limited to, reliability, security, environment and traffic management concerns, as well as possible inclusion of such flights under the ICAO's regulatory system.