## 47th SYMPOSIUM ON SAFETY, QUALITY AND KNOWLEDGE MANAGEMENT IN SPACE ACTIVITIES (D5)

Ensuring quality and safety in a cost constrained environment: which trade-off? (1)

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## USE OF STPA IN COMMERCIAL SPACE LAUNCHES HAZARD ANALYSIS IN BRAZIL

## Abstract

Identify, evaluate and control hazards in launch activities is mandatory in order to proactively implement a risk management system where the launch operator must, through a licensing process, demonstrate that its safety policy ensures the safety of the public. When hazards are identified, steps can be taken to eliminate them, reduce the likelihood of their occurring, or mitigate their effects on the system. This paper applies the advantages of STPA as a systemic technique to conduct hazard analysis to identify risks factors involved in the complex commercial space launching activities in the Launch Centre of Alcântara (CLA) – Brazil, and to design prevention strategies for safety.