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

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THE HIKARI PROJECT AND SAFETY (OF FLIGHT)

Abstract

HIKARI, Japanese for "light", aims at pursuing and bringing one step further cooperation between Europe and Japan in the field of high-speed transport (HST). Even with commercial aviation craving for disruptive and environment friendly approaches and so many research initiatives in high speed transport, passengers traveling routinely onboard a high-speed airplane is still a long way ahead. There are two major hindrances: the first one is development cost and risks, the second is technology readiness level. Taking a stand on both aspects, HIKARI intends to help federate initiatives and derive common goals, and also contribute to advancement in some keys research areas. The primary output from HIKARI will be technology roadmaps relying on synergies between all the different projects brought by the partners. Three major activities will support HIKARI's objective: • federating existing initiatives: The main goal is to foster international cooperation by analyzing the various technological goals, identifying possible synergies, and rationalizing research efforts. • progressing on specific technologies: HIKARI shall contribute to "enhancing cooperation with Japan". Therefore HIKARI concentrates its efforts on three core technologies: - Fuel and environment: The aim of this research axis will be to analyze the impact of high speed emissions on the atmosphere and on the long term evolution of climate, - thermal and energy management, - Propulsion. • addressing a future commercial market (market analysis) Coordinated by Airbus Group Innovations, HIKARI Consortium gathers 16 partners in 7 countries: 4 in Japan and 12 in 6 European countries. Starting from February 2013, the project is expected to be completed by February 2015. The paper will provides an overview of the HIKARI project at large and will focus on technology roadmap(s) under discussion inside the HIKARI consortium. Attention will be given to how they interact with safety (of flight) issues.