

## **ACOUSTICS2008/2387 TIMPAN - Technologies to IMProve Aiframe Noise**

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TIMPAN is a 3-year Strategic Targeted Research Project of the 6th European Framework Programme, Priority "Aeronautics and Space", launched in 2006. It addresses the community noise reduction objective for commercial aircraft by focusing on main airframe noise sources: landing gear and high-lift devices - responsible, on recent aircraft, for about half of the total noise in approach situation. TIMPAN addresses both sources, within 3 main tasks: 1) Landing gear activity: investigation of both innovative low noise technologies on bluff body structures and the improvement of advanced low noise main gear design, as outcome from previous EC Technology Platform SILENCE(R). 2) High lift device activity: study of both innovative concepts based on flow control technologies and mid-term noise reduction solutions as absorptive wing leading edge treatments and high-lift settings optimization through computational aero-acoustic methods. 3) Technology evaluation: aims to prepare the exploitation phase by evaluating the noise reduction technologies under consideration in terms of noise benefit, integration, cost and performance. TIMPAN brings together 14 actors from the European aeronautics industry including aircraft manufacturers (Airbus and Dassault Aviation), landing gear manufacturers (Messier-Dowty and Messier Bugatti), key research institutes (DLR, ONERA, NLR, EADS-IW), universities (University of Southampton, Technical University of Braunschweig) and SMEs (ATECA, Free Field Technologies).