



NDTonAIR: Training Network in Non-Destructive Testing and Structural Health Monitoring of Aircraft structures

Acronimo: **NDTonAIR**

Horizon 2020 – Pilastro Excellent Science - MSCA

Call: **H2020-MSCA-ITN-2016**

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Abstract: The “NDTonAIR” consortium involves Universities, Research Organisations and major European companies working on new Non-Destructive Testing (NDT) and Structural Health Monitoring (SHM) techniques for aerospace, of which both are key technologies. The goal is to train a new generation of scientists and engineers with a wide background of theoretical and experimental skills, capable of developing their research and entrepreneurial activities both in academy and industry and playing an active role in promoting the importance of quality inspection and structural monitoring in aerospace components. The objective of the training programme is to provide the recruited researchers with an extensive and varied training on: 1) Fundamentals skills for NDT and SHM through participation in short-courses and seminars organized by the Consortium; 2) NDT and SHM Techniques for Aerospace through research training at host institutions and participation in Workshops and Conferences organized by the Consortium and major international research associations; 3) Technology Transfer and Entrepreneurship through participation in short-courses and seminars organized by the Consortium.

The objective of the research programme is to consolidate and innovate current NDT and SHM techniques for Aircraft inspection by (1) investigating new physical phenomena and sensors; (2) developing analytical and numerical models to correlate the results of inspection with material properties; (3) quantifying NDT techniques through their probability of detecting reference defects; (4) developing procedures for the automatic detection and classification of defects; (5) transferring these results to industry.

The members of the Consortium will work together for realizing this training programme and scientific collaboration will be stimulated by secondment of the recruited researchers and it will be aimed at improving the integration and comparison of different NDT techniques.