EXOMARS Heatshield: from Design to Manufacturing.

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After an 8-month journey in space, EXOMARS Entry and Descent Module (EDM) will enter into Mars atmosphere. Approximately five minutes later, a landing platform carrying an environmental and meteorological unit station will be released and will land autonomously on the red planet.

During Entry, the EDM will be protected from significant heat flux and mechanical loads by an optimized Heatshield made of composite structure covered by an ablative thermal protection (outgassed Norcoat Liège).

The paper will give an overview on the numerous activities run since 2007, allowing AIRBUS DS to finally provide the System mid-2014 with a Proto-Flight Heatshield.

Design and justification as well as testing will be presented extensively with the aim to highlight the strong interactions between all fields of activities, before a focus is made on manufacturing.