## IAF SPACE SYSTEMS SYMPOSIUM (D1) Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards. (5)

Author: Mr. Andrew Herd ESA, The Netherlands

Mr. Fabien CASTANET Centre National d'Etudes Spatiales (CNES), France Dr. Daniel GALARRETA Centre National d'Etudes Spatiales (CNES), France Mrs. Isabelle Gibek Centre National d'Etudes Spatiales (CNES), France

## ESTABLISHING A PROTOCOL FOR THE X-CHANGE OF EXPERIENCE AND LEARNING BETWEEN SPACE ENTITIES – SHARING WHAT WE DO TOGETHER AND WHAT WE HAVE IN COMMON – AN ESA / CNES CASE STUDY

## Abstract

The European Space Agency is committed to provide its experience, and the learning derived from this, to external entities in the space business, or, as relevant, beyond to other domains. In this regard ESA Lessons Learned set out to establish a generic protocol that would allow for the exchange of experience and lessons between those two entities. The purpose of this protocol was to set out a high-level understanding and non-binding commitments between Lessons Learned entities from participating organizations by which experience gained at either organization's programs or projects could be shared and exchanged for mutual benefit through the Lessons Learned processes, methods and tools, and those individuals involved or contributing to those processes. The lessons considered for exchange were both on topics relating to the Lessons Learned management processes and to the outcomes from these processes relating to programmes or projects performed in mutual cooperation, both aspects being common areas of learning from "things we do together" and "things we have in common". It is collectively understood that this protocol and the associated activities are being undertaken to support a larger exercise (and body of understanding) by which the participating organizations, be they Space Agencies, member states, industry and academia working in the space sector can more effectively, readily, and rapidly exchange their learning for mutual benefit, beyond that already undertaken and potentially as a contribution to other on-going activities, such as standardization or harmonization. To support the working of this commitment, there was needed a framework, a supporting structure, around which an agreement (as detailed in the protocol) can be built, and is understood in the protocol as a policy, process, method or technology (reflected or not in a tool) that provides the justification, structure and resources for the performance of the X-change lesson learned process. The framework is understood a pre-requisite to the creation of an agreement to exchange experience through the lessons learned process, and, the framework of each participating organization is understood to allow for and support (justification and resources) for the sharing of lessons outside of the organization in which the respective framework is defined. To this aim, ESA and CNES are working together to realise such a protocol and the run pilot activities to establish the most productive exchange of experience. This paper reports on this activity and provides a commentary to a broader application of this approach.