SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Calling Planet Earth - Space Outreach to the General Public (6)

Author: Mr. Roland Antonius Gabrielli
Institute of Space Systems, University of Stuttgart, Germany

Dr. Anja Schilling
Germany
Dr. Rene Laufer
Baylor University, United States
Mr. Christophe Koppel
KopooS Consulting Ind, France
Dr. Dominique Valentian
France
Mr. Richard Blott
Space Enterprise Partnerships Limited, United Kingdom
Dr. Claudio Ferrari
SME, Italy
Dr. Claudio Bruno
Sapienza University of Rome, United States
Dr. Frank Jansen
Institute of Aerospace Systems, Germany
Prof.Dr. Georg Herdrich
Institute of Space Systems, Germany
Prof. Hans-Peter Röser
University of Stuttgart, Germany

A SIMPLE APPROACH TO THE PUBLIC ACCEPTANCE OF TECHNOLOGICAL PROJECTS

Abstract

Achieving public acceptance is a major aspect in the final realisation of a technological project. Historic experience indicates that even projects with a high merit for a given society are very likely to be obstructed or prevented if the level of acceptance is low. This is argued referring to the case example of the infrastructural project Stuttgart 21. Based upon a study of its public acceptance process and further literature research, an interdisciplinary model to understand public acceptance is proposed.

The model distinguishes general, scientific and stakeholder public. It offers a rational access to seemingly irrational, emotional responses of a public. It assumes a rational/emotional balance and encompasses anthropologic, technological and economic aspects. Among the anthropologic aspects, special attention is accorded to the effect of social relations between the responsible of a project and the general public, to the so called social implementation [1]. Requirements to communication and ethic behaviour are derived. The technological aspects cover safety issues and environmental considerations on one hand and the dissemination of technological knowledge on the other hand. The economic aspects address transparent business culture in technological projects and the justification of funding for technological projects.

From the consideration of the model respective top level strategies for achieving public acceptance consisting in both directives for the project responsible and suggestions for public communication can

be derived for the specific case of advanced space projects: The project responsible need to cultivate an awareness for public concerns reaching from ethics to the social implementation of the project and adopt a communication culture of transparency and public participation. On the other hand, the public should be enabled to make use of the new transparency and participation options. This makes a case for an enhancement of the scientific education of the public.

The work has been conducted in the frame of the Disruptive Technologies for Space Power and Propulsion (DiPoP) project for the European Union and was approved by an international advisory board in February 2012. In this frame, the presented strategy is applied to the case of nuclear power and propulsion in space which is used as an illustration in the present paper.

Reference:

[1] B. Wynne: "*Redefining the Issues of Risk and Public Acceptance*", Futures Volume 15 Issue 1, pp. 13 – 32, Butterworth Co., February 1983