



Welcome from the Head of ESTEC Centre Michel Courtois

Dear Participant:

It is my pleasure to extend a hearty welcome to all participants of the ESA-CANEUS International Week on MNT for Space 2010. This is a historic event arising from the close cooperation between ESA and the global CANEUS organization and we are very pleased to host it here at ESTEC.

The European Space Research and Technology Centre (ESTEC) plays a critical role in supporting Europe's space programs. ESTEC is the largest site and the technical heart of ESA. Most ESA projects are born here, and this is where they are guided through the various phases of development.

ESA and its 18 Member States work together to pursue a wide range of ambitious and exciting goals in space. Together, they create fascinating projects that would not be feasible for the individual Member States. This mission is synergistic with the CANEUS goal of promoting a global public/private partnerships within the space community by fostering a collaborative environment aimed at the adoption, adaptation, and accelerated commercialization of micro and nano technologies (MNT).

ESA has played an active and critical role in CANEUS conferences and activities. The CANEUS-ESA partnership in the past has represented a unique and exciting opportunity to further develop capabilities in the Micro and Nano Technologies (MNT) sector. MNT promise advanced solutions in terms of ultra-low mass and low power systems with revolutionary capabilities. The dilemma for the space industry has always been on how to rapidly and cost-effectively bridge the so-called technology "Valley of Death" that has thus far "funnelled" down the broad range of technological advances to a mere trickle, by the time any of these advances are finally implemented in space systems. From a system end user perspective, there is no question that a great need exists for next generation space systems with advanced capabilities in order to meet the demanding requirements of tomorrow's missions. Here I commend CANEUS as the premier organization in the world to recognize the existence of the "Mid TRL gap" for the space industry and embolden scientists, technology developers and business professions to jointly address the issue of how to mitigate the "funnel down" effect so that significantly more MNT-based systems can drive future aerospace missions. As you all know well, ESA is involved at all levels of the space technology development TRL scale, and is therefore very happy to partner with CANEUS in this bold and exciting venture.

This ESA-CANEUS International Week on MNT for Space 2010 represents a unique and exciting opportunity to further develop capabilities in the MNT sector, while also benefiting from international cooperation.

As a valued participant, it is critically important that you engage with panellists, presenters, and other participants and provide your vital input to improving and thereby strengthening international cooperation on MNT for Space.

It is our sincere hope that you will benefit tremendously from your participation and that you will have a technically, professionally, and socially enriching experience.

A handwritten signature in black ink, appearing to be 'M. Courtois', written over a light blue grid background.

Michel Courtois
Director - ESTEC