

Welcome to ADCSS 2020

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Ali Zadeh - Head of Data Systems & Microelectronics Division (TEC-ED)
Samir Bennani - Head of GNC, AOCS & Pointing Division (TEC-SA)
Jean-Loup Terraillon - Lead Software Systems Engineer (TEC-S)

Kathleen Gerlo – Administrative Assistant (TEC-SW)

20-22 October 2020 ESA/ESTEC - Virtual

ESA Workshop on

Avionics

Data

Control

Software

Systems



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Welcome to the 14th ADCSS workshop



- Organized every year since 2007 by 3 Divisions from the Systems Department (TEC-S) and the Electrical Department (TEC-E) of ESA/ESTEC:
 - The Software Systems Division (TEC-SW)
 - The GNC, AOCS & Pointing Division (TEC-SA)
 - The Data Systems & Microelectronics Division (TEC-ED)
- The ADCSS programme is prepared in coordination with the SAVOIR Advisory Group
 - ESA, industry, national delegations
- Initial motivation for an Avionics workshop
 - "To provide an opportunity for a multi-disciplinary review of not only common avionics systems issues, but also techniques and technologies, and facilitate the consolidation of related R&D roadmaps." (1st ADCSS workshop)
- Format
 - Thematic sessions with position papers (generally invited) and round tables
 - Plenary sessions and exhibitors in order to foster a common language and better understanding between the various actors and domains of expertise:
 - Primes, HW suppliers, SW companies, national agencies
 - Since 2010, the ADCSS workshop is open to non ESA member states, to promote European developments worldwide and presentations are not anymore protected by a password

Reminder: http://adcss.esa.int





14th ESA Workshop on Avionics, Data, Control and Software Systems ~ ADCSS2020

20-22 October 2020 Virtual Workshop

ADCSS2020

Scope & Topics

Virtual Exhibition

Timetable

Registration

Future Events (Mailing List)

For support please contact Ms. Kathleen Gerlo

□ asg@esa.int

3 0031 715 65 37 81

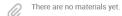
The 14th ESA Workshop on Avionics, Data, Control and Software Systems (ADCSS) covers topics related to avionics for space applications, in the form of a set of round tables. The workshop acts as a forum for the presentation of position papers followed by discussion and interaction between ESA and Industry and between participants. Each theme part of ADCSS workshops will be first introduced and then expanded by presentations on related developments from technical and programmatic points of view. A round table discussion may follow, concluded by a synthesis outlining further actions and roadmaps for potential inclusion into ESA's technology R&D plans.

All material presented at the workshop must, before submission, be cleared of any restrictions preventing it from being published on the ADCSS website.

Starts 20 Oct 2020, 10:00 Ends 22 Oct 2020, 18:30





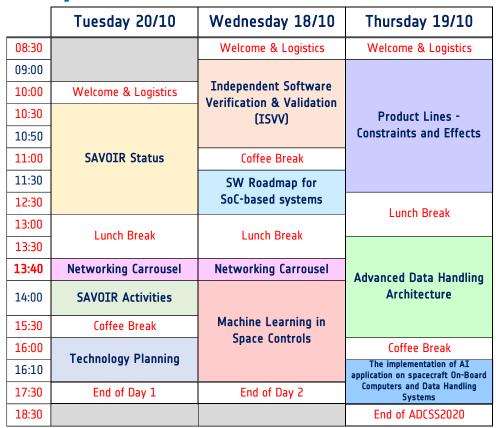


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Main subjects ADCSS2020: Sessions





- Presenters please go into your room at least 15 minutes before the start of the session
- The time for presenting is very tight, please be punctual and foresee at least 5-10 minutes for Q&A
- A number of opportunities are given for discussion: Please use all the means to interact!

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What keeps us busy these days (Driving Factors)



- Interdependency of functional, physical and electrical architecture
 - Integrated avionics, modularity, IMA
 - Model-based avionics, better separation of physical and functional aspects
- HW/SW co-engineering
 - Re-programmable, FPGA
 - Standardisation efforts (ECSS-E-ST-40CRev.1 and ECSS-E-ST-20-40)
- Product Lines
 - Driven by commercial market
 - How to create a win-win situation for suppliers and customers
- Artificial Intelligence
 - HW support and SW support
 - On-board applications
- Digital Twin
 - Means to support design, verification and operations of complex system

European Space Agency

ADCSS2020 - Exhibitors

















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ADCSS2020 – Some initial statistics



- 302 Registered Participants
- 26 Different Countries
- 9 Sessions 50 Presentations
- 2 Networking Carrousels
- 7 Exhibitors
- First Virtual Edition of ADCSS



Special thanks



- We appreciate a lot your regular or first participation to ADCSS.
 - Around 300 registrations this year
- Special thanks to all presenters and exhibitors
- Many thanks to the sessions organizers
 - Who selected representative papers and coordinated the sessions
- And a big thank to Kathleen Gerlo, who coordinated the workshop preparation, managed all logistics details enabling this workshop and who will take care of us during these three days in the virtual lobby



























ADCSS2020 - Let's Get Digital Platform





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10:32:35







