

# ADCSS 2019 Closing remarks

# Some Statistics

180 registered participants spread over 3 days

21 different countries (even China & Argentina)

53 presentations

15 boxes of cookies = 1125 cookies 😊

6 Exhibitors



All presentations for ADCSS 2019 will be available at:

[adcss.esa.int](http://adcss.esa.int) (you will be redirected to the indico site)

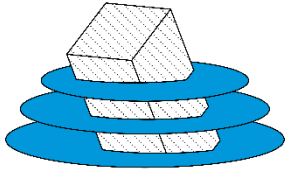
Reminder:

- All material presented at the workshop is assumed to be cleared of any restrictions preventing it from being published on the ADCSS website.

Previous years ADCSS are also accessible on [indico.esa.int](http://indico.esa.int)

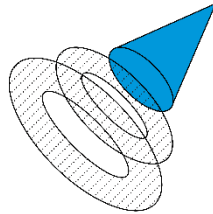
- Search with keyword ADCSS

# ESA Technology Development targets



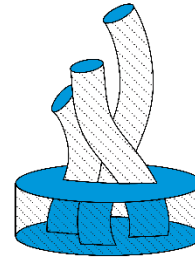
## 1/3 REDUCTION IN BUILD TIME BY 2023

A 30% improvement of s/c development time by 2023. Fully digitise the workflow. Increased flexibility, scalability and adaptability based on modular space system designs.



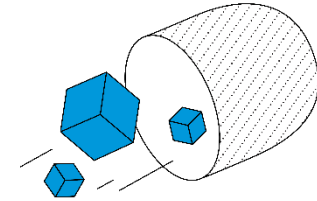
## REDUCE SPACE COSTS BY A FACTOR OF TEN

allow end-to-end cost efficiency improvement by one order of magnitude to the user when considering space as a service.



## INCREASE INNOVATION AND ADOPTION BY 30%

Double technologies demonstrated at TRL [8/9] per year by 2021. Reduce the time from TRL 4/5 to TRL 7/8 by 50%. Double the use of COTS in ESA spacecraft by 2021



## BECOME SPACE-DEBRIS NEUTRAL BY 2030

We develop the technologies that allow us to leave the space environment to the next generation in better shape than we found it.



# Can We Contribute to these Goals?



## Reduce Build Time

- SAVOIR for elements to increase reuse
- MBSE to make V&V more efficient

## Reduce Space Cost (Effectiveness)

- AI for more output for same investment
- COTS for lower cost at same performance

## Increase Innovation and Adoption

- Demonstrating, piloting, training, workshops, addressing the painpoints





# Some impressions



# Thank you



Special Thanks to all participants and exhibitors

Session convenors

- Jean-Loup Terraillon (1<sup>st</sup> day, SAVOIR session)
- Marco Rovati (overall organisation and 2<sup>nd</sup> day)
- Marcel Verhoef, Benedicte Girouart, Massimo Casasco (3<sup>rd</sup> day)

Thanks to all presenters, exhibitors

- In particular: Torbjörn Hult – Key note speaker

Special thanks to

- Kathleen Gerlo, Milena van Schendel and Monique Hansen-Daniel



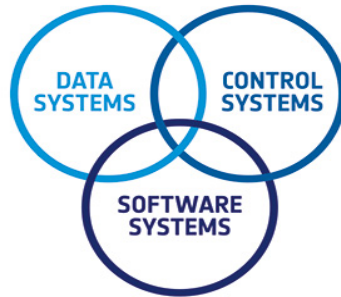
# Next ADCSS



## 14<sup>th</sup> Workshop on Avionics, Data, Control and Software Systems ~ ADCSS 2020 ~

20-22 October 2020 | ESA/ESTEC | The Netherlands

The Data Systems, Microelectronics & Component Technology Division (TEC-ED)



GNC, AOCs & Pointing Division (TEC-SA)

Software Systems Division (TEC-SW)

