# ESCCON 2019
# The European Space Component Conference

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SCSB Chairwoman

11-13 March 2019

# What is ESCCON?

ESCCON= European Space Components Conference

ESCCON Policy, responsibilities and procedures defined in ESCC 11302: Organization of the European Space components Conference

Under the responsibility of the SCSB (ESCC Space Components Steering Board)

Supported by ESCC Members and Observers

# ESCCON 2019

Program based on invited speakers only

Previous ESCCONs

2000

2002

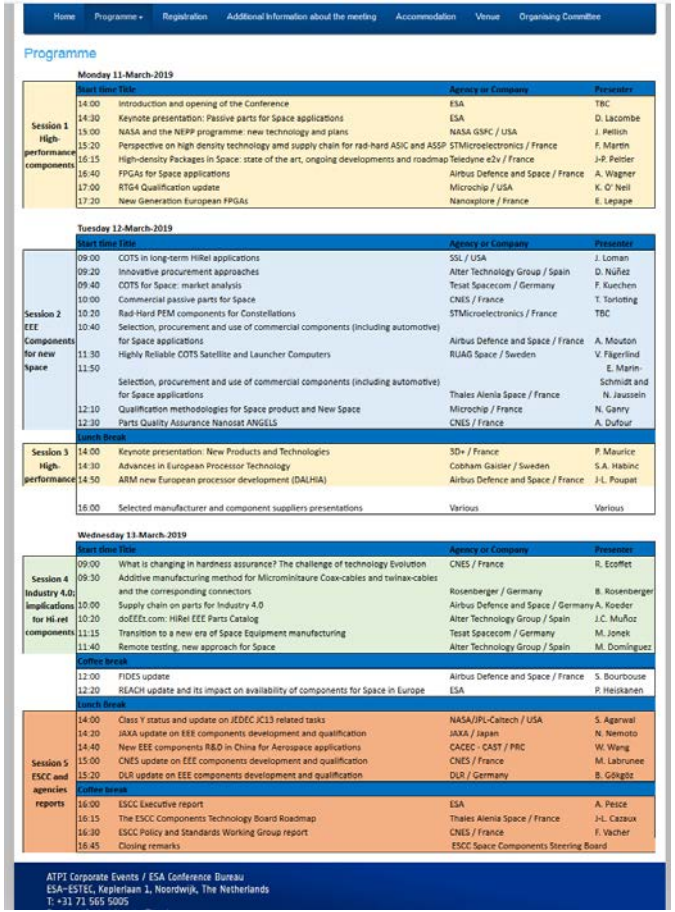
2011

2013

2016

2019

Proceedings available at https://escies.org



Home | Programme | Registration | Additional information about the meeting | Accommodation | Venue | Organising Committee

## Programme

**Monday 11-March-2019**

| Session | Start time | Title | Agency or Company | Presenter |
|---|---|---|---|---|
| Session 1 High-performance components | 14:00 | Introduction and opening of the Conference | ESA | TBC |
| | 14:30 | Keynote presentation: Passive parts for Space applications | ESA | D. Lacombe |
| | 15:00 | NASA and the NEPP programme: new technology and plans | NASA GSFC / USA | J. Pellish |
| | 15:20 | Perspective on high density technology amd supply chain for rad-hard ASIC and ASSP | STMicroelectronics / France | F. Martin |
| | 16:15 | High-density Packages in Space: state of the art, ongoing developments and roadmap | Teledyne e2v / France | J-P. Peltier |
| | 16:40 | FPGAs for Space applications | Airbus Defence and Space / France | A. Wagner |
| | 17:00 | RTG4 Qualification update | Microchip / USA | K. O' Neil |
| | 17:20 | New Generation European FPGAs | Nanoxplore / France | E. Lepape |

**Tuesday 12-March-2019**

| Session | Start time | Title | Agency or Company | Presenter |
|---|---|---|---|---|
| Session 2 EEE Components for new Space | 09:00 | COTS in long-term HiRel applications | SSL / USA | J. Loman |
| | 09:20 | Innovative procurement approaches | Alter Technology Group / Spain | D. Núñez |
| | 09:40 | COTS for Space: market analysis | Tesat Spacecom / Germany | F. Kuechen |
| | 10:00 | Commercial passive parts for Space | CNES / France | T. Tortotting |
| | 10:20 | Rad-Hard PEM components for Constellations | STMicroelectronics / France | TBC |
| | 10:40 | Selection, procurement and use of commercial components (including automotive) for Space applications | Airbus Defence and Space / France | A. Mouton |
| | 11:30 | Highly Reliable COTS Satellite and Launcher Computers | RUAG Space / Sweden | V. Fägerlind |
| | 11:50 | Selection, procurement and use of commercial components (including automotive) for Space applications | Thales Alenia Space / France | E. Marin-Schmidt and N. Jaussein |
| | 12:10 | Qualification methodologies for Space product and New Space | Microchip / France | N. Ganry |
| | 12:30 | Parts Quality Assurance Nanosat ANGELS | CNES / France | A. Dufour |
| | Lunch Break | | | |
| Session 3 High-performance | 14:00 | Keynote presentation: New Products and Technologies | 3D+ / France | P. Maurice |
| | 14:30 | Advances in European Processor Technology | Cobham Gaisler / Sweden | S.A. Habinc |
| | 14:50 | ARM new European processor development (DALHIA) | Airbus Defence and Space / France | J-L. Poupat |
| | 16:00 | Selected manufacturer and component suppliers presentations | Various | Various |

**Wednesday 13-March-2019**

| Session | Start time | Title | Agency or Company | Presenter |
|---|---|---|---|---|
| Session 4 Industry 4.0: implications for Hi-rel components | 09:00 | What is changing in hardness assurance? The challenge of technology Evolution | CNES / France | R. Ecoffet |
| | 09:30 | Additive manufacturing method for Microminiature Coax-cables and twinax-cables and the corresponding connectors | Rosenberger / Germany | B. Rosenberger |
| | 10:00 | Supply chain on parts for Industry 4.0 | Airbus Defence and Space / Germany | A. Koeder |
| | 10:20 | doEEEt.com: HiRel EEE Parts Catalog | Alter Technology Group / Spain | J.C. Muñoz |
| | 11:15 | Transition to a new era of Space Equipment manufacturing | Tesat Spacecom / Germany | M. Jonek |
| | 11:40 | Remote testing, new approach for Space | Alter Technology Group / Spain | M. Dominguez |
| | Coffee break | | | |
| | 12:00 | FIDES update | Airbus Defence and Space / France | S. Bourbouse |
| | 12:20 | REACH update and its impact on availability of components for Space in Europe | ESA | P. Heiskanen |
| | Lunch Break | | | |
| Session 5 ESCC and agencies reports | 14:00 | Class Y status and update on JEDEC JC13 related tasks | NASA/JPL-Caltech / USA | S. Agarwal |
| | 14:20 | JAXA update on EEE components development and qualification | JAXA / Japan | N. Nemoto |
| | 14:40 | New EEE components R&D in China for Aerospace applications | CACEC - CAST / PRC | W. Wang |
| | 15:00 | CNES update on EEE components development and qualification | CNES / France | M. Labrunee |
| | 15:20 | DLR update on EEE components development and qualification | DLR / Germany | B. Gökgöz |
| | Coffee break | | | |
| | 16:00 | ESCC Executive report | ESA | A. Peice |
| | 16:15 | The ESCC Components Technology Board Roadmap | Thales Alenia Space / France | J-L. Cazaux |
| | 16:30 | ESCC Policy and Standards Working Group report | CNES / France | F. Vacher |
| | 16:45 | Closing remarks | ESCC Space Components Steering Board | |

ATPI Corporate Events / ESA Conference Bureau
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# ESCCON 2019 - Main Sessions

**High performance Components**

**EEE Components for New Space**

**Industry 4.0: Implication for high-rel parts**

**Policy and Strategy on Components for Space**

**Selected Manufacturer presentations**

# ESCCON 2019 - Relevant Topics

**Standardization**

**New technology and validation test methods**

**Harmonization of needs and funding**

**Project requirements for EEE parts**

**Supply chain changes**

**Industrial experience and expectations**

# ESCC discussion themes

How to match the traditional ESCC qualification approach to the European component market dynamics and offer

How to develop new qualification schemes for non traditional EEE parts: Plastic packages, lead free, recognition of automotive qualification

What is an European Component nowadays?

# Challenges faced at ESA

The adoption of components in ESA projects is currently made in line with reliability requirements corresponding to components classifications rather then specific mission and payload profiles

The conventional/ traditional approach to select and qualify a technology or a EEE component should possibly evolve considering possibly more extensive usage of commercial parts

ESA has initiated internal actions, supervised by a Steering Committee and dedicated Working Groups across all Programme domains to address the use of COTs in ESA projects

# What's Next at ESA

Evolution of the mission PA requirements

Mission criticality classification scheme for ESA missions

New test methodologies at component level and at module level

Definition of ESA COT/COTS+ Strategy Roadmap to support use in future missions

# ESCCON expected outputs

ESCCON main objectives are to contribute to outline a strategy on assuring access to strategic component technologies for future space missions taking into considerations the needs coming from the traditional High-Rel space and the New Space

Expected outputs are the definition of new methodologies to make state of the art technologies available for future high end missions while understanding and mitigating risks related to the space environment