

# PSATS 2011 - FULL PROGRAM

**February 17, 2011**

*Time schedule*

- 9:00 - 9:15** Welcome Message (Chairs, Organizers, ICST)
- 9:15 - 10:15** Keynote I: Personal Satellite Access Terminals: Observations with a 40-year Perspective  
*Paul Febvre, Inmarsat, UK*
- 10:15 - 10:30** **COFEE BREAK**

**10:30 - 11:30**

## **Multiservice IP Next Generation Satellite Networks**

(Special Session by ThalesAleniaSpace -Spain)

Chair: Ana Yun Garcia, Thales Alenia Space España, Spain

- #15572 **DVB-RCS New Generation Towards NGN Convergence**  
*Borja de la Cuesta, Juan Manuel Rodriguez Bejarano, Isaac Moreno Asenjo, Ana Yun Garcia*
- #15573 **IP Satellite Services and Applications Evolution Towards the Future Internet**  
*Juan Manuel Rodriguez Bejarano, Ana Yun Garcia, Borja de la Cuesta, Isaac Moreno Asenjo*
- #15575 **GSE: a New Step for DVB Networks Convergence**  
*Isaac Moreno Asenjo, Borja de la Cuesta, Gorry Fairhurst*

**11:30 - 12:30**

## **Bandwidth Allocation**

Chair: Giovanni Giambene, University of Siena, IT

- #15661 **Modeling Dynamic Satellite Bandwidth Allocation for Situation-Awareness Applications**  
*Laura Galluccio, Alessandro Leonardi, Giacomo Morabito, Sergio Palazzo, Corrado Rametta*
- #15586 **Optimum Beam Bandwidth Allocation Based on Traffic Demands for Multi-Spot Beam Satellite System**  
*Unhee Park, Hee Wook Kim, Dae-Sub Oh*
- #15577 **Performance Analysis of Satellite-HSDPA Transmissions in Emergency Networks**  
*Alessandro Raschellà, Giuseppe Araniti, Anna Umbert, Antonio Iera, Antonella Molinaro*

12:30 - 14:00

## LUNCH

14:00 - 15:30

### Aeronautical Communications for Air Traffic Management - Part I

(Special Session organized by Bradford University)

Chair: Yim Fun Hu, University of Bradford, UK

*no paper, oral*

**The ESA Iris Programme - Service and Technology Innovation**

*Catherine Morlet, ESA, The Netherlands*

#15670

**THAUMAS: Study on Swift Broadband Improvement for Compliance with SESAR Requirements**

*Laurent Bouscary*

#15671

**ANTARES System Design Options for Satellite-based Air Traffic Management**

*Paolo Conforto*

#15669

**Iris Operations Studies SIRIO ? Study for the Satellite Air-Ground Interface with Reliable and Interoperable Operations**

*Manuela Rossi, Laura Anselmi*

15:30 - 16:00

#15687

**Eutelsat Experiences on Remote Terminals for High Speed Mobility Services in Ku and Ka Band**

*Eros Feltrin, Jean-Marie Freixe, Elisabeth Weller, EUTELSAT, FR*

16:00 - 16:15

## COFFEE BREAK

16:15 - 17:15

### DVB-S2

Chair: Claudio Sacchi, University of Trento, Italy

#15516

**Optimization of the Headers in DVB-S2 and GSE for Conveying IP Packets over GSE**

*Juan Pedro Mediano Alameda, Patrick Gelard, Emmanuel Dubois, Raquel Barco*

#15569

**A Low Complexity Concealment Algorithm for H.264 Encoded Video over DVB-S2**

*Susanna Spinsante, Claudio Sacchi, Ennio Gambi*

#15568

**OAM Technique Based on ULE for DVB-S/S2 Transmission Systems**

*Raffaello Secchi, Nimbe L Ewald, Gorry Fairhurst*

17:15 - 18:30

## Hybrid Networks

**Chair: Rosario Firrincieli, University of Bologna, Italy**

- #15579 **TCP Performance in Hybrid Satellite - WiFi Networks for High-Speed Trains**  
*Giovanni Giambene, Silvia Marchi, Sastri Kota*
- #15547 **Digital Advanced Rural Testbed for Next Generation Access**  
*Graham Peters*
- #15567 **OLSR-H: a Satellite-Terrestrial Hybrid Broadcasting for OLSR Signaling**  
*Carlos Giraldo, Laurent Franck, Cédric Baudoin, André-Luc Beylot*
- #15667 **Energy Efficient Cooperative HAP-Terrestrial Communication Systems**  
*Kandeepan Sithamparanathan, Tinku Rasheed, Sam Reisenfeld*

20:00

## **Conference Banquet**

### **February 18, 2011**

9:00 - 10:00

**Keynote II: Satellite Communications Security - Current Status and Future Expectations**  
*Haitham S. Cruickshank, University of Surrey, UK*

10:00 - 11:30

## **Delay Tolerant Networking**

(Special Session by SatNEx III)

**Chair: Haitham S. Cruickshank, University of Surrey, UK**

- #15676 **SatNEx Phase III ? Satellite Communication Network of Experts**  
*Erich Lutz, Barry Evans, Alessandro Vanelli-Coralli, Tomaso De Cola, Giovanni Giambene*
- #15576 **DTN for LEO Satellite Communications**  
*Carlo Caini, Rosario Firrincieli*
- #15580 **ASaMF:Asymmetric Spray and Multi-Forwarding for DelayTolerant Networks**  
*Yue Cao, Haitham S. Cruickshank, Zhili Sun*
- #15666 **A Proactive DOS filter Mechanism for Delay Tolerant Networks**  
*Godwin Okon Ansa, Haitham Cruickshank, Zhili Sun*

#15589 **Confirmed Delivery Multicast Protocol in Delay Tolerant Networks**  
*Alberto Gotta, Nedo Celandroni, Erina Ferro*

11:30 - 11:45

## COFEE BREAK

11:45 - 13:00

## Channel Estimation and Interference Management

Chair: Kandeepan Sithampanathan, CREATE-NET, Italy

#15564 **Blind Demodulation Framework for Satellite Signals**  
*Markus Flohberger, Wilfried Gappmair, Otto Koudelka*

#15565 **Channel Estimation on the Forward Link of Multi-Beam Satellite Systems**  
*Michael Bergmann, Wilfried Gappmair, Carlos Mosquera, Otto Koudelka*

#15574 **Interference Management versus Interference Cancellation: SATCOM case**  
*Lei Jiang, Maria-Angeles Vazquez-Castro*

#15587 **Coordinated Multi-point Transmission Combined with Cyclic Delay Diversity in Mobile Satellite Communications**  
*Hee Wook Kim*

13:00 - 14:00

## LUNCH

14:00 - 15:30

## Aeronautical Communications for Air Traffic Management - Part II

(Special Session SANDRA organized by Bradford University)

Chair: Prashant Pillai, University of Bradford, UK

#15603 **SESAR and SANDRA: new Paradigms for Aeronautical Communications**  
*Angeloluca Barba, Federica Battisti*

#15588 **The SANDRA Communications Concept - Integration of Radios**  
*Jim Baddoo, Peter Gillick, Rex Morrey, Aleister Smith*

#15566 **The SANDRA Communications Concept - Future Aeronautical Communications by Seamless Networking**  
*Simon Plass, Christian Kissling, Tomaso De Cola*

#15591 **A Networking Testbed for IPv6-Based Future Air Traffic Management (ATM) Network**  
*Oliver Lücke, Eriza Hafid Fazli*

#15596

**Common RRM in Satellite-Terrestrial Based Aeronautical Communication Networks**

*Muhammad Ali, Prashant Pilai, K. J. Xu, Yim Fun Hu*

15:30 - 15:45

**COFEE BREAK**

15:45 - 16:45

**Satellite Antenna Design**

Chair: Danai Skournetou and Elena-Simona Lohan, Tampere University of Technology, Finland

#15534

**A Broadband CPW-Fed Printed Single-Patch Antenna for Galileo Applications**

*Constantinos T. Angelis, Spyridon K. Chronopoulos*

#15570

**Design of MIMO Satellite System: Model and Inter Antenna Spacing Using System Capacity Maximization**

*Boujnah Nouredine*

#15578

**Unified Multibeam Satellite System Model for Payload Performance Analysis**

*Ricard Alegre, Maria-Angeles Vazquez-Castro, Lei Jiang*

16:45 - 17:45

**Localization Systems**

Chair: Wilfried Gappmair, University of Graz, Austria

#15538

**Galileo E1 and E5a Link-level Performances in Single and Multipath Channels**

*Jie Zhang, Elena-Simona Lohan*

#15554

**Galileo Dual-Channel CBOC Receiver Processing Under Limited Hardware Assumption**

*Elena-Simona Lohan*

#15531

**Comparison of Single and Dual Frequency GNSS Receivers in the Presence of Ionospheric and Multipath Errors**

*Danai Skournetou*

17:45 - 18:00

**Best Paper Award Ceremony (young and senior categories)**

**Close of the Conference: see you to next year !**