LONDON, 27 – 28 APRIL 2017

The EUROCAE SYMPOSIUM & 54TH GENERAL ASSEMBLY

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The EUROCAE Annual Symposium offers a unique opportunity to unite representatives from the entire aeronautical community in a debate the outcome of which directly serves the progress of our Organisation's work programme. After a very successful event in 2016, this year's Symposium will offer another platform to discuss a selection of highly topical subjects.

The subjects on the agenda have been chosen for their current relevance to the aviation industry. Performance has become a key driver of the air transportation system, which will be addressed from several angles. For long, the concept of "performance based regulation" has remained little more than buzz word aspiration. The Symposium will attempt to flesh out some of the concrete implications of that model. The practical dimension of performance based navigation will also be discussed. Unmanned aircraft systems is another subject which ranks increasingly high on the civil and military aviation agenda and it is high time to elaborate a regulatory framework to support the technical and operational aspects of unmanned aircraft activities.

The quality of the speakers who have been invited to discuss these various subjects promises a most interesting and informative event. They are all recognised authorities in their areas of specialisation. But the value of the Symposium arises not only from the quality of the various presentations but also from the active engagement of all participants, the collective sharing of knowledge and the diversity of the opinions expressed. It is the combination of these elements which brings EUROCAE's agenda forward.

It is my pleasure to welcome you to the EUROCAE Symposium 2017. I am looking forward to sharing this moment with you and wish you a very successful event.

Francis Schubert
EUROCAE President

It is my pleasure to welcome you on behalf of the General Secretariat to the EUROCAE Symposium 2017. This year's edition of the Symposium brings us to one of the most vibrant and chiefly important aviation centres in the world: London. With 12% of our members coming from the United Kingdom, we see a clear interest and active involvement here, translating in 27 member organisations supporting the mission of EUROCAE. The Symposium aims at gathering your input so we can use the conclusions of each of the topics mentioned below to shape the EUROCAE work programme. Our special event features distinguished representatives from EASA, European Commission, ICAO, SJU, SDM, FAA, RTCA, EUROCONTROL, UK CAA and prominent industry leaders from around the world tackling the most topical subjects of the aviation industry.

This year our speakers will start the 'roundtable' discussions with an insight on the Performance Based Regulations. The following panels will offer you an perspective from General Aviation (GA) and the fast-developing world of the Unmanned Aircraft Systems (UAS). Performance Based Navigation (PBN), Datalink and Service Wide Information Management (SWIM) will be equally explored over the two days of the Symposium. Already last year we realised the changing environment and the increased demand for standards. This year we are going further. With the regulator providing a high level, performance based and proportional regulatory framework, standard developing organisations (SDOs) are asked to complement these regulations with more and more "how to comply" standards. EUROCAE and its members are ready to accept and address these challenges. The Symposium will discuss what would be the best approach going forward.

Following last year's success, the Award Night is organised during the Gala Dinner to recognise outstanding leadership and contributions to our Working Groups. The winners from the following categories will be inducted on 27 April: Global Harmonisation Award, Working Group Leadership Award, Best Contribution Award, International Contribution Award, Women in Aviation Award, and Lifetime Achievement Award.

The Symposium is also the perfect occasion to meet other members and representatives of the aviation industry. It would also provide an excellent venue to meet fellow aviation professionals and to network. Please make best use of the Symposium, raise your point, give us feedback and your input; we are here to facilitate the discussion and listen carefully to our stakeholders.

As our event would not have been possible without the support from our sponsors, I would like to thank once again to all those who have provided us generous contributions this year. Likewise, I would like to thank the Secretariat team that enabled the smooth organisation of the Symposium and brought to you top speakers and an exciting agenda. I wish you a successful two days ahead and we will keep you posted with the conclusions of the event in the next edition of the Broadcast, the Annual Report as well as in the upcoming NEWSblog.

With best regards,

Christian Schleifer-Heingärtner
EUROCAE Secretary General

As Chair of the Council, and on behalf of the whole Council, it is my honour to welcome you to this years symposium and the EUROCAE General Assembly.

This year's symposium covers a range of subjects which are important and topical for our industry and we have some excellent speakers and panel members. I am sure they will stimulate some good debate and challenge. The whole event is made better by members contribution and so I encourage you to take an active part in the question and answer sessions.

One thing I have always valued about the symposium is that it provides an opportunity for networking with other aviation industry stakeholders who attend. Again, I encourage you to make the most of this opportunity in the breaks and the evening and catch up with old acquaintances and create new connections.

The Symposium and General Assembly take a lot of effort to plan and organise – I would like to thank the EUROCAE Secretariat for the preparation of this event, our Sponsors and all our panel members for their support and participation.

I hope you all enjoy this symposium and I look forward to talking to you over the course of the event.

David Hawken
EUROCAE Council Chair

PROGRAMME

THURSDAY 27 APRIL 2017

09:00 REGISTRATION

10:30 OPENING BY THE SECRETARY GENERAL
Christian Schleifer-Heingärtner, EUROCAE

PRESIDENT'S ADDRESS
Francis Schubert, Skyguide - Swiss Air Navigation Services Ltd., EUROCAE President

WELCOME BY THE HOST COUNTRY
Dame Deirdre Hutton, Chair UK CAA

11:00 KEYNOTE SPEECHES
Maurizio Castelletti, European Commission
Adriaan Heerbaart, EUROCONTROL
Nicolas Warinsko, SESAR Deployment Manager

11:30 COFFEE BREAK sponsored by IATA

12:00 SESSION 1: Performance based regulations

Performance-based regulation has been recognised as a new regulatory approach that focuses on desired, measurable outcomes, rather than prescriptive processes, techniques, or procedures, leading to defined results without specific direction regarding how those results are to be obtained.

However, more high-level, performance-based regulations need to be supported by technical standards that provide means of how to comply with the requirements. This has been widely recognised by the regulators and industry stakeholders and is being actively pursued at many levels.

ICAO has set up the Standards Round Table, looking at processes and procedures to implement this approach to drafting of their provisions and enhanced coo-peration with the Standards-Developing Organisations (SDOs), and regional and national organisations such as EASA and the FAA already have a long tradition of collaboration with the standardisation bodies.

This session will look at the concept of performance based regulation and its practical implementation, based on examples and best practices from various organisations and subject matters.

Moderator:

Margaret Jenny, RTCA, Inc.

Speakers:

Maurizio Castelletti, European Commission
Margaret Jenny, RTCA, Inc.
Richard Macfarlane, ICAO
Yves Morier, EASA
Christian Schleifer-Heingärtner, EASCG

13:00 LUNCH sponsored by HELIOS

Speech by **Mike Shorthose, Helios, Executive Chairman**

14:00 SESSION 2: General Aviation

The majority of the world's aircraft are GA and most of the world's airports serve GA exclusively.

Also, GA is an environment for experimentation. The first all-electric aircraft to fly are GA. Innovative avionics are available, although different certification and approval regimes limit the degree of uptake. This is changing in both Europe and the USA and moving towards performance-based, industry-consensus standards.

GA can fly in the same airspace as Air Transport, so must be able to interoperate safely. GA flies also in uncontrolled airspace with limited interaction with ATC or other aircraft. This leads to a huge variety of technical equipage but with many commonalities. VHF radio communication is universal, while surveillance transponders work on the same frequencies and protocols worldwide and all pilots need to be able to navigate accurately. GPS has facilitated instrument approaches at more and more GA airports, with work on PBN approaches for GA airfields under way, supported by SESAR.

ADS-B and Multilateration to complement radar will increase as European infrastructure is modernised. This has already happened in the USA, where all aircraft are required to be ADS-B equipped by 2020. Moreover, the European surveillance "mandate" is being revised, with possible impact on many GA aircraft. The panel will discuss the key challenges that arise for GA, including how to provide suitable equipment at a proportionate and affordable cost.

Moderator:

Philip Church, Helios

Speakers:

Jonathan Archer, GAMA USA
John Korna, NATS UK
Friedhelm Runge, EASA
Julian Scarfe, PPL IR
Stu Wain, UK CAA

15:00 SESSION 3: UAS – regulatory perspective

Unmanned Aircraft Systems (UAS) has without doubt been the most dynamic sector in aviation over the last couple of years. But it is also extremely diverse with aircraft ranging from a few grams to hundreds of kilograms. Even wider is the spectrum of UAS operations: from the hobbyist who wants to use the aircraft for pleasure - all the way to the military systems that are flown using Instrument Flight Rules (IFR) around the world.

These systems and their operations have to be integrated into civil airspace in a way that is safe for both existing manned aviation (GA and Air Transport) and for the UAS newcomers. This requires an adaptation of the way that aircraft and operations are currently managed. One size does not fit all!

Since the operation of UAS differs greatly from manned aviation, new approaches have to be applied to both, regulation and operation – which is why this Symposium will deal with UAS in two sessions.

The first session looks at the regulatory aspects. With the Riga and the Warsaw declaration the European Commission has set the political goals for the safe integration of UAS into the airspace. EASA, with the A-NPA 2015-10 and the Prototype Regulation on UAS has taken the first step towards regulation of RPAS operations. EASA makes use of the support of JARUS for the development of the provisions that support the implementation of these rules.

Moderator:

Paul Ravenhill, Think Research

Speakers:

Richard Macfarlane, ICAO

Manfred Mohr, IATA

Yves Morier, EASA

Lorenzo Murzilli, JARUS

16:00 COFFEE BREAK

16:30 SESSION 4: Performance Based Navigation (PBN)

Performance Based Navigation (PBN) as a concept is based on the use of Area Navigation (RNAV) systems to ensure global standardisation of Required Navigation Performance (RNP) Specifications. It represents a fundamental shift from sensor-based navigation to performance-based navigation. Significant benefits in terms of more efficient use of the airspace and environmental improvements are expected. However there are still some very important items to be discussed.

For instance, phraseology and charting aspects, knowledge and training of flight crew, adequacy of PBN Specifications vs the needs of the end-users, ATC personnel and regulator issues, and a way to allow the General Aviation community to benefit from PBN. The means by which global navigation satellite systems GNSS (Galileo, GPS, GLONASS, BeiDou etc.) can be used within Europe, including associated signal monitoring obligations will also be discussed by the panel.

The discussions will touch on the environmental and social impact of PBN with regard to the overflown areas/populations, and the concentration of noise emissions on specific flight trajectories. The panel will debate, with a particular focus on the implementation gaps, the need for development of Navigation Specifications, and provide an outlook on the emerging technologies and their impact on industry standards development.

Moderator:

Manfred Mohr, IATA

Speakers:

Geoff Burtenshaw, UK CAA
John Dyson, NATS
Franca Pavlicevic, EUROCONTROL
Sylvain Raynaud, Airbus
Friedhelm Runge, EASA

ICAO: TBD

17:45 END OF DAY 1

18:00 EUROCAE GENERAL ASSEMBLY

Open to all EUROCAE Full Members.

20:00 GALA DINNER & AWARD NIGHT

The Gala Dinner will take place at the Royal Aeronautical Society, No. 4 Hamilton Place, London. Logistic information is available on next page.

The EUROCAE Awards is intended to recognise excellence, leadership and hard work in EUROCAE WGs be it by the WG Chairperson, Secretary, or other key members of the group. The Awards categories are **Global harmonisation**, **Working Group leader**, **Best contribution**, **Women in aviation, International contribution** and **Lifetime achievement.**

GALA DINNER & AWARD NIGHT

20:00 **Gala Dinner & Award night** at the Royal Aeronautical Society, No. 4 Hamilton Place, W1J 7BQ, London

EUROCAE AWARDS

EUROCAE's work is based on contributions from voluntary workforce nominated by our members. These experts are the heart of the organisation and are driving the standard development process. The EUROCAE Awards are intended to recognise excellence, leadership and hard work in EUROCAE WGs by the WG Chairperson, Secretary, or other key members of the group.

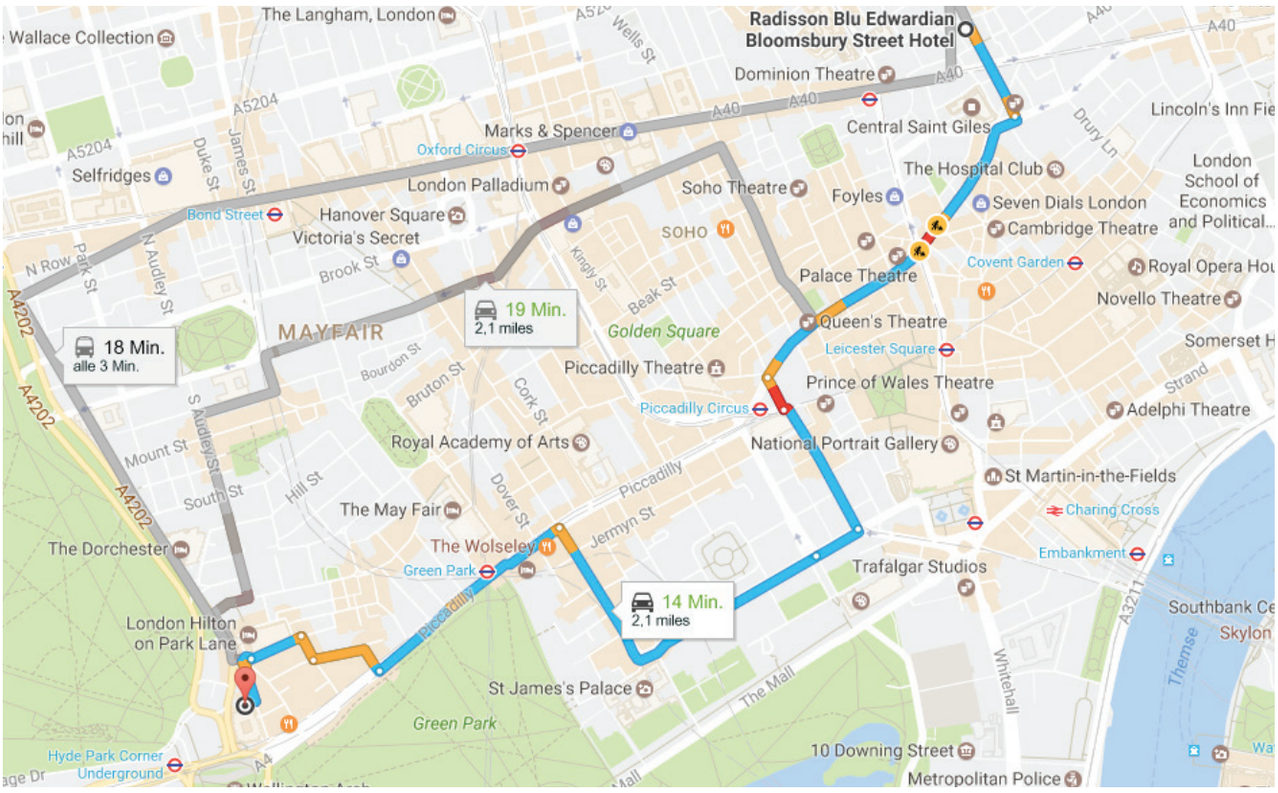
The categories, which have been chosen based on key areas of importance to EUROCAE WGs, are:

- **Global harmonisation:**
  To recognise joint WGs activities and to support worldwide interoperability and global harmonisation
- **Working Group leader:**
  To recognise excellent leadership of a WG or activity
- **Best contribution:**
  To recognise outstanding contributions to a WG
- **Women in aviation**
  Recognising outstanding contributions by a female Working Group member
- **International contribution:** To recognise specifically participation from non-European stakeholders.
- **Lifetime achievement**
  Presented to a Working Group member for long-lasting outstanding support to EUROCAE

Dress Code: Business formal

FROM RADISSON BLU EDWARDIAN BLOOMSBURY HOTEL (TUBE TOTTENHAM COURT ROAD) TO NO.4 HAMILTON PLACE, W1J 7BQ, LONDON (TUBE HYDE PARK CORNER):

Trip duration: about 15-20 minutes



PROGRAMME

FRIDAY 28 APRIL 2017

09:00 **OPENING OF DAY 2 - OPENING BY THE SECRETARY GENERAL**

Christian Schleifer-Heingärtner, EUROCAE

09:05 **SESSION 5: Datalink services and technologies**

Datalink services are recognised as a key technical enabler paving the way to the evolution of ATM in order to face the challenges ahead that are the capacity and efficiency improvements to cope with the growing traffic demand over the next decades. The initial Datalink services (i.e. ATN B1) were standardised more than 15 years ago and are in the process of implementation in different parts of the world based on various technologies. The last package of datalink applications was standardised in 2016: this package (i.e. ATN B2) covers the basic functionalities to move to trajectory based operations (TBO). A ground based cellular system named LDACS that will operate in the L band spectrum part coexisting with several other CNS systems (DME, Mode S, GNSS L5/E5,..). This solution is still under investigation to validate the possible sharing of this spectrum with other critical systems without degrading them. Besides the basic radiocommunication technologies another new debate is now taking place regarding the network aspects (i.e. the capacity of the airborne system to use different technologies in a transparent way from the datalink application point of view). The objectives of this session will be to present the current situation and to identify the major challenges ahead that are linked with the technical difficulties that have been faced during implementation in Europe and that are linked with the lack of a clear evolution roadmap regarding the technologies to be deployed (they must be minimised and they must be viable economically – for an operation life cycle of at least 25 years).

Moderator:

Pascal Dias, EUROCONTROL

Speakers:

Danny Bharj, Satellite Inmarsat
Bernard Bourcier, Thales Avionics
Jerome Condis, Airbus
Davide Corinaldesi, SDM
Dinesh Gogna, NATS
Julia Jiggins, Thales UK
Stephane Marche, Honeywell
Pascal Medal, EASA
Manfred Mohr, IATA
Stephane Pelleschi, Rockwell Collins

10:45 **Keynote speaker**

David Alexander, SAE International

Signature of EUROCAE-ECA MoU

Jon Horne, Vice-President, European Cockpit Association (ECA)
Christian Schleifer-Heingärtner, EUROCAE Secretary General

11:15 **LUNCH**

12:15 SESSION 6: UAS – technology and operations

This second UAS session will look at the technological and operation related aspects of the safe integration of UAS into the airspace. In future the determination of the rules to be applied will be performed in a risk-based, operation centric approach. With the three categories of operations (Open, Specific, Certified), a basic categorisation has already been defined. Standardisation will be key to ensure that the same procedures and technologies are applied globally. EUROCAE WG-105 has been tasked to develop such standards for the whole spectrum of UAS aircraft and operations. If future operations of UAS shall be successful, it is important to take into account the requirements and needs of manned aviation. Both types of airspace users have to fit into the concept of the provision of Air Navigation Services.

Moderator:

Juan Ignacio del Valle, EDA

Speakers:

Michael Allouche, IAI
Perran Bonner, ARPAS-UK
Juan Ignacio del Valle, EDA
Thomas Hoffmann, Austro Control
Yves Morier, EASA
Lorenzo Murzilli, JARUS

13:45 SHORT BREAK

14:00 SESSION 7: System Wide Information Management

System Wide Information Management (SWIM) is an enabler that facilitates interoperable information exchange in the European ATM system, in support of operational improvements identified in the ATM Master Plan. The definition of SWIM is as follows: "SWIM consists of standards, infrastructure and governance enabling the management of ATM information and its exchange between qualified parties via interoperable services". The implementation of SWIM will not be a big-bang replacement of the existing ATM environment, but rather an evolutionary process based on a gradual transition towards a service-oriented European ATM system. The adoption of SWIM will be flexible, fostering increased levels of collaboration within business domains and enabling supporting systems to interact in an interoperable and standardised way. Within the SESAR programme, activities on SWIM have reached a maturity level where the first SWIM services are now ready for standardisation.
The European Commission has adopted the Pilot Common Project (PCP) regulation which includes, among others, provisions for the deployment of initial SWIM services using the related and validated SESAR Programme findings as inputs. The rule was published on 27 June 2014 in the Official Journal of the European Union. It aims to ensure that the ATM functionalities developed within the SESAR Programme are deployed in a timely, coordinated and synchronised way. It is expected that this will contribute to cost benefits for Europe's aviation and air transport sectors, a topic the panel will discuss at length.

Moderator:

Dennis Hart, EUROCONTROL

Speakers:

Christian Accardo, ENAV
Ruben Flohr, SJU
Stéphane DUBET, DSNA
Siegfried Schäfer, DFS

15:15 EUROCAE STRATEGY AND CLOSING KEYNOTE

David Hawken, NATS, EUROCAE Council Chair

15:30 END OF SYMPOSIUM

SPEAKERS

CHRISTIAN ACCARDO

ATM SYSTEM ENGINEERING - AIRPORT SYSTEMS, ENAV

Christian Accardo joined ENAV since February 2008. He was previously employed in SICTA, an R&D ENAV Company, involved mainly in ATM Real Time Simulation concerning AMAN and MTCD Concepts Validation. He joined the WG -104 since the beginning as AMAN expert. Currently in ENAV is the Technical Manager for the integration of ATC Tools (AMAN, MTCD) into the ENAV Legacy ATM System and further integration into the future ENAV ATM System (4-Flight).

MICHAEL ALLOUCHE

AIRWORTHINESS MANAGER, ISRAEL AEROSPACE INDUSTRIES (IAI)

Michael Allouche was born in France in 1953. He is an Aeronautical Engineer, graduated from the French Aerospace Engineering School 'SupAéro' of Toulouse, in 1976.
He has more than 40 years of professional experience in the Aeronautical Industry, including 9 years as Avionics Certification Manager at Airbus Industries, Toulouse, France, where he was actively involved in the A320 Fly By Wire Certification.
In 1992, he immigrated to Israel where he joined Israel Aerospace Industries (IAI). He is currently the Airworthiness Manager at IAI's UAS Malat Division and, as such, has managed all the activities leading to various flight and airworthiness certificates granted worldwide to IAI UAS family by civil and military certification authorities.
Michael Allouche is actively involved in various UAS / RPAS rule-making studies and processes, namely in Europe. He is acting as Airworthiness Expert in the NATO STANAG 4671 Working Group. Recently appointed as co-chairman of the EUROCAE UAS WG-105, he is also participating as SME in JARUS RPAS WG6 and WG3. He is also a member of the ICAO RPAS Panel. He has been invited to give numerous lectures at various international forums about RPAS Airworthiness and Airspace Integration.

DAVID ALEXANDER

DIRECTOR, AEROSPACE STANDARDS SAE INTERNATIONAL

David Alexander has been with SAE International and its affiliates for 11 years and is based in London, UK. In May 2016, he assumed the role of Director, Aerospace Standards. In this role, David is responsible globally for the operation of the SAE Aerospace Standards program and its staff, the management support for the SAE Aerospace Council and for liaisons with key organisations around the world. This also involves leveraging standards to work across the SAE International portfolio. Supported by SAE staff in London, continental Europe, USA and China, this includes the relationships with EUROCAE and with European industry, EASA and other key aviation stakeholders in Europe and globally on new standards development as well as global strategy and outreach for SAE. He also facilitates the General Assembly of the International Aerospace Quality Group (IAQG). Prior to joining the SAE Aerospace Standards operation, David worked on the Nadcap accreditation programme through SAE's affiliate organisation PRI.

JONATHAN ARCHER

DIRECTOR OF ENGINEERING & AIRWORTHINESS, GAMA

Jonathan Archer, a 24-year aviation industry veteran, joined General Aviation Manufacturers Association (GAMA) as Director of Engineering & Airworthiness in July 2014. Archer most recently provided key support for the Federal Aviation Administration (FAA) and the Joint Planning and Development Office (JPDO) as an Associate with Booz Allen Hamilton. His work included facilitating an FAA Aviation Certification Service (AIR) pilot study implementing a voluntary Safety Management System (SMS) for select Part 21-approved design and manufacturing organizations. A Project Management Professional, Archer also provided aviation safety, certification, and system integration expertise on FAA NextGen Air Traffic Management (ATM) initiatives. Prior to this role, Archer served as a Systems Engineering Manager at Hawker Beechcraft Corporation, where he focused on improving engineering design and development processes. Previously, Archer held senior airworthiness, certification, and systems engineering positions in the United Kingdom for Raytheon Systems Ltd., Datel Defense Ltd., Marshall Aerospace Ltd., and BAE Systems. A native of York, England, Archer holds a Bachelor of Engineering with honours in Engineering and Technology from Leicester Polytechnic in the United Kingdom.

DANNY BHARJ

IRIS PROGRAMME MANAGER, INMARSAT CTO, PROGRAMMES DIVISION

Danny Bharj is Inmarsat's Iris Programme Manager, responsible for implementing and delivering the Iris Programme on behalf of Inmarsat. Iris will deliver a new generation of satellite-based data link communications to improve Air Traffic Management in Europe. In this role, Danny will lead a consortium of 30 external partners (Aviation and Space companies) and the Inmarsat team to study, design, implement and deliver the future satcom-based Air Traffic Management system. He will be working closely with key stakeholders in Inmarsat's Aviation Business Unit and at the European Space Agency to make Iris a success for Inmarsat and the aviation industry. Danny joined Inmarsat in September 2013 as an Aviation Product Manager, where he was responsible for a number of activities associated with the Inmarsat Aviation safety roadmap and products. Iris is part of Europe's ambitious intent to create the world's most advanced and secure Air Traffic Management infrastructure. Inmarsat is the prime contractor and is responsible for the execution and delivery of Iris. Prior to Inmarsat, Danny spent more than 20 years in various Air Traffic Management and aviation environment positions, including serving as the Aeronautical Telecommunications Network (ATN) Data Link Services Product Manager for SITA. Here he was responsible for all activities covering the development, integration, deployment and commissioning of new data link systems, required by both airlines and Air Navigation Service Providers. Danny has also worked at Eurocontrol where he was the Project Co-ordinate for the PETAL-II project, which implemented the first ATN in Europe using American Airlines and the ARINC VDL M2 network. Danny's career started at the UK Ministry of Defence where he worked on a number of international projects.

PERRAN BONNER

CHAIRMAN AT ARPAS-UK

Perran has held a variety of commercial and operational roles within the communications and airborne surveillance sectors over the last 19 years. He has extensive experience of working with military and government clients globally. Perran established two successful companies operating unmanned aerial systems before establishing himself as a consultant where he continues to develop new areas of business.

A keen aviator, Perran has logged hundreds of hours of flight time worldwide. Working with UAVs has enabled him to combine his personal interests and entrepreneurial skills to create business value. Since gaining his UAV operations licence he has flown a wide variety of missions for clients across multiple industries, including managing the largest unmanned survey awarded within the UK covering the entire Norfolk Broads National Park. One of his key areas of focus has been using this experience to establish safe flight operations that both streamline work in the field and deliver the best results for clients. He has worked closely with the UK Civil Aviation Authority on a number of occasions including establishing NQE status. Perran also has recent experience within the field of counter UAV technology, an area he continues to develop.

Perran is Chairman of ARPAS UK, a non-profit trade association for the UK RPAS industry. ARPAS is a professional association for remotely piloted aircraft and systems working on behalf of its members, to influence regulation and promote safe operational best practice. Working closely with the industry regulator CAA (Civil Aviation Authority) and Government to influence and ensure that the regulatory framework for the safe and professional operation of remotely piloted aircraft is fit for purpose and encourages best practice.

BERNARD BOURCIER

AERONAUTIC RADIO PRODUCTS, THALES COMMUNICATIONS AND SECURITY

Bernard is in charge of the Civil Radio development for Thales Communications.

He joins Thales in 1981 and he works on various aeronautics products like Radio-altimeters and ILS.

He is member of the WG-23 and WG-92

He participates at the SESAR working group in charge of the VDL2 issues in Europe.

GEOFF BURTENSHAW

PERFORMANCE-BASED NAVIGATION (PBN) IMPLEMENTATION LEAD UK CIVIL AVIATION AUTHORITY (CAA)

Geoff Burtenshaw is the Performance-based Navigation (PBN) Implementation Lead within the Airspace, ATM and Aerodromes team in the UK CAA, a post he has held for the last 12 years. Prior to that Geoff spent 16 years in the CAA's Safety Regulation Group fulfilling roles as an Aircraft Systems Design Surveyor and later, as an Avionics Flight Test Engineer. During this period Geoff worked on many major aircraft certification projects including B777, A340-500/600 and A380 and contributed to the development of industry Standards of Navigation Performance. He has also assisted in the drafting of European airborne navigation and flight guidance system certification criteria. His current responsibilities include supporting the delivery of the UK's Future Airspace Strategy (FAS) through advising on policies and specifically, developing guidance for the implementation of PBN within UK airspace. He is the UK member to the ICAO PBN Study Group and the ICAO Navigation Systems Panel.

MAURIZIO CASTELLETTI

HEAD OF THE SINGLE EUROPEAN SKY UNIT OF DG MOVE, EC

Born in 1958, Maurizio Castelletti is a transport engineer who graduated top of his class from the Polytechnic of Milan (Italy). He spent the first part of his professional life, between 1984 and 1995, in a private consultancy company in Italy working as a transport planner and manager of various projects covering the economic and technical feasibility of new transport infrastructures, in particular in the field of rail and road transport.
In 1995, he became an official of the European Commission in the Unit of the Directorate for Air Transport dealing with aviation safety and air traffic management issues.
From 2000 until 2003, he was employed in the Single Sky Unit of the Directorate General for Energy and Transport, where he was in charge of the development of general and specific policies relating to Air Traffic Management, including the funding programme under the Trans-European Transport Network, relations with Eurocontrol and the reform of the sector. He was the author of the Single Sky legislative proposals adopted by the European Commission in 2004.
In 2003, he was called to work in the team of the Director-General, Mr Lamoureux, to work on programming and planning aspects. He was also responsible for the supervision of all initiatives in the nuclear sector.
In April 2004, he was asked to create and manage a new horizontal unit «Strategy, Coordination, Information & Communication». Following a reorganisation in 2006 he was appointed head of the unit responsible for planning, coordination and interinstitutional relations of the Directorate-General for Energy and Transport. Since January 2007 until April 2011, he was Head of the «Railway and interoperability» unit in the Directorate-General for Mobility and Transport (DG MOVE). In this period he launched a new policy on a European rail network for competitive freight (rail freight corridors) whose regulatory framework was adopted in 2010. He has been appointed Head of the Single European Sky Unit of DG MOVE with effect from April 2011. The unit is responsible for all policy aspects concerning air traffic management including the technological pillar SESAR.

PHILIP CHURCH

PRINCIPAL CONSULTANT HELIOS

Philip is an experienced technical consultant and avionics engineer with more than 16 years' experience supporting customers achieve operational benefits from technical deployments. He has a wealth of experience in CNS ATM that includes project management, technical specifications, safety assessments, cost benefits analysis, market forecasting, training, standardisation and industry support. He has led numerous consultations on behalf of Eurocontrol, the European GNSS Agency (GSA), the European Commission (EC) and worked with numerous airports, ANSPs, National Safety Agencies (NSAs) and aircraft operators achieve operational improvements across all areas of Communications, Navigation and Surveillance (CNS) and Aeronautical Information Management (AIM).

Philip has championed the adoption of new GNSS Instrument Approach Procedures (IAPs) by General Aviation and Rotorcraft and is IAOPA's Contribution Manager in the SESAR programme with oversight and support of the technical team to meet SJU and project timescales. He has led the development of innovative solutions, building on already standardised ideas to explore their application for alternative purposes and challenging environments.

JEROME CONDIS

MULTI-PROGRAM DATA LINK AND FMS PROGRAM MANAGER, AIRBUS

Mr. Jerome Condis was awarded an Aeronautics Engineering degree from ISAE-ENSICA in June 1997 in France, equivalent to Master's degree.
Mr. Condis has about 20 years' experience in avionics systems, mainly focused on data link, navigation and air traffic management domains.
He is currently Multi-Program Data Link and FMS Program Manager for Airbus.
He has been actively involved in various international committees, ensuring Airbus collaboration with Eurocontrol, FAA, SESAR and NextGen program offices.
Jerome represents ICCAIA (Industry) in ICAO Communication Panel and Operational Services Working Group. More particularly, he was instrumental in delivering standards for ATS Data Link services based on FANS 1/A and ATN B1 within WG53/SC189 joint committee. He was also a key contributor to the definition of Advanced ATS Data Link services (Baseline 2) within WG78/SC214 joint committee since the first plenary meeting in 2007 and acted as co-chair of the committee from September 2012 to April 2016 (WG in dormant since then).

DAVIDE CORINALDESI

DATA LINK IMPLEMENTATION PROJECT MANAGER. SESAR DEPLOYMENT MANAGER

Davide Corinaldesi got in 1998 the Master Degree of Electronic Engineering at the Rome University "La Sapienza" discussing a thesis on "Air Traffic Services on VDL M4".
He joined ItalATC (in 1999 until 2000) assuming several technical roles in the Aeronautical Communications area (especially on R&D European projects about Air Traffic Services on Data Link). Then he moved to AleniaMarconiSystems (currently LEONARDO) in 2000 until end of 2001 assuming the Project Leader role of some R&D European Projects on Aeronautical Data Link.
In 2001 he joined ENAV S.p.A. (Italian Air Navigation Service Provider) assuming several technical roles in the Aeronautical Communications area as, for example, Project Leader of Satellite Data Link System (R&D project) and Project Leader of LINK IT (the Italian implementation of Air traffic Services on VDL M2).
Currently, he is in the ENAV Technical Area/CNS department (Manager staff) coordinating the ENAV CNS technical activities at international level and representing ENAV in several international working groups on Aeronautical Communications. In 2014 he has been appointed by Italian Civil Aviation Authority (ENAC) as Italian member of the ICAO Communications Panel.
Since 2016 he joined Sesar Deployment Manager as Data Link Implementation Project Manager.
His main areas of expertise are: A/G data communication networks supporting ATS (Data Link applications/services (CPDLC, ADS-C, ADS-B, FIS-B,…) and technologies), A/G voice communication systems, G/G communication networks and communication protocols.

JUAN IGNACIO DEL VALLE

PROJECT OFFICER AIR PROGRAMMES AT THE EUROPEAN DEFENCE AGENCY

Juan Ignacio del Valle is Project Officer Air Programmes at the European Defence Agency since 2014. He works mainly in RPAS Air Traffic Integration, where he leads several R&D projects and supports EDA's Member States in this area.
Prior to joining EDA, Juan Ignacio worked for Airbus Defence and Space, where he, as Head of RPAS Ground Segment, led the development of the Ground Control Stations of the UCAV Neuron and the Tactical RPAS Atlante. He also worked as Ground Systems Engineer and participated in the development of several ground subsystems for military aircraft. Before joining the aeronautics industry, he worked as Business Intelligence consultant.
Juan Ignacio holds a MS in Information Technology, a MSc. in Electronic Engineering and a BSc. in Applied Physics.

PASCAL DIAS

HEAD OF DIVISION, EUROCONTROL

Pascal is a graduated engineer from the Ecole Polytechnique in France, with more than 30 years of ATM experience. During his career, Pascal spent more than 15 years in the ATM industry; he was originally leading ATM Radars and Systems developments; he then managed contracts and prospects throughout the ATM world, and had most of the European ANSPs as customers. He also led the Strategy for transitioning to the FANS system, the new CNS / ATM for the Thomson-CSF group, now Thales.

Pascal joined EUROCONTROL in 1999 as Mode S Programme Manager, then led the Air Traffic Control Applications and Systems Division from 2004, became leader of the ATM Network Development activities in 2009 and at last joined the Network Manager in 2011 as Head of Division, Deployment Coordination, and in 2014 Head of Division CNS/AIM Services.

STEPHANE DUBET

HEAD OF RESEARCH AND DEVELOPMENT WITHIN AIS FRANCE AT DSNA

Stephane DUBET is a civil aviation engineer who graduated from the Civil Aviation Academy «ENAC» in 1992. Currently Head of Research and Development within AIS France at DSNA, Stephane has been actively contributing for over a decade to numerous international activities dealing with aeronautical information and data management. In particular, he has been chairing EUROCAE WG44 on Aeronautical Databases, joint WG with RTCA SC217, for more than 15 years. Through the SESAR framework, Stephane got involved in the work related to SWIM, in particular on the governance aspects. He is the French member of ICAO Information Management Panel and the rapporteur of its Governance Working Group. He also leads a multi-stakeholder project about deployment of SWIM governance in the context of the PCP, gathering European airlines, airports, ANSPs, Eurocontrol, MET providers and military representatives.

JOHN DYSON

HEAD OF NAVIGATION & MET SYSTEMS AND SAFEGUARDING - NATS SERVICE OPERATIONS, UK

Responsible for all Navigational & Meteorological equipment including; ILS, MLS, GBAS, DME, IRVR, DF, Remote control & Automated Met / AWOS equipment at over 16 airports in the UK. Project Manager for replacement navigation and meteorological projects. Introduced and gained operational approvals for the fourth generation Cat III ILS and Cat III MLS into Heathrow Airport. Work covers all aspects of equipment replacement and operation from specification writing, tender evaluation, project management, installation, and integration into existing operational environments, transition into service and on-going performance monitoring and operational maintenance.

Currently member of EUROCAE working group 28 – GNSS, member of the ICAO NSP working groups CNTWG, GWG & SWG and technical advisor to UK panel member of ICAO Navigation Systems Panel.

Previously rapporteur of ICAO EUR Project Team BRA – led to introduction of EUR Doc 015, and UK member on ICAO EUR All Weather Operations Group and member of various Project teams including CERT, ROAP and AWO.

RUBEN FLOHR

SESAR JOINT UNDERTAKING, SYSTEM ENGINEER

Ruben has gained over 20 years of professional experience in the fields of ICT and aviation. Having a theoretical physics education, after various ICT-roles for government and finance he switched to aviation. His aviation experience encompasses the domains of flight preparation, air traffic control and environmental management, including co-authoring the Dutch ATM systems strategy. Within the SESAR Joint Undertaking Ruben is covering the topics of architecture, information management and cybersecurity. His role is to assess and guide technical systems development, ensuring a consistent, coherent and complete architectural approach of the «system of systems» across the programme. He has been deeply involved in the development of SWIM and its support to trajectory based operations. He is leading the international coordination on these topics.

DINESH GOGNA

SENIOR PROJECT MANAGER, NATS

Dinesh has over thirty years' experience in NATS, including managing European programmes. For the first thirteen years he worked in Comms, Navigation and Surveillance engineering and since 1999 has been in Programmes delivery. Dinesh has managed and successfully delivered a number of large and complex projects in the CNS and FDP areas of ATS, including the UK NATS implementation of Datalink. These projects involved technical complexity as well as extensive customer interfaces both internal and external to NATS. Dinesh has considerable experience of managing relationships including external contractors such as Comsoft, Raytheon, BT, SITA, ARINC, Frequentis, Emcor, Lockheed Martin, EGIS and Think. He has also been extensively involved in supporting the Borealis Alliance in their programmes for Datalink deployment. Most recently Dinesh has managed the ELSA Datalink VDLm2 project successfully delivering the ELSA (SJU MASC) Report; this was a key project for the aviation industry involving 23 organisations including Airbus, Arinc, Altys, Boeing, ENAV, SITA, Rockwell-Collins, Honeywell, Leonardo and a number of airlines. Dinesh is a Chartered Engineer, is qualified in APM project management and holds a MSc in Data Communication Systems.

DENNIS HART

HEAD OF THE SYSTEM WIDE INFORMATION MANAGEMENT UNIT OF EUROCONTROL

Dennis Hart is Head of the System Wide Information Management Unit of EUROCONTROL and in this position the co-chair of the EUROCONTROL AIM/SWIM Team. He has extensive experience in topics related to Information Management for Aviation and was in this role one of the core contributors in the development of the SESAR work package on Information Management (WP8). He is now intensively engaged in the deployment of SWIM in the European Region. More specifically, his Unit with the active support of the stakeholders is developing the first set of SWIM Specifications for Europe based on SESAR1 outcomes and that will support the wider uptake of SWIM in Europe.

DAVID HAWKEN

SERVICE DELIVERY DIRECTOR IN AQUILA AIR TRAFFIC SERVICES LIMITED, CHAIR EUROCAE COUNCIL

David Hawken is Chair of EUROCAE Council. He works for NATS and is currently Service Delivery Director in Aquila Air Services Limited, a joint venture of NATS and Thales that provides technical air traffic services to support Military operations from over 100 sites across the globe including major air bases, and weapons ranges. He is also a non-executive Director of the European Satellite Service Provider (ESSP). David is a Chartered Engineer, has a degree in Electrical and Electronic Engineering, a Fellow of the IET and a Member of the Institute of Directors. His career started in the rail industry with London Underground where he trained and then went on to ensure that new signalling systems met their safety requirements. He moved to NATS, the UK Air Traffic Control Provider, in 1992, where he has held a variety of engineering management posts including Engineering Director until he became Aquila Service Delivery Director in September 2016.

ADRIAAN HEERBAART

DIRECTOR CENTRAL ROUTE CHARGES OFFICE, DIRECTOR PAN-EUROPEAN SINGLE SKY, EUROCONTROL

Director of the Central Route Charges Office since September 2007, and Director Pan-European Single Sky since January 2015. Adriaan Heerbaart was appointed Director of EUROCONTROL's Central Route Charges Office (CRCO) in September 2007, and was additionally appointed Director Pan-European Single Sky (DPS) in January 2015.
Before taking over his responsibilities as Director CRCO, Mr Heerbaart headed the Budget and Economic Affairs unit of the Finance Directorate for five years.
He started his career at EUROCONTROL in 1990 as an Expert in Directorate Personnel and Finance, and after two years became the Head of General Accounting in the then reorganised Finance Directorate, a post he held for three years before joining the CRCO in 1995 as Head of Administrative Management. Between March 2008 and February 2009, he also assumed the function of Acting Director Finance. His appointment as Director DPS in January 2015 is in addition to his role as Director CRCO.
Prior to joining EUROCONTROL, Mr Heerbaart had accumulated over ten years of experience in the financial management domain in private industry as a Financial Controller of large multinational organisations.
Mr Heerbaart studied in Leiden, Tilburg and Antwerp and holds an MSc. in Business Economics. He is also an alumnus of INSEAD.

THOMAS HOFFMANN

MANAGING DIRECTOR AND CHIEF OPERATOR OF AUSTRO CONTROL

Since January 1st 2014 Thomas Hoffmann is Managing Director and Chief Operating Officer of Austro Control. In this role, Thomas is responsible for the Air Traffic Management Services, the Engineering Services and the Meteorological Services. He is also in charge of Safety, Quality and Security Management as well as of the Consultancy department. Before taking this challenge, the former Air Traffic Controller worked for DFS German Air Navigation Services for nearly 15 years and held several Executive Management positions in Germany. Between 2007 and 2013 Thomas was responsible for the Air Traffic Management Services as Head of Operations at Frankfurt airport, the Upper Area Control Centre in Karlsruhe and the Area Control Centre in Langen. Additionally, he represented DFS in Washington D.C. at FAA headquarters for a period of one year during this time. Thomas holds a Master of Science degree in Air Transport Management of London City University. He started his career in aviation in 1995 with Lufthansa German Airlines as a Management trainee in Cologne, Frankfurt, Hamburg and Montréal. Today, Thomas is also the Chairman of the COOPANS Alliance Board (Cooperation of Air Navigation Service Providers), works as lecturer at the Danube University in Austria and used to be the Chairman of the CANSO Operations Standing Committee for the last two years.

JON HORNE

VICE-PRESIDENT EUROPEAN COCKPIT ASSOCIATION (ECA)

Jon is a current airline pilot on the A320 series and previously the 747 for a major UK airline. As Vice-President of ECA, the representative body for Europe's professional pilots, Jon oversees technical, training and safety areas for the profession. He has also served as Vice-Chair of the EU Social Dialogue in Civil Aviation, representing and working with all sides of the aviation industry in Europe.
At ECA Jon has significant experience working with EASA and the EU institutions, and dealing with the creation and implementation of aviation regulatory and legal measures. Prior to this he spent many years in the UK Pilots' Association, BALPA, specialising in scheduling and fatigue, welfare and support, performance and disciplinary matters amongst others.
Jon sits on the Executive Board of IFALPA, the global pilots' federation, giving a global as well as European perspective on the aviation industry, and the workings of ICAO. He has appeared as an industry representative before both the UK and European Parliaments and is a regular expert speaker at international aviation political, legal and safety events. In his spare time Jon is a keen sailor and classic boat enthusiast.

DAME DREIRDE HUTTON

CHAIR OF UK CAA

Dame Deirdre Hutton, DBE became Chair of the Civil Aviation Authority on 1 August 2009 having previously been Chair of the Food Standards Agency until July 2009. She has served on a number of public bodies and has considerable experience of corporate governance, risk-based regulation and consumer policy. She sits as a Non-Executive on the board of Thames Water Utilities Ltd, is Pro-Chancellor of Cranfield University and is Honorary Vice President of the Trading Standards Institute.

She served on the Board of HM Treasury from 2008-2013, was the Vice-Chair of the European Food Safety Authority Management Board until 2008 and was Deputy Chair of the Financial Services Authority until December 2007. For five years, until 2005, she was Chair of the National Consumer Council, having formerly chaired the Scottish Consumer Council. Prior to her appointment at the Food Standards Agency, she was a member of the Better Regulation Task Force. She has held a number of positions on bodies dealing with food issues, including Chair of the Foresight Panel on the Food Chain and Crops for Industry, Chair of the Food Chain Centre, and membership of the Policy Commission on the Future of Farming and Food (the Curry Commission). In April 2010 she was awarded a Fellowship of City and Guilds.

MARGARET JENNY

PRESIDENT OF RTCA, INC.

Margaret Jenny is the President of RTCA, Inc., a private, not-for-profit corporation dedicated to the forging of wide-ranging consensus-based recommendations in aviation policy, technology and modernization.

Margaret has devoted her career to helping diverse and competing stakeholders find common ground to expedite the continual modernization of the national airspace.

Prior to joining RTCA, Ms. Jenny served as Chief Executive Officer of MJF Strategies, LLC, an aviation consulting firm (2001-2008); Vice President of Corporate Business Development at ARINC (1999-2001); Director of Airline Business and Operations Analysis for US Airways (1996-1998) and Technical Director at The MITRE Corporation (1983-1996). She also served as the 2016 President of the Aero Cub of Washington.

JULIA JIGGINS

CIVIL AVIONICS SALES AND BUSINESS DEVELOPMENT, THALES UK

Julia is the Lead Civil Avionics Sales and Business Development for Thales UK and is responsible for developing Thales UK's market opportunities for future civil communication products for the whole of the connected aircraft.

Prior to joining Thales UK in 2008, Julia worked for Boeing UK Ltd for 6 years and was with Royal Air Force for 13 years. She has worked in various logistics, after sales support, manufacturing, product development including the delivery of integrated communication packages to aircraft and product strategy throughout her career. Her current focus is on future communication requirements and the necessary product development to ensure that products developed are secure, safe and meet the future ATM evolutions.

Julia is an alumni of Warwick University having graduated in 1987 with BSc(Hons) in Management Science.

JOHN KORNA

HEAD OF TECHNICAL AND STRATEGIC RESEARCH AT NATS

John Korna is currently Head of Technical and Strategic Research at NATS, and is responsible for research portfolio focused on Electronic Conspicuity, the management and integration of autonomous and remotely piloted air vehicles, and future datalink capabilities. Before taking over the portfolio, John specialised in the development, assurance and operation of Satellite Systems for ATM, with a long involvement in the EGNOS system and the early days of the ESA Iris satellite communications programmes, partipating in Eurocae Working Group-62 and -82.

RICHARD MACFARLANE

DEPUTY DIRECTOR AIR NAVIGATION INTERNATIONAL CIVIL AVIATION ORGANISATION

Richard is responsible for the capacity and efficiency aspects of ICAOs role in international civil aviation. This covers the generic disciplines of CNS/ATM, Aeronautical Information, Meteorology and Airports. He is personally tasked with putting the international enabling provisions in place for programmes such as CARATS, NextGen and SESAR through the application of the Global Air Navigation Plan and its associated Aviation System Block Upgrades (ASBUs).

STÉPHANE MARCHÉ

AIR TRAFFIC MANAGEMENT ARCHITECT HONEYWELL AEROSPACE ENGINEERING & TECHNOLOGY EMEA

Stéphane Marché is part of the Advanced Technology department within Honeywell Aerospace in Europe. He was hired at Honeywell for the role of Chief Architect of the SESAR program and then took expert and management positions.
Prior to joining Honeywell Aerospace in 2008, Stéphane spent 8 years at Airbus design office where he held various positions such as FANS Interoperability Specialist and ADS-B In Project Manager and ATM Research Coordinator.
Before working at Airbus, Stéphane held positions as system designer and project leader during 12 years, mostly in the area of data communications and Air Traffic Control.

PASCAL MEDAL

EASA CHIEF ENGINEER

Started his career as Project Certification Manager at DGAC-F.
He then worked for the DGAC OPS department, specifically in the following domains
- JAA Equipment Sub Committee (EQSC) JAR OPS 1, as DGAC-F member
- Flight Simulation Training Device
- AWO (JAR OPS subpart E)

From March 2001 to early February 2004, appointed JAA OPS Sectorial team coordinator at JAA Hoofddorp.
During this period he was the JAA member of the International MMEL policy WG and Chairperson for the JAA MEL Policy WG (responsible for the drafting of JAA MEL (TGL 26). P. Medal then joined EASA in March 2004, as Large Aeroplane Section Manager. From September 2007 to September 2014, he was Head of the Experts Department (C2), responsible for the management of Airworthiness experts, OSD experts and FSTD experts. P. Medal has been involved in the development of standardisation bodies since 2004.
He is the Chairperson of the EASA Internal International Standardisation Committee (IISC) since end 2014. He represents EASA in the EUROCAE council and in the European ATM Standardisation Coordination Group. Since September 2014, P.Medal is the EASA Chief Engineer.

MANFRED MOHR

ASSISTANT DIRECTOR (REGIONAL SAFETY AND FLIGHT OPERATIONS) SESAR 2020 AT IATA

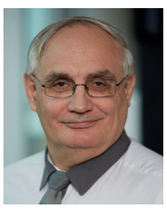
He started his airline carrier 45 years ago as technician and engineer in the Lufthansa Technique and Training Department. After some studies in and out of the Airline, he became the chief instructor for A340 and A330 EIS for the launching customer. He is holder of plenty of licenses for all Airbus aircraft and as a Simulator Instructor. Manfred took over the position as the Deputy in Administration of the Airbus Fleet Chief pilot, responsible for 1500 Pilots.

He was full responsible in managing the A380 operation of Lufthansa and Lufthansa Technic across all Training business segments. First A380 Instructor of LAG and AI in XFW and TLS. Group Leader of the Airbus A380 Policy & Specification Group. Member of Airbus Training AACT working groups. He has been the Head of SESAR Project and LAG Team (LH, Swiss, Austrian, Brussel Airlines and Lufthansa Cargo), in this scope he was the Representative of LH COO and AU Speaker of European Airlines inclusive AEA, EBA, GA and IACA, SPP Member for IATA, Expert in ATM Masterplan, CBA, CONOPS and SWIM, Contact and liaison manager to EADS and Airbus relationship. E.g. BTV, HUG/D, TAM and GPS/TCAS Projects.

Manfred Mohr was the Lufthansa Senior Advisor and Referent for Aircraft Datalink (Air and Ground), ETS (Co2 Emissions) and Fuel Efficiency Program at Lufthansa Group. Since 2014 Manfred was appointed as Assistant Director SESAR and Is the Point of contact within IATA Europe for all RPAS/UAV duties, as Member of the EASA Regulation Team and EUROCAE Membership. He is additional the ATM Acting Manager between the FAA, SJU and SDM, he is leading as Technical Manager the IATA SME and Consulting Team for SESAR 2020.

YVES MORIER

PRINCIPAL ADVISOR TO THE CERTIFICATION DIRECTOR-NEW TECHNOLOGIES AT EASA



French CAA:

- Deputy Head of a regional office "Basse Normandie" 1979-1985
- Responsible of Airworthiness codes and Safety Studies-SFACT rulemaking directorate-1985-1991
- Head of the office "technical regulations"- SFACT rulemaking directorate-1991

Joint Aviation Authorities:

- Regulations Director- 1991-2004

European Aviation Safety Agency:

- Head of department "product safety" in Rulemaking Directorate-2004-2010
- Head of department "Safety Information and Reporting" in Executive Directorate- 2010-2013
- Head of department "Professional and Organisational Development" in Executive Directorate- 2013-2014
- Head of Department "General Aviation and Drones" in Certification Directorate from Sept. 2014 to August 2016
- Principal Advisor to the Certification Director-New Technologies from September 2016

Education

- Baccalaureat option "Physics and Mathematics"- Lycee de Carhaix-1973
- Preparation aux grandes ecoles-Lycee Chateaubriand a Rennes-1973-1975
- French Civil Aviation Academy (ENAC in Toulouse)- Air Transport Engineer-1975-1978

LORENZO MURZILLI

EUROPEAN AVIATION SAFETY AGENCY (EASA) PROJECT CERTIFICATION MANAGER

Lorenzo Murzilli is a graduated aerospace engineer, innovation manager and specialist in aviation, system safety and drones. An accredited European Aviation Safety Agency (EASA) Project Certification Manager and Expert for Safety Assessment and Development Assurance, he is actively engaged in several certification, authorisation and rulemaking activities, both at national and international level. Leader of the Joint Authorities for Rulemaking on Unmanned Systems (JARUS) WG-6, Safety and Risk, and member of the Swiss FOCA RPAS Working Group, he oversees the risk management process of all critical drones' operations, in Switzerland, and works to improve the perception of unmanned aerial vehicles worldwide. Mr. Murzilli has been amongst the founding fathers of the Global UTM Association (GUTMA), where he is entrusted with the position of treasurer and is a member of the executive board of directors. An EUROCAE WG-63 member, dear friend of WG-105, guest lecturer at the Zürich University of Applied Sciences (ZHAW), previously with Leonardo (former Alenia Aeronautica) and Pilatus Aircraft, he has developed a striking capability to boost innovation in safety critical environments. He enjoys exploring the intersection of safety and disruptive technologies that can advance the human race.

FRANCA PAVLICEVIC

HEAD OF EUROCONTROL'S NAVIGATION AND CNSS RESEARCH

Franca Pavlicevic is head of Eurocontrol's Navigation and CNSS Research. She started her career ad an air traffic controller, then became an ATC Instructor and has extensive experience in terminal airspace planning and design. In the last 12 years she has been working on navigation applications, was part of the ICAO technical group that developed the PBN Concept, and now chairs the ICAO PBN Study Group. She has a Bachelors degree as well as an MSc.

STÉPHANE PELLESCHI

SENIOR SYSTEMS ENGINEER AT ROCKWELL COLLINS AND WG-92 CHAIR

Stéphane is a Sr systems engineer expert in data-link working for Rockwell Collins since 2008 on the Avionics communication routers for the Airbus aircraft family (ATSU and ACR). Stéphane has developed an expertise on VDL Mode 2 and ATN protocols in the Airbus lab and as a consultant for DSNA. Stéphane is chairing the EUROCAE WG-92 and participates actively in the data-link committees dealing with VDL standards such as the ARINC 631, ICAO Doc 9776, DO-224, DO-281/ED-92. In the frame of this ELSA project, Stéphane has been the technical lead for Rockwell Collins.

PAUL RAVENHILL

THINK RESEARCH

Paul is an experienced consultant specialising in ATM regulation and policy with over 25 years' experience in the air transport industry. Paul started his career at Racal as an avionics designer working on FANS and early implementations of the ATM protocol stack; before moving on to ATM Research and Development with the Defence Evaluation and Research Agency (DERA) working on topics such as 4D trajectories, advanced datalink applications and enterprise architectures. For the last 17 years Paul has worked as a consultant focussing on the impact of the Single European Sky legislation and SESAR project on the performance of the ATM sector. He is currently a Director at Think Research where he takes the lead on ATM regulatory and performance issues - in particular looking at how new technologies and concepts can improve ATM performance using the raft of analytics and big data approaches developed by Think. Paul is the Focus Team Leader for the SORA Focus Team and WG-105.

FRIEDHELM RUNGE

CHIEF EXPERT AVIONICS AND ELECTRICAL SYSTEMS AT EASA

Friedhelm Runge, a German national, graduated as an electrical engineer for control systems from the University of Braunschweig. He worked 16 years in aviation industry in aircraft modifications especially for special mission systems but as well for GPS equipment. He joined EASA in 2005 as Project Certification Manager in the Parts and Appliances Section, became Avionics Systems section manager and later the Chief Expert Avionics and Electrical Systems. Within that position he is responsible for the development of the EASA position in the Avionics domain and coordinates the EASA participation to standards development in the avionics area. He participated to some EUROCAE working groups and is member of the EUROCAE TAC since 2014.

JULIAN SCARFE

CONSULTANT

Julian Scarfe has been engaged in the innovative safety regulation of general aviation for more than 5 years. He flies a 1966 Twin Comanche around the UK and Europe, under IFR and VFR, for both business and leisure.
Julian is a proponent of total system safety management, based on evidence and risk. He participates in a number of strategic safety groups at the European Aviation Safety Agency, including the GA Task Force, the Safety Standards Consultative Committee, and the GA Sectorial Committee. He chaired the rulemaking group at EASA that developed aircrew and operational requirements for the use of Performance Based Navigation. In 2012, he was a member of the Challenge Panel that undertook the Red Tape Challenge of the UK's regulation of GA. More recently, he organised and facilitated a workshop at EASA aimed at alleviating the regulatory/certification requirements for ADS-B deployment in GA. In 2016/7, he has been closely involved with the recast of the Basic Regulation, including an invitation to discuss specific aspects of it in the Council's Aviation Working Group.

SIEGFRIED SCHÄFER

SYSTEM ARCHITECT AT DFS AND WG-104 CHAIR

Siegfried Schäfer graduated with a degree in Information Technology. He has more than 30 years of professional experience in the areas of systems engineering and project management. He has been awarded with the Certified Project Manager IPMA Level C. After having joint DFS in 1997 he was leading several complex projects. One of the most challenging ones was the EAD (European AIS Database) project, which aimed to setup a new service provider company, the GroupEAD Europe S.L. and to define their contractual relationship with the European ATM community based on Service Level Agreements. In addition, he was working in several SESAR projects dealing with the introduction of an Open Systems Architecture and with the implementation of SOA (Service Oriented Architecture). Beside that, he was leading an A6 initiative to introduce Open Architecture into the current ANSP systems. In his current role, he is steering the DFS participation for the technical areas in SESAR 2020 PJ19, dealing with Systems and Services and the elaboration of the EATMA framework used to establish the content integration of the various SESAR 2020 solutions. Besides that, he is acting as the chairperson of EUROCAE WG-104, which works on the standardization of SWIM services using the Extend AMAN service as a first example.

FRANCIS SCHUBERT

CHIEF CORPORATE OFFICER AND DEPUTY CEO SKYGUIDE

Dr. Francis Schubert is Chief Corporate Officer and Deputy CEO for Skyguide, Swiss Air Navigation Services Ltd., in Geneva, Switzerland.
He is also Adjunct Professor at the Institute of Air & Space Law, McGill University, in Montreal, Canada and lecturer at the Faculty of Law of the University of Lausanne, in Switzerland. Francis Schubert started his career as an air traffic controller, and moved to other positions after several years of Air Traffic Control practical experience. His current responsibilities include international relations, corporate strategy and legal affairs for skyguide. Dr. Schubert holds a Ph.D. in international aviation law from the University of Geneva and a Diploma in Higher Studies in International Relations from the Graduate Institute for International Studies in Geneva. He serves as ex officio General Counsel for CANSO (Civil Air Navigation Services Organisation) and is past President of the Swiss Air & Space Law Association.

STU WAIN

MANAGER FOR THE FUTURE AIRSPACE TEAM (FAT) AT UK CAA

Stu is currently employed by the Civil Aviation Authority as their Manager for the Future Airspace Team (FAT), a role he has held since June 2016. His work encompasses PBN, UK/IE Functional Airspace Block, the Future Airspace Strategy (FAS) and the Mid-Air Collision (MAC) Programme.
Prior to this post, Stu has completed back-to-back secondments (by the CAA) into the Department for Transport (DfT) working on Single European Sky (SES) issues and, most recently, he has spent 4 years on secondment to the European Commission working within DG MOVE (Transport) under the SES Unit headed by Maurizio Castelletti.
His CAA time followed 22 years serving with the Royal Air Force as a Tornado GR1 navigator seeing service in Germany, the UK and the Middle East. He retired in 2007 as a Wing Commander.
Stu brings a wealth of aviation and SES/SESAR related experience to the CAA with a sound knowledge of National Governmental and European Union process and procedure. Stu worked with the INEA (Innovation and Networks Executive Agency) during the recent selection process that led to EU funding support for conversion of 8.33KHz radios in the UK. Stu lives in West Sussex, is married with 2 (grown-up) children and enjoys riding his motorcycle.

NICOLAS WARINSKO

SDM DEPUTY MANAGING DIRECTOR AND DIRECTOR TECHNICAL AND OPERATIONS

Mr Nicolas Warinsko joined the SESAR deployment Manager since its establishment in December 2014 as Deputy Managing Director and Director Technical and Operations.
From July 2013 to November 2014, he was advisor to the Chief Operating Officers of the A4 Airlines (Air France, British Airways, EasyJet and Lufthansa) on SESAR deployment. In this capacity, he was also the bid manager for SESAR deployment Alliance's successful application to European Commission's call to select the SESAR Deployment Manager.
In his previous position, he spent 5 years as senior policy advisor to the Directorate General for Mobility and Transport of the European Commission (DG MOVE) where he played a significant role in preparing for SESAR deployment. Before joining the European Commission in 2008, Nicolas Warinsko was with the French Air Navigation Service Provider (DSNA) where he managed the ATM division, being responsible for developing and maintaining French ATM systems for en route centres and airports.
In the nineties, Nicolas Warinsko was an expert in Global Navigation Satellites Systems (GNSS), contributing on behalf of the DSNA and then the European Commission to the definition and the launch of the EGNOS and Galileo programmes. Nicolas Warinsko is graduated as «Ingénieur de l'Aviation Civile» from the French Academy for Civil Aviation (ENAC). He hold a pilot licence with a multi-engine IFR rating totalising more than 1000 hours of flight.

SPONSORS

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NATS

NATS is a leading air traffic management and solutions company, established in the UK in 1962 and now operating in countries around the world. NATS handled 2.3 million flights in 2015, covering the UK and eastern North Atlantic from its centres at Swanwick, Hampshire and Prestwick, Ayrshire. NATS also provides air traffic services at 14 UK airports; at Gibraltar Airport and, in a joint venture with Ferrovial, at a number of airport towers in Spain.

Building on its reputation for operational excellence and innovation, NATS offers aerodrome, data, engineering, capacity, efficiency and environmental performance solutions to customers worldwide, including airports, airlines air traffic service providers and Governments.

For more information visit the NATS website at www.nats.aero

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ROCKWELL COLLINS

Rockwell Collins is a pioneer in the design, production and support of innovative solutions for our customers in aerospace and defense. Our expertise in flight-deck avionics, cabin electronics, mission communications, information management and simulation and training is strengthened by our global service and support network spanning 150 countries. Working together, our global team of 19,000 employees shares a vision to be the most trusted source of aviation and high-integrity solutions in the world.

Our aviation electronics systems and products are installed in the flight decks of nearly every air transport aircraft in the world. Our communication systems transmit nearly 70 percent of U.S. and allied military airborne communications. Whether developing new technology to enable network-centric operations for the military, delivering integrated electronic solutions for new commercial aircraft or providing a level of service and support that increases reliability and lowers operational costs for our customers throughout the world, we deliver on our commitments.

SILVER SPONSOR

THALES

A world leader in ATM, Thales combines more than 80 years in development and deployment, an unrivalled worldwide installed base, advanced technology and ground-breaking innovations to deliver solutions that are continually adapted to the ever-changing aviation system's needs. Thales is trusted by key ATM decision makers across more than 170 nations and helps key decision makers master complexity and make timely decisions for better outcomes. With engagement in all major ATM modernisation initiatives, ICAO ASBUs, SESAR and NextGen, Thales focuses on international harmonisation. Our strong involvement in these initiatives, and the alignment of our product roadmaps, ensures that our solutions have been extensively tested, certified and validated.

BRONZE SPONSOR

INDRA SISTEMAS

Indra is one of the main global consulting and technology companies and the technology partner for core business operations of its clients businesses throughout the world. It offers a comprehensive range of proprietary solutions and cutting edge services with a high added value in technology, which adds to a unique culture that is reliable, flexible and adaptable to its client's needs.
Indra is a world leader in the development of comprehensive technological solutions in fields such as Defense & Security, Transport & Traffic, Energy & Industry, Telecommunications & Media, Financial Services and Public Administrations & Healthcare. Through its Minsait unit, it provides a response to the challenges of digital transformation.

Our vision
As a corporate project, the Indra vision has always been long-term and has been founded upon the firm belief that maintaining a company profile focused on innovation with a solid technological base and offering premium solutions to leading clients allow us to generate increased growth and profitability and, thereby, acquire the capacity to create value in the short-, medium- and long-term.

In 2004, following a period of consultation and feedback with company professionals, we defined our vision as follows:
«To be an innovative knowledge-based company in our relations with internal and external stakeholders (shareholders, professionals, clients, etc.), with the institutions that cultivate and develop this knowledge, and with the communities in which we operate.»

LUNCH SPONSOR

HELIOS

Helios is the aviation consultancy of Egis, delivering management consultancy, strategy, investment and technical advice across the globe. Combining analytical rigour, strategic context and creativity, we bring independence and insight to every opportunity we address. We are ISO 9001 certified, with offices in the UK, Slovakia and United Arab Emirates.

Our parent company, Egis, is an international group headquartered in Europe, with over 13,000 employees and a turnover of €1 billion. Egis also operates 14 international airports.

With a worldwide reputation for excellence and integrity, our multinational aviation team provides a compelling offer that encompasses consultancy and engineering services to ATM, institutions, airports and aircraft stakeholders.

COFFEE BREAK SPONSOR

IATA

IATA, the International Air Transport Association, is the trade association of the world's international airline industry. At its founding in 1945, IATA had 57 Member Airlines from 31 nations, mostly in Europe and North America. Today its membership is made of some 272 Airlines from 117 nations operating in every part of the globe.

In a fast-changing aviation world, airlines need to cooperate in order to offer a seamless product of the highest possible standard. Much of that cooperation is expressed through IATA, whose vision is «To be the force for value creation and innovation driving a safe, secure and profitable air transport industry that sustainably connects and enriches our world." IATA strives to ensure that people, freight and mail move around the vast global airline network as easily as if they were on a single airline in a single country - and that members' aircraft operate safely, securely, efficiently and economically - under clearly defined and understood rules.

Although the environment of the airline industry has changed since IATA foundation in 1945, the primary objective of the association has not changed. IATA's mission is "To represent, lead and serve the air transport industry".

In pursuit of its vision and mission, IATA is fully committed to supporting commercial aviation stakeholders, including CAAs, airports and ANSPs, in their efforts to achieve the safe, profitable and long-term viability of the aviation industry.

EUROCAE ATM STANDARDISATION ACTIVITIES IN SUPPORT OF SINGLE EUROPEAN SKY HAVE RECEIVED FUNDING FROM THE EUROPEAN UNION.

European Commission

BRUSSELS, 27 APRIL 2018

EUROCAE
HIGH LEVEL MEETING 2018

The High Level Meeting will discuss the role of EUROCAE in the European and Global framework, as well as the role and needs of the different Standardisation Organisations. The meeting will have a close look at the fast-developing technology in aviation, on ground and in the air, from views from the industry and service providers on the specific requirements and on the standardisation process.

EUROCAE

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