DAY 1 – TUESDAY, 14 OCTOBER 2014

KEYNOTE PRESENTATIONS

09:30 – 09:50	**Welcome to the ICAO Business Class 2014** ICAO is a key player in the use of aviation information and analysis for the purpose of monitoring safety and operational efficiency performance. Because aviation is such a rich data environment, ICAO has organized a symposium that brings together all key organizations to address air navigation and safety-related issues regarding information and data, applications and infrastructure. • Welcome Speech: **Nancy Graham**, *Director, Air Navigation Bureau, ICAO*
09:50 – 10:00	• **Denis Chagnon** , Master of Ceremonies
10:00 – 10:20	**amazon** web services **REMOTE PRESENTATION** • **Mark Ryland,** *technology leader for Amazon Web Service's Worldwide Public Sector (WWPS) team.* ***Data in the Cloud*** Amazon Web Services (AWS) offers a broad set of global compute, storage, database, analytics, application, and deployment services that help organizations move faster, lower IT costs, and scale applications. Today, Amazon Web Services provides a highly reliable, scalable, low-cost infrastructure platform in the cloud that powers hundreds of thousands of businesses in 190 countries around the world.
10:20 – 10:30	• ***Q & A Session***
10:30 – 11:00	***COFFEE BREAK***
11:00-11:20	**CSKY 集云** • **Paul Chen,** *founder and CEO* "***Infrastructure as a Service: from data center to cloud platform***" Csky is a cloud infrastructure provider in China, defined data center SDDC. first to bring the concept of next generation data center design to China.

DAY 1 – TUESDAY, 14 OCTOBER 2014 (Continued)

11:20-11:40	 • **David White**, *Chief Customer Officer, CCO, FlightStats, Inc.* *Au contraire. Not so fast Big Data! Use small data to realize big results* Big Data is everywhere and everyone is talking about it. But it isn't living up to the hype! Gartner says we're stuck in the "trough of disillusionment" and we are two to five years away from realizing the promise of big data analytics. But the good news is that applying today's big data tools, technologies and techniques to smaller, more targeted data sets is starting to yield some very promising results in the commercial aviation industry. FlightStats will focus on the challenges of data analytics and highlight more pragmatic approaches to overcoming those challenges to answer deeper and more penetrating questions around safety, operational efficiency, and cost-savings using small, manageable data sets. FlightStats will cite real-world examples of the application of tools such as Tableau, Open Street Maps, cloud computing, and data warehousing to address the analytical and visualization needs of airlines, airports and the civil aviation authorities. Bigger is not yet better.
11:40 – 12:00	 • **Yves DE WANDELER,** *Eurocontrol CODA Analyst* *CODA: Building the delay-analysis system for Europe* How do you build a system from scratch that provides high-quality analysis of air traffic delays and improves network performance, yet remains voluntary? With the benefit of hindsight, we pick out a range of decisions that we believe have been key to CODA's success as we developed from using aggregate data, through voluntary reporting, to the current mix of voluntary and required reporting for the whole of Europe. We describe the data, the processes and the technology that have been developed. And since improvement is always possible, we describe the next steps for CODA's development.
12:00 – 12:20	 • **Narjess Abdennebi**, *Chief, Economic Analysis and Policy Section, ICAO* *Economic Analysis and Forecasting* The need for complete and reliable aviation statistics was foreseen by the fathers of the Convention on International Civil Aviation and the obligation to file statistical information with ICAO is set out in Article 67 of the Convention. Throughout the years, the ICAO Statistics Programme has been adapted to maintain its relevance to the needs of the Organization as well as Member States. The data collected from ICAO Member States are verified and validated using internal Business Intelligence tools including historical data and other sources of information. ICAO disseminates the aviation data collected from its Member States through ICAODATA+, an online global comparative aviation data product, which is recognized by the users as a unique analysis tool and dependable source of aviation data. ICAO performs its own air transport and economic analyses and disseminates monthly and annual reports. ICAO also develops and analyzes passenger and freight traffic forecasts based on reliable historical aviation and economic data. ICAO will present its most recent aviation data analysis tools and will also focus on the need for reliable data and economic analysis.
12:20 – 12:30	• ***Q & A Session***

DAY 1 – TUESDAY, 14 OCTOBER 2014 (Continued)

12:30 – 14:00	*LUNCH*

SESSION 1

14:00 – 15:00	**Data and Information** The modern aviation system is a highly dynamic environment where the amount of data and information captured, disseminated and required for use in decision-making is growing. Quality-assured data and information are fundamental to enhance situational awareness, increase trust in the information user community and ensure legitimacy and reliability of the information. This session is aiming at showing real-cases and success stories on how the proper use of data and information is essential to transform businesses, increase efficiency, and drive innovation. Speakers: • **Jim Hetzel**, Vice President Business Development, Aviation & Distribution, FlightStats • **Yves De Wandeler,** *Eurocontrol CODA Analyst*
15:00 – 15:15	• *Q & A Session*
15:15 – 15:45	*COFFEE BREAK*

SESSION 2

15:45 – 16:45	**Software and Analytics** Use of automation is essential to compile data from multiple sources, to perform consistent data analyses, to compute, network, store, manage and disseminate the information. Automation enhances operational efficiency, ensures the integrity of data and information, increases the timeliness and precision of routine procedures and ensures the capability to understand how information, events, and one's own actions will impact goals and objectives, both immediately and in the near future. This session is a forum for discussion, technical demonstrations and information sharing, to address the aviation industry requirements. Speakers: ramco | ICAO • **Praveen PN**, *Ramco Systems* • **Gilbert Lasnier**, GIS expert*, ANB, ICAO*
16:45 – 17:00	• *Q & A Session*
	End of Day 1

DAY 2 – WEDNESDAY, 15 OCTOBER 2014

KEYNOTE PRESENTATIONS

09:30 – 09:50	• Speaker: **Harro Ranter** *The role of aviation safety information in accident prevention* The current level of safety in aviation is extremely high. Sharing of aviation safety information like accident and incident investigation results played an important role in achieving this. Can we rest on our laurels? No, not at all! We will show the current and future challenges on collecting, storing and sharing aviation safety information. In addition to the challenges on a data-level, we will also be looking at how reliable the current formal systems and processes are for sharing and acting upon safety information. Do the results and safety recommendations of accident and incident investigations reach the relevant persons and organizations?
09:50 – 10:10	• Speaker: **Geoffrey Thomas** *Intelligence through Rating* Airlineratings.com provides a one-stop-shop airline safety and product rating review. The rating system takes into account a number of different factors related to audits from aviation's governing bodies, lead associations as well as the airlines own safety data. Airlineratings.com delivers expert safety ratings for more than 435 airlines around the world. Over 230 of the airlines on the site that carry 99 per cent of the world's passengers have a product rating by Airlineratings.com.
10:10 – 10:30	• Speaker: **Alex Alshtein** *Aviation Data Management Applied: Taming public and private data in support of Aviation Safety Analyses* MITRE is a not-for-profit organization that operates research and development centers sponsored by the US federal government. MITRE operates federally funded research and development centers—which are unique organizations that assist the United States government with scientific research and analysis, development and acquisition, systems engineering and integration.

DAY 2 – WEDNESDAY, 15 OCTOBER 2014 (continued)

10:30 – 11:00	*COFFEE BREAK*

SESSION 3

11:00-12:00	**Data and Information for Safety and Quality Decisions** The modern aviation system is a highly dynamic environment where the amount of data and information captured, disseminated and required for use in decision-making is growing. Quality-assured data and information are fundamental to enhance situational awareness, increase trust in the information user community and ensure legitimacy and reliability of the information. This session is aiming at showing real-cases and success stories on how the proper use of data and information is essential to transform businesses, increase efficiency, and drive innovation Speakers: • **Geoffrey Thomas**, *Airline Ratings* • **Harro Ranter**, *Aviation Safety Network*
12:00-12:30	• ***Q & A Session***
12:30-14:00	*LUNCH*

SESSION 4

14:00-15:00	**Infrastructure in the Cloud** Running complex analysis and managing big data requires sophisticated server and computer infrastructures. Cloud based solutions are widely available now and show the way of the future with regard to infrastructure management. This session goes into some examples on the use of cloud infrastructures for data analysis Speakers: • **Nikolay Bakaltchev** , *Amazon WebServices* • **Marco Merens**, *I-SPACE*
15:00-15:15	• ***Q & A Session***
15:15-15:45	*COFFEE BREAK*

DAY 2 – WEDNESDAY, 15 OCTOBER 2014 (continued)

SESSION 5	
15:45 – 16:45	**Intelligence through algorithms** Use of automation is essential to compile data from multiple sources, to perform consistent data analyses, to compute, network, store, manage and disseminate the information. Automation enhances operational efficiency, ensures the integrity of data and information, increases the timeliness and precision of routine procedures and ensures the capability to understand how information, events, and one's own actions will impact goals and objectives, both immediately and in the near future. This session is a forum for discussion, technical demonstrations and information sharing, to address the aviation industry requirements. Speakers: • **Alex Alshtein**, *Mitre* • **Jan Malawko**, *University of Warsaw*
16:45 – 17:00	• *Q & A Session*
	End of Day 2

DAY 3 – THURSDAY, 16 OCTOBER 2014

KEYNOTE PRESENTATIONS

09:30 – 10:00	• **Michel Dubois**, *Xaracom* ***Training capsule on airport security*** The product consists of an interactive capsule, short-term training, released MDA Internet. The goal is to place learners in a virtual environment that will encourage and promote the role play as an activity of experiential learning. The main objectives are to demonstrate organizational leadership in programs implemented to solve the problems of aviation safety; attract and create a synergy between the Member States and ICAO partners' organizations; build a community around the training / learning capsules, etc.
10:00 – 10:30	• **Marco Merens**, *ICAO* ***ICAO SPACE*** SPACE is the new version of the integrated Safety Trend Analysis and Reporting System (iSTARS). It is a web based system linking a collection of safety and air navigation datasets and related web application to perform online analysis. SPACE is used primarily by ICAO Member State's and contains mostly classified information.
10:30 – 11:00	***COFFEE BREAK***

SESSION 6

11:00 – 12:00	**Learning and testing through Data and Information** Data and information can be used to build training packages and learning aids. Data can also be used to build test cases and examination questionnaires. Tied together with advanced technologies coming from gaming industry for example, will give yet another flavor to the available data. This session will show examples on how data can be used in a learning and examination environments to build up and certify competencies. Speakers: • **Michel Dubois**, *Xaracom* • **Bonnie McEachern**, *ICAO*

DAY 3 – THURSDAY, 16 OCTOBER 2014 (continued)

12:00 – 12:30	*Q & A Session*
12:30 – 13:00	**CLOSING PRESENTATION KEYNOTE** Speaker: **Nancy Graham**, *Director, Air Navigation Bureau, ICAO*
	End of Symposium