The META-CDM team

Daniel Delahaye is doing research for the French Air Navigation Research Center since 1995 and is member of the artificial evolution team of the applied mathematics research center (CMAP from Ecole Polytechnique, France). Delahaye graduated with an Engineer degree from ENAC, a Master of Science in signal processing from the national polytechnic institute of Toulouse in 1991, the PhD D in automatic control from Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (SUPAERO) in 1995. Following a Post-Doc in the Department of Aeronautics and Astronautics at MIT in 1996, he has been working continuously in the Applied Mathematic Laboratory of ENAC, where he is conducting research on stochastic optimization for large scale air traffic management.

Lynnette Dray is a senior research associate at the University of Cambridge Institute for Aviation and the Environment. The main focus of her research is the Aviation Integrated Modelling project, within which her interests include air travel demand modelling, fleet turnover, model system integration and policy assessment. Other recent work includes analysis of European transportation vehicle fleets and emissions for the TOSCA project, in which she led the Policy Analysis work package. Before joining the Institute for Aviation and the Environment, she gathered expertise in the numerical modelling of complex systems, including Antarctic cloud and the interiors of stars. Previously, she was a member of the Cambridge University Institute of Astronomy and the Theoretical Astrophysics Group at Leicester University.

Eric Feron graduated from Ecole Polytechnique, France, Ecole Normale Supérieure, France, and Stanford University, USA with the BS, MS and PhD, respectively. Eric Feron has been involved with education and research since 1993, having held tenured faculty appointments at MIT (1993-2005), Georgia Tech (2005-Current), ONERA (1993-1998), and ENAC (09/2011-Current). His current research interests include airport and airspace dynamics, and high confidence real-time control software design techniques. His past research interests include unmanned aerial vehicles, flight testing, airline dynamics, and control theory. He is an advisor to the French Academy of Technologies and holds an endowed professorship at Georgia Tech. He has published extensively in peer-reviewed journals. He has co-authored two books.

Roger Gardner is an aviation environmental expert with nearly 30 years experience of policy development, regulation and research management currently providing consulting and research advice to various stakeholders. Most recently Roger was Chief Executive of the Omega academic Knowledge Transfer Partnership which tackled research challenges linked to aviation sustainability and growth. Previously, he has worked for the UK government on domestic and international policy aspects of airport air quality and aviation environmental technology

and earlier on noise mitigation and control. Roger has led ICAO and European environmental groups and worked in the research community at DERA and QinetiQ . He works with the University of Cambridge on collaborative decision making and currently has commercial interests in alternative fuels and carbon footprinting and is a visitor at Southampton University where he is currently working to develop research connectivity with industry.

Thomas Günther studied traffic engineering at Dresden University of Technology (TUD) where he received his Diploma in 2004. From 2004 until 2010 he worked at TUD, Chair of Air Transport Technology and Logistics as a scientific assistant. Since April 2011 he is Product Manager ATM at BO, responsible for Airport and Airlines market product development and innovations. Within his PhD thesis he is currently working on the assessment of efficiency improvements under consideration of ATM network effects. The development and application of a proper methodology will contribute to a better understanding of potentials to improve flight efficiency and environmental sustainability of air transport.

Isabelle Laplace is Doctor in economics specialised in aeronautics, graduated in 2001 from the Toulouse School of Economics (Toulouse Capitole University). During the PhD, Isabelle has studied the productivity of an ATM organisation taking the French case as an example ("Costs and productivity of the French ATM organisation"). This PhD was performed at ENAC (l'École Nationale de l'Aviation Civile). In addition, Isabelle has also acquired a "Diplôme d'Étude Approfondie" in Aeronautics and Space Economics in 1996 and a "Maîtrise" in econometrics in 1995 from Toulouse University. As an economist consultant and European project manager , Isabelle LAPLACE has acquired 12 years' experience in the domain of economics and econometric analysis in particular in the domain of Aeronautics (ATC and airlines). Her expertise concerns the economic aspects of air traffic control in terms of cost, productivity, sector complexity, airline demand features and of the air transport market in terms of passenger demand, airline behaviour, airport strategies, personal aviation, intermodality features between air other transport modes (especially rail). All these projects are conducted at European level allowing Isabelle LAPLACE to confirm her ability to work in an international environment.

Aude Marzuoli is currently pursuing her PhD in Aerospace Engineering at the Georgia Institute of Technology, with a focus on air traffic, optimization, control and network management. In 2012, she graduated with a Master in Aerospace Engineering from Georgia Tech and obtained her French Engineering Diploma from Supelec, a leading school in Electrical Engineering and Computer Science. She previously attended the Lycee Henri IV in Paris for the classes preparatoires.

Amedeo Odoni, is a consultant for ENAC. He is Professor of Aeronautics and Astronautics and of Civil and Environmental Engineering at the Massachusetts Institute of Technology, where he is Co-Director of the Global Airline Industry Program. He is a world expert in the analysis and modeling of aviation infrastructure systems and of urban services and he is well-recognized for his work on airport planning, capacity and congestion and air traffic flow management. He is co-author with R. de Neufville of the international best-selling textbook Airport Systems: Planning, Design and Management (McGraw-Hill, 2003) and the author or co-author of more than 100 professional publications. Some of his numerous distinctions include the T. Wilson Endowed Chair at MIT, Fellow of INFORMS, the Robert Herman Lifetime Achievement Award in Transportation Science and the U.S. Federal Aviation Administration's National Award for Excellence in Aviation Education. He is a member of the US National Academy of Engineering.

Andreas Schäfer is a Professor at the University College of London. Prior to that, he was a University Lecturer at the University of Cambridge. Before his tenure at Cambridge, he was a principal research engineer at the Massachusetts Institute of Technology (MIT) where he worked with the climate change and transportation program for seven years, and a research assistant in the energy systems program at the International Institute for Applied Systems Analysis (IIASA) in Austria for 5 years. During the 2010/2011 academic year, he has also been a Visiting Professor at Stanford University. Andreas is principal investigator of the AIM project and was the principal investigator of TOSCA. His main areas of interest are energy and transportation systems analysis. He has published widely on global travel demand modeling, transport system technology assessment, and the introduction of technology. His publications include "Transportation in a Climate-Constrained World" (MIT Press). For several years, he was a member of the World Economic Forum’s Agenda Council on the Future of Transportation and the Aviation, Travel & Tourism Industry Agenda Council. He is currently a consultant to the World Bank’s Global Green Growth Platform.

Gunnar Spies received his diploma in Computer science at the University of Bremen in 2002. From 2002 until 2008 he was employed at DLR, Institute of Flight Guidance. For instance, he was involved in the development of a Traffic Monitor for Frankfurt/Main Airport. Since July 2008 he is employed at BO as Requirements Engineer and is responsible for the “airside tactical working position” and the integrated Air-to-Air Process Management within TAMS.