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ABOUT THE CHAIRS AND SPEAKERS

Professor Setsuko Aoki is a professor of International Law at Keio University, Japan. Since 2012, she has been a member of the Space Policy Committee. She has been a member of the Telecommunications Council of the Ministry of Internal Affairs and Communications (MIC) since 2007. She is also an *ad hoc* member of Infectious Diseases Division to Council of Science in the Ministry of Health, Labor and Welfare (MHLW) and a legal advisor of the Ministry of Foreign affairs to the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space (LSC). She is a board member of the International Institute of Space Law (IISL), The Japanese Association of World Law, The Air Law Institute of Japan, a member of International Law Association (ILA) and the Japanese Society of International Law, and president of the Japan Association of International Security and Trade. Professor Aoki received her Doctor of Civil Law from the Institute of Air and Space Law. Her LL.M. is from the Graduate School of Law, Keio University, Japan, and she received her B.C.L. from Keio University, Japan. She has written numerous articles and books in both English and Japanese concerning outer space law including most recently "The Function of Soft Law in the Development of International Space Law" and "In Search of the Current Legal Status of the Registration of Space Objects".

Mr Jean-François Bureau, a graduate of the Institut d'Etudes politiques de Paris, began his career in the private office of France's Ministry of Defence where he was advisor for political affairs from 1983 to 1985. He subsequently carried out various responsibilities at the Ministry of the Interior, including as sub-prefect and civil administrator from 1985 to 1991 before joining the Minister of Defence private office as advisor from January to September 1991. From 1991 to 1994 he worked in the secretariat-general of the Presidency of the French Republic, and from 1994 to 1998 was a rapporteur at France's Court of Auditors (Cour des Comptes), dealing with defence and industry issues. In 1998, Mr Bureau set up the Communications and Information Delegation at France's Ministry of Defence, which he managed until 2007, in addition to acting as spokesman. From 2007 to 2010, he was NATO Assistant Secretary General, in charge of public diplomacy. He was a General Controller at France's Ministry of Defence from July 2010 to October 2011, when he joined Eutelsat as Director, in charge of Institutional and International Affairs.

Ambassador Jacek Bylica is the Principal Adviser and Special Envoy for Non-proliferation and Disarmament at the European External Action Service in Brussels, since February 2013. Prior to joining EEAS he was the Head of WMD Non-Proliferation Centre at NATO, since 2008. From 2004 to 2008 he was Poland's Ambassador to the United Nations Office and other international organisations and control regimes in Vienna. For over two decades in the Polish Foreign Service, H.E. Mr. Bylica divided his professional activities between Asia and international security affairs. He studied in Warsaw, Moscow, Beijing and Boston and holds degrees in International Relations and Law.

Dr Sergio Camacho is the Secretary General of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean. The Centre is affiliated with the United Nations and has a Campus in Brazil and a Campus in Mexico. Dr. Camacho is a former Director of the United Nations Office

for Outer Space Affairs (OOSA). Before that, he held the posts of Chief of the Space Applications Section and Chief, Committee Services and Research Section also of OOSA. He is the Chairman of the Action Team on Near Earth Objects (NEOS) of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and Chairman of the Working Group on NEOs of the Scientific and Technical Subcommittee of COPUOS. Prior to joining the United Nations, Dr. Camacho carried out research in the area of electromagnetic radiation transfer at the Institute of Geophysics, Universidad Nacional Autónoma de México (UNAM). Dr. Camacho received his Ph. D. in Aerospace Science from the University of Michigan, in the United States and his Bachelor's degree in physics from the UNAM.

Mr Dave Clemente is a Research Associate in the Chatham House International Security Department. He has worked at the International Institute for Strategic Studies and the Overseas Development Institute, and his areas of expertise include technology and cyber security policy and US and UK security and defence policy. He is the author of *Cyber Security and Global Interdependence: What is Critical?* (Chatham House, 2013) and co-author of *Cyber Security and the UK's Critical National Infrastructure* (Chatham House, 2011) and *On Cyber Warfare* (Chatham House, 2010).

Mr Mohamed Hatem Elatawy is the Counsellor Officer in Charge of Disarmament at the Permanent Mission of Egypt to the UN and Other International Organizations.

Dr Abdul-Hakim Elwaer is the Director of the Department of Human Resources, Science and Technology (HRST) at the African Union Commission in Addis Ababa, Ethiopia. In this role, he is in charge of driving policy and implementing programs for the realization of the African Union vision in the area of science, technology and innovation, primary and high school education, and youth capacity development. He previously occupied the position of Director of Administration and Human Resources Management (AHRM) at AUC managing one of the most diverse directorates in the Commission.

Mr Amandeep Singh Gill is the Minister at the Permanent Mission of India to the Conference on Disarmament. Since entering the Indian Foreign Service in 1992, Amandeep Singh Gill has had a variety of postings. Beginning in 2006, he was the Director of Disarmament & International Security Affairs for the Ministry of External Affairs in New Delhi. From 2004 to 2006 he was First Secretary at the High Commission of India, Colombo and from 2001 to 2004 he was the First Political Secretary at the Embassy of India in Tehran. Prior positions include Under Secretary (United Nations) & Under Secretary (Disarmament & International Security) for the Ministry of External Affairs in New Delhi and Third Secretary, Permanent Mission of India to the UN, Geneva and delegate to the Conference on Disarmament. Amandeep Singh Gill has also been the expert representing India to the UN Secretary General's Panel on Missiles from 2007 to 2008, and the expert representing India on the UN Secretary General's Panel on Small Arms & Light weapons. He was a Disarmament Fellow representing India in 1999. Singh Gill has a Bachelor of Engineering degree from Punjab Engineering College, and he received Diplome de langue et de civilization francaise, Geneva University, Switzerland.

Ms Cécile Gaubert is Vice President and Head of Legal and Claims in the Aviation & Space Department of Marsh France. She was in charge of studying the UNIDROIT Protocol to the Cape Town Convention on Matters specific to Space Assets at the European Centre for Space Law (European Space Agency), before joining Marsh in June 2000 as the legal adviser of the Space Team. In 2006, Ms Gaubert was appointed deputy head of the space department. She has been in charge of the management of a team of five dedicated aviation and space legal specialists and claims handlers since 2007. Her team's duties include drafting and negotiation of aviation and space insurance contracts (property damages and third party liability), assisting aviation and space customers to mitigate their contractual exposure, assisting customers to draft and negotiate the liability and insurance provisions of their commercial contracts (lease, sell, maintenance, financing, services contracts...), handling claims on behalf of customers and the development of settlement strategies with law firms and experts.

Mr Yvon Henri is Chief of the Space Services Department (SSD) at the Radiocommunication Bureau of the International Telecommunication Union (ITU), in Geneva (Switzerland). Before joining the ITU in 1995, he held various management positions at France Telecom (Paris, France) and INTELSAT (Washington DC, USA). He has been involved in the satellite business for more than 25 years. ITU is the United Nations specialized agency for information and communication technologies – ICTs. They allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect and strive to improve access to ICTs to underserved communities worldwide.

Dr Yasushi Horikawa is a technical counselor of Japan Aerospace Exploration Agency (JAXA), Tokyo Japan. He graduated from Tokyo University and received his PhD from Tokyo University on Electrical Engineering. He worked for many years in the field of spacecraft design. He contributed to the successful implementation of Japanese meteorological satellite programs and the Earth observation programs as well as the laying down of the space station program. During this time, he was stationed at Hughes Aircraft Company in Los Angeles for two years. He contributed to the implementation of the Japanese space

station program as the Program Manager. After that, he was responsible for all application satellite programs as an executive director of JAXA, including Earth observations, communications and broadcasting, and global positioning satellites and those operation and utilization as well. At the present time, he is advising to the activities of the Japanese application satellite development and utilization programs. He is a chairman of COPUOS. He is a special assistant to the Minister for Foreign Affairs and a special advisor of UN General Assembly Mission of Japan. He is a president of Japan society of cost estimate and analysis since 2011. He is a professor of Tokai University. He is a member of IEICE, JAAS, AIAA, IAA, JRS, JSCEA and SCEA.

Dr Joan Johnson-Freese has been a member of the faculty of the Naval War College since 2002. Previously, she was on the faculty at the Asia Pacific Center for Security Studies in Honolulu, HI; the Air War College in Montgomery, AL; and Director of the Center for Space Policy & Law at the University of Central Florida. Within international and national security studies, Dr. Johnson-Freese focuses on globalization and technology programs and policies generally, and space programs and policies specifically, including issues relating to technology transfer, missile defense, and space security. Dr. Johnson-Freese has testified before Congress on several occasions regarding Chinese space activities and space security issues. She is on the editorial board of China Security, a member of the International Academy of Astronautics, the International Institute for Strategic Studies, the International Space University, served on the Space Studies Board of the National Academy of Sciences, and the Lyles Commission to examine the future of the U.S. civil space program, and an Adjunct Professor at the Watson Institute, Brown University. In addition to teaching courses on Security Studies at the Naval War College, she also teaches courses on Globalization & Terrorism and Space & Security at Harvard. She has travelled extensively in support of the Naval War College PME engagement program, making presentations and conducting curriculum discussions in Cameroon, Ethiopia, Colombia, Mexico, Kenya, South Africa, Brazil, Uruguay, Argentina and the Dominican Republic.

Professor LI Juqian is a professor at China University of Political Science and Law (CUPL), Associate Dean of the School of International Law of CUPL, Associate Director of International Law Center of CUPL, Standing Council-Member of China Space Law Institute, and Standing Council-Member of Beijing International Law Association. Professor LI graduated in 1999 in CUPL, obtaining a doctorate degree of law, specializing in international law. His research field covers public international law, especially space law, and international economic law. Professor LI obtained his bachelor degree on law in 1991, master degree on International Economic law in 1996 in CUPL. He has published about 15 books and 20 articles on international law and international economic law. As visiting professor, he taught law in Korea in 2004 and 2005 and Iceland in 2006. He also acted as a teacher for Chinese astronauts (Taikonauts) in China Astronaut Center.

Ms Agnieszka Lukaszczyk is the Brussels Office Director for Secure World Foundation and has seven years of professional experience in the international space policy arena at an executive level. Currently, Ms Lukaszczyk is based in Brussels, Belgium where she is spearheading and actively facilitating international dialogue regarding space policy and space security matters. Her work involves working with the European institutions, NGOs, academia, space agencies and more. In addition, she works closely with the United Nations (UN) space activities covering the UN Committee on the Peaceful Uses of Outer Space (COPUOS) and the UN General Assembly. From 2006 until 2009, Ms Lukaszczyk has served as the Executive Officer for the Space Generation Advisory Council (SGAC) in support of the UN Programme on Space Applications. In 2009 she was elected the SGAC Chairperson for two years. Currently she is serving on the advisory board of SGAC. In addition, during the period of September 2006 to June 2008, she was a researcher at the European Space Policy Institute. Ms Lukaszczyk is also the Vice President - Europe for World Space Week and sits on the board of the Women in Aerospace Europe.

Dr Peter Martinez is the Chair of the South African Council for Space Affairs, the national regulatory authority for space activities in South Africa. He has served on the South African delegation in several multilateral fora dealing with space affairs and is currently the Chair of the COPUOS Scientific and Technical Subcommittee's Working Group on the Long-Term Sustainability of Outer Space Activities. He is also South Africa's representative on the United Nations Group of Government Experts on transparency and confidence building measures for space activities. Dr Martinez holds a PhD in astrophysics from the University of Cape Town. He is a member of the International Academy of Astronautics, the International Astronomical Union and the International Institute of Space Law. He has authored, co-authored or edited over 190 publications in journals and books and is an Associate Editor of the COSPAR journal *Advances in Space Research*.

Ambassador (Ret'd) Paul Meyer is Senior Fellow in Space Security and Nuclear Disarmament at The Simons Foundation, as well as Fellow in International Security at the Centre for Dialogue, Simon Fraser University in Vancouver, Canada. He joined the then Department of External Affairs in 1975 as a Foreign Service Officer and served abroad in Oslo (1976-1978), Moscow (1982-1984) and Brussels (1988-1992) where he was Political Counsellor in Canada's delegation to NATO. From 1992-1997, he served at the

Embassy in Washington D.C. as Minister-Counsellor (Political) and from 2001-2003 as Minister and Deputy Head of Mission at the Embassy in Tokyo. In Ottawa, Mr. Meyer has held a variety of positions at the Department of Foreign Affairs and International Trade, primarily in the field of international security policy. He was Director-General of the International Security Bureau from 1998-2001. From 2003 to 2007, Mr Meyer served as Ambassador and Permanent Representative to the Office of the United Nations and the Conference on Disarmament in Geneva. His responsibilities spanned a variety of issues and organisations including human rights, humanitarian affairs, global health and disarmament. From 2007 to his retirement from the Foreign Service in September 2010, Mr. Meyer served as Director General of the Security and Intelligence Bureau at DFAIT.

Dr Xavier Pasco is a Senior Research Fellow at the Fondation pour la Recherche Stratégique (FRS) based in Paris where he is in charge of the Department "Technology, Space and Security". Previous to 1997, he was researcher at CREST (Center for Research and Evaluation of the relationships between Strategies and Technology) associated to Ecole Polytechnique, France. His research is currently focused on space and high technology policies and decision-making processes associated with national security strategies. He is working more specifically on the European and U.S. policies and on their impact on the transatlantic relationship in the space activity, both in the civilian and military domains. He has also been involved in a number of projects studying the use of space for the security, both at national and European levels (notably in relation with the R&D Framework Programme) coordinated by the European Commission. He has also supported several analytical works of the subcommittee on Security and Defence of the European Parliament on these issues and has been contributed to ESA on-going work on governance and data policy issues for future programmes. He has led many research programmes in France and has been the author, coordinator or "rapporteur" of many research reports on space issues including official reports. Dr Pasco is also associate Research Fellow at the Space Policy Institute in the George Washington University (Washington D.C., U.S.A.). He is also giving lectures in the French Military School in Paris and at the Institute of Political Studies in Paris. He has also been associate Professor at the University of Marne-la-Vallée and is the European Editor of the international academic review Space Policy. He is a permanent Invited Member of the French National Marine Academy. In 2012, Dr Pasco was been elected full member of the International Academy of Astronautics. He has also been named Expert at the European Economic and Social Committee in Brussels in 2007.

Dr Rajeswari Pillai Rajagopalan is a Senior Fellow at the Observer Research Foundation (ORF), New Delhi. Dr. Rajagopalan joined ORF after an almost five-year stint at the National Security Council Secretariat (NSCS), Government of India (2003-2007), where she was an Assistant Director. Prior to joining the NSCS, she was Research Officer at the Institute of Defence Studies and Analyses, New Delhi. She was also a Visiting Professor at the Graduate Institute of International Politics, National Chung Hsing University, Taichung, Taiwan in early 2012. She is the author of three books: Clashing Titans: Military Strategy and Insecurity Among Asian Great Powers; The Dragon's Fire: Chinese Military Strategy and Its Implications for Asia; and Uncertain Eagle: US Military Strategy in Asia. Her research articles have appeared in edited volumes, and in India Review, Strategic Analysis, Indian Foreign Affairs Journal, and CLAWS Journal. Other writings have appeared in the Journal of Strategic Studies, Journal of Peace Research and Contemporary South Asia and she has also contributed essays to newspapers such as Times of India, Hindustan Times, Economic Times and Pioneer. Her areas of research interests include Indian and Asian foreign policy and security issues, US foreign policy, space security and other arms control issues. She has her own blog at: http://securitystrategyrajagopalan.blogspot.in/.

Mr. Frank Rose currently serves as the Deputy Assistant Secretary of State for Space and Defense Policy within the Department of State of the United States of America. In this position, he is responsible for advising the Assistant Secretary and, as required, the Under Secretary for Arms Control and International Security, on key issues related to arms control and defense policy. These issues include missile defense, military space policy, and conventional arms control. His responsibilities also include liaison with the U.S. Intelligence Community on issues related to the verification of arms control treaties and agreements. Prior to joining the State Department in June 2009, Mr. Rose held various national security staff positions in the U.S. House of Representatives, including service as a Professional Staff Member on both the House Armed Services Committee and the House Permanent Select Committee on Intelligence. Mr. Rose has also held numerous positions within the Office of the Secretary of Defense, including as Special Assistant to the Assistant Secretary of Defense for Strategy and Threat Reduction; and Policy Advisor in the Office of the Assistant Secretary of Defense for International Security Policy. Previous to that, he worked as a National Security Analyst with Science Applications International Corporation and on the staff of U.S. Senator John F. Kerry (D-MA).

Mr Stewart Sanders is Director of the Space Data Association and Senior Vice President (SVP) of Planning & Procurement at SES. Mr Sanders is responsible for the SES fleet planning activities including procurement of new satellites and associated launch vehicles; this role also has responsibility for SES's technical innovation activities. Prior to this role, Stewart was SES's SVP for Customer Service Delivery,

responsible for the monitoring and control of all real-time customer operations on the SES fleet. Having studied electronics and telecommunications in the UK while working for British Telecom International (BTI), Stewart joined Intelsat in 1987, initially working in Japan. Since then he has travelled extensively during his more than 30 years' experience in the satellite communication industry, having fulfilled various satellite and payload operations roles for BTI, Intelsat, ICO, New Skies Satellites and SES. Stewart was the founding Chairman of the Space Data Association, working with industry colleagues from Intelsat and Inmarsat in particular, and remains a Director of the data sharing organisation. He has also worked closely with other industry bodies such as IRG, WBU-ISOG, GVF, EUI and other satellite operators in a number of initiatives targeting RF Interference. Stewart has an MBA from the University of Liverpool and now lives in Luxembourg with his wife and three well-travelled children.

Dr John B. Sheldon is a Senior Fellow (non-resident) at the Canada Centre for Global Security Studies in the Munk School for Global Studies, University of Toronto, Toronto, Canada. He is also the founder and President of The Torridon Group, LLC, an international space and cyberspace policy consulting firm based in Washington, DC. Dr Sheldon was Professor for Space and Cyberspace Strategic Studies at the U.S. Air Force's School of Advanced Air and Space Studies, Maxwell AFB, Alabama, and has published numerous articles and chapters on both space and cyberspace. He previously served in the British Diplomatic Service, and is also a Fellow at the George C. Marshall Institute, Washington, DC; an Associate at Cityforum Ltd., U.K.; and serves on the Advisory Board of the Centre for Strategic Cyberspace + Security Science, U.K. John received his B.A. (Hons.) and M.A. from the University of Hull, and his Ph.D. from the University of Reading, U.K.

Mr Kassym-Jomart Tokayev of Kazakhstan has been Director-General of the United Nations Office at Geneva and Personal Representative of the United Nations Secretary-General to the Conference on Disarmament since 2 May 2011. Mr. Tokayev brings to the position a wealth of experience at the senior levels of Government. A career diplomat, he served from 1992 as Deputy Minister and later as First Deputy Minister for Foreign Affairs of Kazakhstan. He then served as Minister for Foreign Affairs of Kazakhstan from 1994 to 1999, when he was also appointed Deputy Prime Minister and later the same year Prime Minister of Kazakhstan. He served as Prime Minister from 1999 until 2002, when he was appointed State Secretary for Foreign Affairs before becoming Minister for Foreign Affairs in 2003. Prior to taking up his functions as Director-General of the United Nations Office at Geneva, Mr. Tokayev was Chairman of the Senate of the Parliament of Kazakhstan, having been unanimously elected in January 2007. Born in 1953, Mr. Tokayev is a graduate of the Moscow State Institute of International Relations, the Beijing Institute of the Chinese Language and the Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation. He is Doctor of Political Sciences and has written several books on international affairs. He has received state awards of Kazakhstan and other countries. Mr. Tokayev is married and has a son.

Mr Victor Vasiliev is currently the Chair of the Group of Governmental Experts on Transparency and Confidence Building Measures in Outer Space Activities. He graduated in 1989 from the Moscow State Institute (University) of International Relations. Following graduation, Mr. Vasiliev worked in the Ministry of Foreign Affairs for the USSR (Russia) until 1993. He served two terms in the Permanent Mission of the Russian Federation to the United Nations in New York, from 1993 to 1997 and 2000 to 2004. His most recent position was as Senior Counselor for political affairs. Since 2004 he has been Deputy-Director of the Department of International Organizations of the Russian Foreign Ministry. He also served as Deputy Permanent Representative of the Russian Federation to the United Nations Office and other International Organizations in Geneva in charge of Disarmament and Political issues since 2007. Mr. Vasiliev participated as a member of the Soviet/Russian delegations at various international fora, including NPT 1995, 2000, 2005 Review Conferences, UNGA Sessions and First Committee meetings, sessions of UN Disarmament Commission, etc. He was a governmental expert in the Group of Governmental Experts on verification in all its aspects in 2005–2006.

Professor Frans G. von der Dunk holds the Harvey and Susan Perlman Alumni / Othmer Chair of Space Law at the University of Nebraska-Lincoln's unique LL.M. Programme on Space, Cyber and Telecommunication Law. He also is Director of Black Holes BV, Consultancy in space law and policy, based in Leiden. He was awarded the IISL Distinguished Service Award in 2004 and the IAA Social Science Award in 2006. He has written more than 130 articles and published papers, has given more than 140 presentations and was visiting professor at over 30 academic institutions. As of 2006, he is the Series Editor of 'Studies in Space Law'. He has advised numerous governments, international organisations, space agencies, and companies, and was member inter alia of the PCA Advisory Group on Optional Rules for Arbitration of Disputes relating to Outer Space.

Ambassador WU Haitao is currently Ambassador Extraordinary and Plenipotentiary for Disarmament Affairs and Deputy Permanent Representative of the PRC to the United Nations Office at Geneva and Other International Organizations in Switzerland. Ambassador Wu was born in October 1962. He is a university

graduate. From 1985-1989 Ambassador Wu was staff member and Attaché, Information Department, Ministry of Foreign Affairs (MFA) of the People's Republic of China (PRC). From 1989-1993 he was Attaché and Third Secretary, Permanent Mission of the PRC to the United Nations and Other International Organizations in Vienna. From 1993-1995 he was Third Secretary and Second Secretary, Department of International Organizations and Conferences, MFA. In 1995 until 1997 he was Second Secretary, Permanent Mission of the PRC to the United Nations Office at Geneva and Other International Organizations in Switzerland. From 1997-1999 he was Second Secretary, Deputy Director and Director, Department of Disarmament and Arms Control, MFA. From 1999-2004 he worked as the First Secretary and Counsellor, at the Permanent Mission of the PRC to the United Nations (New York). In 2004 until 2010 he was Counsellor and Deputy Director-General, Department of Disarmament and Arms Control, MFA. From 2010 until November 2011 he was Minister Counsellor, Permanent Mission of the PRC to the United Nations Office at Geneva and Other International Organizations in Switzerland.

Mr Vladimir Yermakov is Deputy-Director, Arms Control Department, Ministry of Foreign Affairs, Russian Federation. Previous positions with the Russian Ministry of Foreign Affairs include Senior Counselor at the Embassy of the Russian Federation in Washington, DC and Director for Arms and Technology Transfer Policy and Director for Political and Military Relations. Mr. Yermakov also worked in the Ministry's Department of Africa. From 1982-1990, he served in USSR embassies in Senegal, Gambia, and Algeria. Mr. Yermakov has a Master's Degree in International Relations from Moscow State University and a PhD in Political Sciences from the Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation.