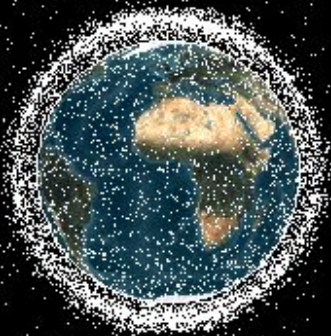


Workshop *on the Protection of* *Space Environment*



sponsored by
Ministry of Foreign Affairs of Japan
in Kuala Lumpur, Malaysia
12th December, 2012

Workshop on the Protection of Space Environment Agenda

December 12, 2012
(Berjaya Times Square in Kuala Lumpur, Malaysia)

(9:30 - 9:35) Welcome speech

Dr. Mustafa Din Subari, Director General of National Space Agency
(ANGKASA), Malaysia

(9:35 - 9:50) Keynote Speech

Dr. Yasushi Horikawa, Chairman of the United Nations Committee on
Peaceful Uses of Outer Space (UN COPUOS)

(9:50 – 10:05) Invited Speech

Dr. Mazlan Othman, Director of the United Nations Office for Outer Space
Affairs (UN OOSA)

(10:05 - 10:25) Coffee Break

(10:25 – 11:45) Technical Presentation

- (1) Dr. Peter Martinez, Chairman of the Working Group on the Long-term
Sustainability of Outer Space Activities, UN COPUOS
- (2) Prof. Dr. Toshiya Hanada, International Center for Space Weather Science
and Education, Kyushu University
- (3) Mr. Kaneaki Narita, Director of Consolidated Space Tracking and Data
Acquisition Department, Japan Aerospace Exploration Agency (JAXA)

(11:45 - 13:15) Lunch (Sponsored by Ministry of Foreign Affairs of Japan)
(Venue: Bronx IV)

(13:15 - 14:15) Panel discussion (Theme: To mitigate space debris)

Moderator : Dr. Martinez

Panelist : Dr. Green (DIISRTE, Australia),
Prof. Dr. Hanada (Kyushu Univ., Japan)
Prof. Hassan (UTM, Malaysia)
Mr. Narita (JAXA, Japan)
Ms. Yatini (LAPAN, Indonesia)

(14:15 - 14:20) Closing

Biography

Speakers, Presenters and Panelists

Welcome Speaker

Dr. Mustafa Din Subari (Malaysia)



Dr. Mustafa Din Subari is currently the Director General, the National Space Agency (ANGKASA) of Malaysia. He obtained his Land Surveying degree from UTM in 1983, Masters in Geodetic Science (OSU) in 1987, and PhD in GPS Surveying (UNSW) in 1996. Prior to joining ANGKASA, he was the Head, Department of Geomatic Engineering, Faculty of Geoinformation Science and Engineering, Universiti Teknologi Malaysia. He is co-chairing the National Working Group on GNSS, which is responsible in steering the direction of GNSS implementations in Malaysia. Apart from involvement in GNSS, he is also responsible in the production of two national almanacs, the Almanac for Surveyors and the Almanak Falak Syar'ie.

Keynote Speaker

Dr. Yasushi HORIKAWA (Japan)



Dr. Yasushi HORIKAWA is a technical counselor of Japan Aerospace Exploration Agency (JAXA), Tokyo Japan. He graduated at the University of Tokyo and he received PhD from the University of Tokyo 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. 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 in JAXA. He is a president of Japan society of cost estimate and analysis since 2011. He is a professor of Tokai University and he is a chairman of UN COPUOS for 2012-2013.

He is a member of IEICE, JAAS, AIAA, IAA, JRS, JSCEA and SCEA.

Invited Speaker

Dr. Mazlan OTHMAN (UNOOSA)



Dr. Mazlan OTHMAN is Director of the United Nations Office for Outer Space Affairs (UNOOSA). She was educated in Malaysia and studied Physics at the University of Otago, New Zealand. She was appointed Professor of Astrophysics in 1994.

In 1990 she was seconded to the Prime Minister's Department to direct the establishment of the National Planetarium where she led the design and manufacture of

Malaysia's first remote-sensing satellite.

In 1999, she was appointed Director of the UNOOSA and, in 2002 returned to Malaysia to set up the National Space Agency. As Director-General, she established the National Space Centre; founded the Langkawi National Observatory; and initiated the programme placing the world's first remote-sensing satellite in the near-Equatorial orbit. In 2007, she spearheaded a programme which launched the first Malaysian astronaut to the International Space Station and resumed the post of Director of UNOOSA. In 2009, she was appointed Deputy Director-General of the United Nations Office at Vienna (UNOV).

She is a fellow of several professional bodies and is the recipient of several national and international awards.

Presenters

Dr. Peter MARTINEZ (South Africa) also as a Moderator of Panel Discussion



Dr. Peter MARTINEZ is the Chairman 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 Chairman of the United Nations Committee on the Peaceful Uses of Outer Space (UN 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*.

Prof. Dr. Toshiya HANADA (Japan) also as a Panelist



Prof. Dr. Toshiya HANADA studied Aeronautics and Applied Mechanics at Kyushu University in Japan. After he graduated with the degree of Doctor of Engineering in 1994, he joined Kyushu University as a Research Associate. Currently he is a Professor at Department of Aeronautics and Astronautics, and also at International Center for Space Weather Science and Education. He is teaching astrodynamics, spacecraft dynamics, and space mission analysis and design. His research interest is to confirm whether or not we really have to clean up space junks out there

as in ΠΑΑΝΗΤΕΣ the Japanese science fiction comics featuring space debris issues. Thus, he is leading IDEA the project for In-situ Debris Environmental Awareness, initiated by graduate students at Kyushu University, to figure out the right answer to his question.

Mr. Kaneaki NARITA (Japan) also as a Panelist



Mr. Kaneaki NARITA is Director of Consolidated Space Tracking and Data Acquisition Department, Japan Aerospace Exploration Agency (JAXA). He is responsible for satellite tracking and flight dynamics operations. He has been conducting the space debris conjunction assessment and collision avoidance concept and operation capability built in JAXA. He is a member of Expert Group B - Space Debris, Space Operations and Tools for Collaborative Space Situational Awareness, Working Group on the Long-term Sustainability of Outer Space

Activities, Scientific and Technical Subcommittee, UN COPUOS.

Panelists

Dr. Michael GREEN (Australia)



Dr. Michael GREEN is General Manager of the Manufacturing Innovation Branch in the Manufacturing Division of the Department of Industry, Innovation, Science, Research and Tertiary Education.

Dr. Green is responsible for the Space Policy Unit and the Space Licensing and Safety Office. The Space Policy Unit is co-ordinating Australia's national and international space activities, delivers the Australian Space Research Program and is responsible for Australia's national space policy.

Prior to joining the Department in 2001, Dr. Green was Head of Engineering at the Australian National University. He has held academic positions at Imperial College of Science, Technology and Medicine, London at Cornell University, New York.

Michael has a PhD in Systems Engineering from the Australian National University and a honours degree in Science from the University of New South Wales.

Prof. Azumi HASSAN (Malaysia)



Prof. Azumi HASSAN is currently a GeoStrategist at Institute of GeoSpatial (INSTeG), Universiti Teknologi Malaysia (UTM). He is the owner of the patent 6052082 issued by the United States Department of Commerce, Patent and Trademark Office. The IP with the title of *“Method for Determining a Value for the Phase Integer Ambiguity and a Computerized Device and System Using Such a Method”* deals with algorithms that can be employed to mitigate the U.S. Pentagon’s GPS Anti-Spoofing policy. He holds the Bachelor of Science specializing in Geodesy from UTM. His Master of Science is in the area of Civil and Environmental Engineering from the University of Wisconsin-Madison. His academic qualification is capped with the Doctor of Philosophy from the same university specializing in satellite signal processing.

Ms. Clara Yono YATINI (Indonesia)



Ms. Clara Yono YATINI is Director of Space Science Center, National Institute of Aeronautics and Space of Indonesia (LAPAN).

She studied at Institut Teknologi Bandung, Dept of Astronomy. After that, she studied Solar Physics at Tohoku University in Japan. In Space Science Center, she is organizing the research and observation of space weather, including its impact to the ionosphere, communication (satellite and terrestrial), geomagnetic field, satellite's orbital perturbation and space debris. She also a researcher on Astronomy and Astrophysics in LAPAN.

(Overall Moderator)

Mr. Tomofumi NISHINAGA (Japan)



Mr. Tomofumi NISHINAGA is Director of Space Policy Division, Ministry of Foreign Affairs (MOFA) of Japan. He graduated from Waseda University and worked at Embassy of Japan in Egypt, United States of America and Iraq. And he served as Civil Affairs Officer of United Nations Transitional Administration in East Timor (UNTAET). In Japan, he served as Deputy Director of Regional Affairs Division of Asian Affairs Bureau, First Middle East Division, Aid Policy Division and Grant Aid and Technical Cooperation Division.

He also served as Senior Coordinator of National Security Policy Division, Foreign Policy Bureau, MOFA.

FLOOR MAP

