**APPENDIX II**

**49th Session of ESCAP/WMO Typhoon Committee**

**February 21 to 24, 2017**

**Yokohama, Japan**

**OPENING REMARKS AND DECLARATION**

**MR. YUKINORI NEMOTO**

**PARLIAMENTARY VICE-MINISTER OF LAND, INFRASTRUCTURE, TRANSPORT AND TOURISM**

Prof. Petteri Taalas, Secretary-General of the World Meteorological Organization,

Mr. Sanjay Srivastava, Representative of the United Nations Economic and Social Commission for Asia and the Pacific,

Mr. Raymond Tanabe, Chair of the ESCAP/WMO Typhoon Committee,

Mr. Yu Jixin, Secretary of the Committee,

Mr. Kunihiro Yamauchi, Representative of the Japan International Cooperation Agency,

Dr. Toshihiko Hashida, Director General of the Japan Meteorological Agency and Vice- Chair of the Typhoon Committee,

Distinguished Participants,

Ladies and Gentlemen,

Good morning, everyone. I am Yukinori Nemoto, Parliamentary Vice-Minister of Land, Infrastructure, Transport and Tourism of Japan.

The 49th Session of the ESCAP/WMO Typhoon Committee is to be held here, hosted by the Japan Meteorological Agency of the Ministry of Land, Infrastructure, Transport and Tourism. I am very pleased and honored to have an opportunity to deliver opening remarks.

Most importantly, I would like to mention that this session is attended by a great number of participants from many countries and regions. This means a lot to the session, and I would like to extend a hearty welcome to all of the participants, especially those from abroad.

As you well know, since its establishment in 1968, the Typhoon Committee has been developing activities to prevent typhoon-related damage in various fields, such as meteorology, hydrology and disaster risk reduction. And I understand that the activities of the Typhoon Committee have been serving as a model for other basins, including the Atlantic Ocean and Indian Ocean, where the concern is damage from tropical cyclones.

Over the past 50 years, as the socioeconomic development of the Northwest Pacific nations and regions has progressed, information technologies, as well as observation and prediction techniques in meteorology and hydrology, have greatly advanced. These advancements have enabled us to obtain an astonishing amount of information even before a typhoon actually approaches. Meanwhile, structural and non-structural measures against floods and sediment disasters have also advanced to reduce the frequency of damage events arising out of disasters.

But, it is important to remember the fact that typhoons still cause various types of damage to people in the region each year. In particular, the Northwest Pacific region, which has seen the most rapid urbanization in the world, is an area subject to frequent cyclones. Therefore, the relevant organizations and countries must keep working on the measures to reduce the risk of disasters.

Distinguished Delegates and Guests, Ladies and Gentleman,

Against such a backdrop, Japan has been supporting disaster risk reduction measures against typhoons in the Northwest Pacific region. We develop high-quality hard and soft infrastructure, and apply the knowledge and skills we gain through such development to provide a variety of information on typhoons, including that which we acquire with the meteorological satellite Himawari, as well as information on risk levels of floods and sediment disasters. We also offer technical support to meteorological, hydrological and anti-disaster organizations of Members based on the activity plans of the Typhoon Committee. In this way, we are contributing to the advancement of typhoon risk reduction measures of all of our Members.

Members are increasingly concerned about and interested in measures to prevent and mitigate typhoon-related damage. Here, I promise you that Japan will continue our efforts toward the further development of knowledge and skills in the region. This session should serve as an excellent opportunity for the Typhoon Committee Members to share their issues and make the next round of Strategic Plan through constructive discussion.

On behalf of the host government, I declare the 49th Session of the ESCAP/WMO Typhoon Committee officially open.

Thank you very much.

**OPENING REMARKS**

**PROF. PETTERI TAALAS**

**SECRETARY-GENERAL, WORLD METEOROLOGICAL ORGANIZATION**

(Dignitaries)

……

Dr Hashida, - Permanent Representative of Japan with WMO

Mr Ramond Tanabe - Chair of the ESCAP/WMO Typhoon Committee

Mr – Representative from ESCAP

Mr Jixin Yu - Secretary of the Typhoon Committee

Distinguished Delegates and Guests,

Colleagues, Ladies and Gentlemen

Welcome you all to the 49th session of the ESCAP/WMO Typhoon Committee.

Sincere appreciation to the Government of the Japan, in particular JMA, for hosting the session in Yokohama.

Thanks to all the members of the Committee, in particular RSMC Tokyo Typhoon Centre, for their efforts to reduce the risk of typhoon disasters during the previous season. (Statistics for 2016: 26 named tropical cyclones, of which 13 reached typhoon intensity. 30 year average: 25.6 named TCs).

The 17th WMO Congress in 2015 approved the Strategic Plan of the Organization and provided guidance to the work of the TCP:

(a) To expand and consolidate further the regionally coordinated systems to cover all Members prone to tropical cyclones;

(b) To enhance the capacities of Members to provide more accurate forecasting and warning services which are impact-based and in multi-hazard approach;

(c) To improve forecasting and warning capabilities of Members through advances in sciences and technologies, and capacity development; and

(d) To reduce damage and loss of lives through the above institutionalized activities and arrangements, and in step with the developmental goals of the Sendai Framework.

EC-68 made further decisions for TCP to strengthen the implementation of the first two objectives above, in particular to develop impact-based forecasting and warning products.

The Congress also requested that WMO should continue to give high priority to capacity development in tropical cyclone forecasting, particularly in SIDS and LDCs and make the necessary arrangements to extend training activities to cover all the five regional tropical cyclone bodies.

The recent RA II-16 (Abu Dhabi, UAE) also decided to enhance capacity and competencies of the NMHSs in tropical cyclone forecasting and warnings.

This can be achieved through the provision of regular training on tropical cyclone for casting and warnings, and the establishment of a protocol to initiate event-driven rapid-scanning satellite observations.

All these efforts require coordination and collaboration in holistic and systematic approaches, for example coordination of TCP with the GDPFS, PWS and other programmes, tropical cyclone regional bodies and RSMCs/TCWCs.

In addition, the diversity of the tropical cyclone impacts requires partnerships with regional and international organizations to face new challenges ahead.

In tropical cyclone DRR, the improvements on timeliness of hurricane warnings and the accuracy of track forecasts have been steady over the last decades, but there is still a need for increased warning lead time for enhanced response.

Moreover, users demand forecasting and warning information based on impacts and risks to support national DRR (e.g. Hurricane Matthew on 4 October 2016 in the Atlantic).

This means enhanced products: not just providing storm track and intensity and also storm surges, but areas of probable maximum winds, coastal inundation zones, inland flooding areas, most probable and effective evacuation zones…

However, in some Members of the region, forecasting and warning services for tropical cyclones are still insufficient to ensure the safety of all their citizens.

This requires stronger interaction between the NMHSs and the national agencies in charge of disaster risk reduction to increase the effectiveness of early warning systems and associated mitigation actions.

This Committee has already developed SSOP – Synergized Standard Operating Procedure to help Members establish national strategies for concerted actions under threat by tropical cyclones.

This session offers an opportunity to discuss further strategies for coordinated DRR actions, in particular the establishment of national institutional arrangements for DRR (National Protocols).

Indeed, impact-based forecasting and warnings products under tropical cyclone circumstances will serve as a leverage to link the NMHS’s services with possible national protocols on DRR for better tropical cyclone DRR services.

This Committee is going to celebrate its 50th anniversary next year. Its achievements are remarkable. However, the Committee still needs to do more to fully support DRR actions in all Members. WMO through TCP will be always behind you in all dimensions.

Once again thanks to the Government of Japan, and to the staff of the JMA (led by Dr Hashida, plus Mr Hiroshi Koide, etc.).

I wish all the participants a very successful and productive session over the next four days and I look forward to the fruitful outcomes of your deliberations.

I also wish you all an enjoyable stay in Yokohama. Thank you.

SANJAY

**OPENING SPEECH**

**MR. RAYMOND TANABE, CHAIR OF TC**

Aloha and Good Morning, Ohai yo gozaimasu

Mr. Yukinori Nemoto, Parliamentary Vice-Minister of Land, Infrastructure, Transport and Tourism

Prof. Petteri Tallas, Secretary-General, WMO

Mr Sanjay Sirivastaya, Chief, Disaster Risk Reduction, ESCAP

Mr. Toshihiko Hashida, Director General JMA

Vice Chair of TC

Mr. Yu Jixin, Secretary of the Typhoon Committee

Mr. Kunihiro Yamauchi, Director General, Global Environment Department, JICA

Fellow Typhoon Committee Members and Participants

Welcome to Yokohama for the 49th Annual Session of the Typhoon Committee

I would first like to thank the country of Japan, JMA, and the Local Organizing Committee for hosting this years Session. The conference facilities and hotel accommodations are outstanding and the City of Yokohama is very beautiful. Perhaps most importantly the food is oishi or delicious and Japanese beer is really good. I hope everyone has the opportunity to explore some of the city this week.

It is a very exciting time for the Typhoon Committee as we finalize a new Strategic Plan. As we all know the world and our countries have changed a lot since the last Strategic Plan was signed. The last Sendai Framework has provided the Committee with a unique and fresh set of goals and challenges. In particular, the emphasis on risk based forecasting and impact based decision support will ensure we minimize loss of life and economic damages in our respective countries. Of similar if not greater importance, is the focus on regional and international collaboration. Typhoons do not care about borders and I firmly believe the Typhoon Committee is one of the greatest examples of how countries with different political views, socio-economic status, languages, and cultures, can find common ground and work together to minimize the impacts of typhoon related events.

Over the past year it has been my absolute and great honor to serve all of you as the Chair of the Typhoon Committee and I have thoroughly enjoyed working with everyone. We have made wonderful progress and I am looking forward to continued excellence. The technical presentations we will see later today showcase the great work being done by Members.

We have a full and busy week ahead of us and ask for everyone’s continued participation to make the 49th Annual Session a success. Let’s work hard during the day to take care of the business at hand. We will then be able to enjoy the hospitality of Japan and catch up with each other during the evenings. I love to hear stories about your families, your children, and your lives.

Mahalo nui, Thank you very much, arigato gozaimashita

**OPENING REMARKS AT 49TH SESSION ESCAP/WMO TYPHOON COMMITTEE**

BY MR. YU JIXIN

Secretary of Typhoon Committee

(**21- 24 February 2017 Yokohama, Japan**)

**Mr. Yukinori Nemoto,** Parliamentary Vice-Minister of Land, Infrastructure, Transport and Tourism

**Prof. Petteri Taalas,** Secretary-General of World Meteorological Organization

**Mr. Sanjay Srivastava,** Chief, Disaster Risk Reduction, United Nations Economic and Social Commission for Asia and the Pacific

**Mr. Raymond Tanabe,** Chairperson of the Typhoon Committee

**Mr. Kunihiro Yamauchi,** Director General, Global Environment Department, Japan International Cooperation Agency

Dear participants, Ladies and Gentlemen,

Good Morning and Coniqiwa!

It is my great honour to address you on the occasion of the opening of the the 49th Session of the ESCAP/WMO Typhoon Committee.

First of all, I would like, on behalf of Typhoon Committee Secretariat and myself, to express my sincere appreciation to the Japan government through Japan Meteorological Agency for organizing and hosting this important annual session, and to extend a warm welcome to all the colleagues and participants at this session.

Ladies and Gentlemen,

As a regional intergovernmental body, ESCAP/WMO Typhoon Committee officially established in 1968, and has already a long history of about forty-nine years. We will hold a special event to celebrate 50th Anniversary of Typhoon Committee for the contributions to society development in next year. Since established, the Typhoon Committee, under the auspice of the UNESCAP and WMO, has been playing a unique role in reducing the loss of life and properties and minimizing social, economic, and environmental impacts by typhoon-related disasters. It also illustrates the contributions of the TC Members in achieving the United Nations Sustainable Development Goals and the desired outcomes of the Sendai Framework for Disaster Risk Reduction.

Typhoon season in 2016 was characterized by the absence of named storms in the first half of the year and above-average number of storms which made landfall over China and Japan. While more details can be found in the reports of RSMC Tokyo and TC Members report.

Our goal is to promoting and co-coordinating efforts to minimize typhoon damages in the region. It is pleased to note that the progress achieving the goal we have made under the efforts of all TC Members, Chairpersons, AWG, working groups in the last year. Most AOPs and activities of TC have been implemented successfully. Taken this opportunity, I would like to express my sincere thanks to all of you for the continuous support, guidance, contribution and assistance which has been given to TCS.

This is the regular annual session of Typhoon Committee. But there are many important issues will be touched. We will make decision on our new Strategic Plan 2017-2021 and other administrative issues, review the activities of 2016 and initiate the new AOPs of 2017 etc. I wish the session a complete success and may you have an enjoyable stay in the Yokohama.

Thank you!

**OPENING SPEECH**

**MR. KUNIHIRO YAMAUCHI,**

**DIRECTOR GENERAL,**

**GLOBAL ENVIRONMENT DEPARTMENT,**

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**

Mr. Yukinori Nemoto, Parliamentary Vice-Minister of Land, Infrastructure, Transport and Tourism   
Mr. Sanjay Srivastava, Representative of the United Nations Economic and Social Commission for Asia and the Pacific   
Prof. Petteri Taalas, Secretary-General, World Meteorological Organization   
Mr. Raymond Tanabe, Chair of Typhoon Committee   
Mr. Yu Jixin, Secretary of the Typhoon Committee

Dr. Toshihiko Hashida, Director General of the Japan Meteorological Agency and Vice- Chairperson of the Typhoon Committee  
  
Distinguished participants, ladies and gentlemen,

I am very much honored to speak here for the opening of forty-ninth Session of Typhoon Committee hosted by the Government of Japan. I am so delighted to see a lot of distinguished participants who have been engaged in Meteorological Services and Disaster Risk Reduction activities in Asia.

JICA is implementing agency of Japanese Official Development Assistance and committed to support developing countries for implementation of Sendai Framework for Disaster Risk Reduction which was adopted in Japan in 2015. JICA is closely working with Japan Meteorological Agency (JMA) in international cooperation for Meteorological Services.

Economic and human loss caused by Typhoon is very severe and make negative impact on economy and development. Japan is one of the most typhoon prone countries and experienced a lot of serious damages during development phase after World War II such as typhoon Kathleen in 1947 and typhoon Vera[[1]](#footnote-1) in 1959. To reduce Disaster Risk, the Government of Japan invested 5 to 8% of its national budget in Disaster Risk Reduction since the time we had very low per-capita GDP of less than USD 5,000 before 1970. We invested a lot in physical structural measures and non-structural measures such as regulatory and institutional Disaster Risk Reduction mechanism, Land use regulation and building codes, early warning system, education and awareness raising and so on.

JICA’s cooperation in Disaster Risk Reduction is based on experience in Japan and committed to implementation of priority for actions of Sendai Framework for Disaster Risk Reduction. JICA is promoting investment in physical structural measures and non-structural measures which are emphasized in priority actions of Sendai Framework. International cooperation in Meteorological Services is one of the most important sub sectors of JICA’s cooperation.

Typhoon Forecasting and Monitoring are strong driving force for early warning system and it needs investment, capacity development and international cooperation.

I would like to show some cases of JICA’s cooperation for Typhoon Forecasting and Monitoring.

JICA constructed 21 meteorological observation radars and has been constructing 8 radars so far since the first radar was handed over in Bangladesh in 1988. JICA also have provided related trainings as well as construction of cyclone shelters. Radar technology of Japanese company has been developed over the years such as solid state power amplifier and Dual Polarization system. JICA adopts such new and advanced technologies as per capacities of the partner countries.

JICA is also cooperating in utilization of Himawari satellite data in close collaboration with JMA.

For capacity development, JICA has been hosting a meteorological training course in Japan called “Reinforcement of Meteorological Services Course” with JMA for forty three (43) years since 1973. Every year, around eight (8) meteorological officers join this three months intensive and comprehensive course. This course is composed of lecture and site survey, and includes many subjects related to typhoon forecasting and monitoring. I believe there must be alumni of this course in this venue.

Ladies and Gentlemen,

We believe that ex-ante investment in Disaster Risk Reduction is more cost efficient than ex-post response and reconstruction. Damages of typhoon sometimes seriously affect the development of the country, which Japanese people experienced in the past. JICA is strongly committed to promotion of ex-ante investment in Disaster Risk Reduction and continuation of international cooperation in Meteorological services.

I would like to reiterate the importance of investment in physical structural measures and non-structural measures once again.

Lastly, I hope the next few days produce meaningful results for Typhoon Committee and members and all of you enjoy good stays in Japan.

Thank you for your attention.

1. Isewan Typhoon in Japanese name [↑](#footnote-ref-1)