**APPENDIX II**

**Opening Remarks from TC56 Chair (TC 57th Session)**

**Dr. Mohd Hisham Mohd ANIP**, Director General, Malaysian Meteorological Department,

on behalf of TC56 Chairperson

1. **The Honourable Renato U. Solidum, Jr**

**Secretary of the Department of Science and Technology, Philippines**

1. **The Honourable Imelda G. Calixto-Rubiano**

**Mayor of Pasay City**

1. **Dr. Nathaniel T. SERVANDO**

**Administrator of PAGASA**

1. **Dr. Duan Yihong**

**Secretary of the Typhoon Committee**

1. **Mr. Daisuke MARUICHI**

**Economic Affairs Officer of the Information and Communications Technology Disaster Risk Reduction of UNESCAP**

1. **Mr. Cyrille HONORE**

**Director of the Disaster Risk Reduction, Muti-Hazards Early Warning System (MHEWS) Office and Public Weather Services of WMO**

1. **Distinguished Representatives from Countries’ Permanent Representatives to the WMO**
2. **Executive Heads and Representatives of other international organisations**
3. **Distinguished Delegates, Guest and Observers**

**A very Good Morning everyone!**

1. Firstly, it is a great pleasure to welcome all of you to Manila, Philippines for “**The 57th Session of the ESCAP/WMO Typhoon Committee**”. It is an honour and a privilege to address you all today as the Chairman of the Typhoon Committee before I hand over the position to Dr. Servando later today.
2. Secondly, I would like to convey warmest regards from the former TC Chair, Mr. Muhammad Helmi Abdullah who was officially retired as the Director General of MET Malaysia on 4 August 2024.
3. Thirdly, my sincere gratitude to PAGASA, on behalf of the Government of the Philippines for their outstanding support in hosting this event. The facilities and the hospitality we have received so far are truly meritorious.

**Ladies and Gentlemen,**

1. Despite the advances we have made in typhoon monitoring, forecasting, and early warning systems over the past decades, it is clear that we must continue to innovate and improve our approaches to meet the growing demands of our societies.
2. As the Typhoon Committee members, we have very important role in protecting our countries from human and asset losses caused by typhoons, thus contributing to the sustainable development of each nation as well as the entire region.
3. Our region, with its unique vulnerabilities and challenges, stands to benefit immensely from a robus integrated early warning framework. The United Nations’ EW4All initiative aims to ensure that everyone on the planet is protected by early warning systems within the next five years.
4. Therefore, we really need to strengthen the entire value chain of our operations, from early warning to preparedness, response, recovery, and resilience-building in order to fulfil the UN goal.

**Ladies and Gentlemen,**

1. Extreme weather events have a growing impact on a nation’s sustainable development and the economy. In respect to this, we need to recognise the complexity of natural disasters, calls for multi-hazard approaches and early warning systems, hence, we need to make use of the best that today’s technology has to offer.
2. As we embark on these discussions, let us keep in mind of the people and communities who are affected by typhoons. Our work here is not just about scientific advancement or policy development; it is about saving lives, protecting livelihoods, and building a safer, more resilient future for all.
3. Let us congratulate to all our experts on typhoon for the achievements they have registered over the years and also thank them for their willingness to share their knowledge and expertise.
4. Your presence here today underscores the importance of our shared mission and the strength of our community. I am sure that all of us will greatly benefit from the presentations and discussions that to be held throughout this session.

**Ladies and Gentlemen,**

1. Before I end, I would like to once again express my special thanks to our hosts for their exceptional support and hospitality.
2. Last but not least, I would also like to take this opportunity to record my sincere appreciation to the Local Organising Committee and the Typhoon Committee Secretariats for the hard work they have put into the preparation of this session.
3. I am confident that in these few days, we will have a productive and fruitful deliberations during this session in strengthening the value chain within the UN EW4All Framework for the Typhoon Committee Region.

Terima kasih! Thank you! Maraming Salamat!

**Opening Remarks from TC56 (TC 57th Session)**  
**Mr Cyrille Honoré**  
Director – DMPS Division, Services Department, World Meteorological Organization

(Dignitaries) ......  
Dr. Mohd Hisham ben Mohd ANIP, Director General of the Malaysian Meteorological Department,

acting ESCAP/WMO Typhoon Committee Chairperson,  
Mr. Daisuke MARUICHI, Economic Affairs Officer, Information and Communications Technology

Disaster Risk Reduction, United Nations Economic and Social Commission for Asia and the

Pacific (UNESCAP)  
Prof. DUAN Yihong, Secretary of the Typhoon Committee,  
Dr. Nathaniel SERVANDO, Administrator of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), Vice-Chairperson of the Committee,  
Attorney Peter Manzano, representing the Mayor of Pasay City,

Mr Rodolfo Calzado, assistant secretary of the Department of Science and Technology,

Honorable Renato U SOLIDUM,Jr, Secretary of the Department of Science and Technology of the Philippines

Distinguished Permanent Representatives with WMO, heads of delegations, Guests, Ladies and Gentlemen, colleagues and friends

Good morning!

It is a pleasure to join you all for my first in-person participation in the ESCAP/WMO Typhoon Committee. On behalf of the Secretary-General of the World Meteorological Organization, Prof. Celeste Saulo, and our teams from WMO Headquarters and the Regional Office, I warmly welcome you to the 57th session of the Typhoon Committee.

I express my sincere gratitude to Mr Muhammad Helmi ABDULLAH, Chairperson of the Typhoon Committee and Mr. Hisham ANIP, the acting Chairperson, Dr. Nathaniel SERVANDO, the Vice Chairperson, the Typhoon Committee Secretariat, and the Government of the Philippines, for their excellent collaboration and support in organizing this important event.

Typhoons vividly demonstrate the devastating impacts of extremes in extreme weather—disrupting lives, damaging infrastructure, and hard-testing our resilience.  
In the past year, the Committee region experienced twenty-seven (27) named storms of which 13 intensified into typhoons – an average in terms of activity. However, 2024 saw the most active November on record in this region. Philippines has been hit by an extraordinary six tropical storm series in only five weeks during this period.

Climate change is progressing faster than anticipated, leaving us with a narrowing timeline.

These challenges emphasize the critical need for collective responsibility and collaboration in disaster preparedness, response, and recovery. Your support for this global effort is essential.

The Integrated Workshop conducted in November 2024 focused on “**Strengthening the Value Chain within the UN EW4All Framework for the Typhoon Committee Region**” addressing a central challenge: delivering early, actionable warnings for increasingly severe weather events.  
We share a commitment to expand collaboration under the **Early Warnings for All (EW4All)** initiative to ensure that no one is left unprotected.

Guided by the World Meteorological Congress and the WMO Executive Council, WMO contribution to EW4All is a top priority in the WMO Strategic Plan for 2024–2027. Through regular reviews and concrete actions, this initiative is already making a difference. The Typhoon Committee is at the forefront of regional efforts in coping with tropical cyclones.

Ladies and Gentlemen,

I wish to commend the Typhoon Committee and its Members for their substantial progress in aligning activities with EW4All and for advancing regional resilience. I would like to highlight that, beyond organizing and maintaining practical arrangements related to daily operations and coordination, the Committee, through its working groups, is also doing excellent work in considering sectoral aspect implications and how to progress further building on improved science, frontline technologies. The first quarter of the 21st century will be behind us at the end of this year. I trust that the work done by the various groups will facilitate the transition of these new promising developments, from earth observation and communication technologies to Artificial Intelligence into the full scope of necessary applications to mitigate adverse impacts of typhoons and tropical cyclones worldwide.

In addition to this alignment with EW4All,, WMO Regional Association II (Asia) and the Regional Association V (South-west Pacific) are re-establishing their working structures in 2025, where we anticipate a closer collaboration between Working Groups and Coordination Panels and more joint regional activities to also contribute to advancing this critical ambition.

However, it is also clear that such an initiative cannot reach its objective without strong country engagement, ownership and leadership. As we look into the future, I encourage all Members to continue giving priority to the EW4All in your planning of annual activities.  
Working together at all scales, with as broadened partnerships as possible, we can better protect our communities, our economies, and our environment. Through our collective expertise and action, we can create a safer and more resilient future for all.

I extend my thanks to all the Members of the Committee, and gratitude to the Tokyo Typhoon Center, the WMO Regional Specialized Meteorological Centre (RSMC), for your tireless efforts in reducing risks, and damages caused by typhoons.

Finally, I express a heartfelt appreciation to the Typhoon Committee Secretariat, and our host, Philippines, for the excellent organization of 57th session of the Typhoon Committee.

I wish you all a productive and successful event. Thank you.

**Opening Remarks from ESCAP (TC 57th Session)**

**Mr. Daisuke MARUICHI**

Economic Affairs Officer, Information and Communications Technology Disaster Risk Reduction, ESCAP

Honorable Renato U. SOLIDUM, Jr., Secretary, Department of Science and Technology, Philippines,

Honorable Imelda G. CALIXTO-RUBIANO, Mayor of Pasay City,

Dr. Nathaniel T. SERVANDO, Administrator, Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA),

Mr. DUAN Yihong, Secretary of the Typhoon Committee,

Mr. Cyrille HONORE, Director of the Disaster Risk Reduction, Muti-Hazards Early Warning System (MHEWS) Office and Public Weather Services. World Meteorological Organization,

Dr. Mohd Hisham Mohd ANIP, Director General, Malaysian Meteorological Department,

Distinguished participants, colleagues, and honored guests,

It is my privilege to be part of the 57th session of the Typhoon Committee. I would like to express my sincere gratitude to the Philippines for your warm hospitality and for all the effort that went into making this annual session a success. I would also like to thank the Typhoon Committee Secretariat for the excellent support provided.

As we know, 2024 was the warmest year on record, with temperatures approximately 1.55°C above pre-industrial levels. I am sure that, as professionals in this field, you are all well aware of the implications of a warming planet, including more extreme weather events, increased unpredictability, and cascading risks. As the climate warms, one hazard often triggers another, and the combined effect of multiple simultaneous disasters makes it even harder to predict and address. In fact, ESCAP's Asia-Pacific Disaster Report has identified emerging and intensifying risk hotspots based on the latest climate projection data, aiming to raise awareness about this critical issue. I will present some of these findings on Day 3.

The four pillars of the early warning system provide a solid framework to help us prepare and build resilience before, during, and after extreme events. Subregional cooperation institutions, such as the Typhoon Committee, exemplify a successful platform and embody good practices, especially in Pillar 1, which focuses on building disaster risk knowledge, and Pillar 2, which strengthens forecasting and monitoring.

I am pleased to share that, given the importance of this initiative, ESCAP has received a mandate from its Member States to support the Early Warnings for All initiative. So far, we have provided technical assistance on Pillars 1 and 2 to the Maldives, Lao PDR, Nepal, and Tajikistan—all pilot countries for the initiative.

In this regard, ESCAP plans to further strengthen our partnership with the Typhoon Committee, its members, and the WMO to empower transboundary solutions to transboundary hazards through systematic resilience-building. I believe there are several opportunities for ESCAP and the Typhoon Committee, along with its members, to collaborate. I will discuss these opportunities in more detail on Day 3.

We must work together to save lives and protect livelihoods, and ESCAP will fully support the Typhoon Committee in achieving this goal.

I wish you all the best in your deliberations at the 57th Session of the ESCAP/WMO Typhoon Committee.

Thank you.

**Opening Remarks from ESCAP (TC 57th Session)**

**Dr. DUAN Yihong**,

Secretary of the Typhoon Committee

Distinguished Dr. Mohd Hisham Mohd ANIP，Director General, Malaysian Meteorological Department, On behalf of Typhoon Committee 56th Session Chairperson

Distinguished Mr. Cyrille HONORE, Director of the Disaster Risk Reduction, Muti-Hazards Early Warning System Office and Public Weather Services. World Meteorological Organization

Distinguished Mr. Daisuke MARUICHI, Economic Affairs Officer, Information and Communications Technology Disaster Risk Reduction, United Nations Economic and Social Commission for Asia and the Pacific

Distinguished Dr. Nathaniel T. SERVANDO, Administrator, Philippine Atmospheric, Geophysical and Astronomical Services Administration

Distinguished Mr. Rodolfo Galzado, Assistant Secretary, Department of Science and Technology, Philippines

Distinguished Honorable Imelda G. CALIXTO-RUBIANO，Mayor of Pasay City

Distinguished Honorable Renato U. SOLIDUM, Jr. Secretary, Department of Science and Technology, Philippines

**Distinguished Guest, Ladies and Gentlemen,**

Good morning, and welcome to the 57th session of the Typhoon Committee here in Manila, Philippines. It is an honor and a privilege to address you all at this significant gathering, where we come together to share knowledge, strengthen our cooperation, and reaffirm our commitment to building a more resilient future in the face of the challenges posed by typhoons.

The importance of this Committee cannot be overstated. As an intergovernmental organization dedicated to mitigating the impact of typhoons on the Asia-Pacific region, our work is critical to protecting lives, livelihoods, and the environment. Each year, typhoons affect millions of people, causing devastating damage and loss. Our mission is to reduce these impacts through concerted efforts in monitoring, forecasting, preparedness, response, and recovery.

I would like to extend my heartfelt gratitude to our hosts, PAGASA, Department of Science and Technology, the Philippines, for their warm hospitality and excellent arrangements. The Philippines, with its unique geographical location, is no stranger to the destructive power of typhoons. This makes Manila a fitting venue for our discussions, as we seek to learn from the resilience and determination of the Filipino people in the face of such adversity. As you know, Before 2007, the Philippines, as the host of Typhoon Committee Secretariat, made lasting contributions by fostering regional coordination, enhancing disaster management, and advancing research on typhoon resilience. These contributions will always be remembered in the history of the development of the Typhoon Committee.

In recent years, we have witnessed significant advancements in meteorological science and technology. Improved satellite observations, numerical weather prediction models, and data assimilation techniques have enhanced our ability to track and predict typhoon paths and intensities. These developments have saved countless lives and mitigated the economic impact of typhoons. However, there is still much work to be done. We must continue to invest in research and innovation to stay ahead of the ever-evolving threats posed by climate change and extreme weather events.

Our collaboration with international partners has been instrumental in achieving our goals. The support and resources provided by organizations such as the World Meteorological Organization and the United Nations Economic and Social Commission for Asia and the Pacific have been invaluable. Together, we have made great strides in building regional capacity for disaster risk reduction and fostering a culture of preparedness.

I would like to take this opportunity to extend my heartfelt thanks to the Typhoon Committee Members, for your dedication and hard work. Your commitment to our mission is truly commendable. I am deeply grateful to AWG Chairs and members, as well as the Chairs and Focal Points of all working groups and TRCG as well as experts from the Members, for your tireless efforts. It is through your professional knowledge and passion that we continue to make a significant difference for the Typhoon Committee.

As we embark on this 57th session, let us renew our commitment to collaboration, innovation, and resilience. Let us continue to build on the foundations we have laid, striving to create a safer, more sustainable future for all. Together, we can overcome the challenges posed by typhoons and ensure the well-being of our communities.

Thank you for your attention.

**Opening Remarks from ESCAP (TC 57th Session)**

**Dr. Nathaniel T. SERVANDO,**

Administrator, Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

* **Honorable Sec. Dr. Renato U. Solidum, Jr.**, Secretary of the Department of Science and Technology
* **Dr. Mohd Hisham Mohd Anip**, Director General of the Malaysian Meteorological Department, and Chairpeson of the Typhoon Committee 56th Session
* **Dr. Cyrille Honore**, Director of the Disaster Risk Reduction, Muti-Hazards Early Warning System (MHEWS) Office and Public Weather Services of the World Meteorological Organization (WMO)
* **Dr. Daisuke Maruichi**, the Economic Affairs Officer of the Information and Communications Technology Disaster Risk Reduction, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
* **Dr. Duan Yihong**, the Head Secretariat of the Typhoon Committee
* **Honorable Mayor Imelda G. Calixto-Rubiano** of Pasay City
* Honorable officials from ESCAP and WMO, distinguished delegates, esteemed colleagues, guests, and friends – *Good morning, and mabuhay!*

On behalf of the **Philippine Atmospheric, Geophysical and Astronomical Services Administration** (PAGASA) and the Department of Science and Technology (DOST), it is my distinct honor and privilege to welcome you all to the 57th Session of the ESCAP/WMO Typhoon Committee here in Pasay City, Metro Manila, Philippines. We warmly acknowledge and appreciate your attendance.

It is a great pleasure for us to host this significant gathering of experts and decision-makers from across the region. The Typhoon Committee has, for more than five decades, been instrumental in strengthening regional cooperation, advancing meteorological science, and enhancing disaster preparedness across typhoon-prone nations.

In December 2006, almost two decades ago, the 39th Annual Session of the Typhoon Committee was also conducted in Manila. And for the 57th session of the Typhoon Committee, hosted once again by the Philippines this year, we pay homage to our former PAGASA Director as one of the founders of the Typhoon Committee – Dr. Roman L. Kintanar. We continue his legacy of motivating institutions and members to dedicate more efforts to achieve the Committee’s mission and vision, as well as to foster camaraderie and collaboration among countries and territories in its unified efforts against the challenges of extreme weather events and climate change.

PAGASA remains steadfast in its mission to integrate cutting-edge science and technology into its service which includes the monitoring, forecasting, and warning of various weather systems. In recent years, we have continued to upgrade and expand our observation network including synoptic stations, weather radars, river-basin telemetry, and enhance our numerical models satellite-based monitoring, ensuring that our data are reliable and accurate. We also geared towards impact-based forecasts which are not just more precise, but also more actionable. Alongside, we have also placed a strong emphasis on community-based disaster preparedness, recognizing that resilience starts at the grassroots level.

While each of our nations has made significant strides in strengthening disaster resilience, we know that no single country can face the growing threats of climate change and extreme weather alone. The spirit of collaboration that defines the ESCAP/WMO Typhoon Committee is what makes our work truly impactful. By sharing our expertise, data, and best practices, we ensure that all communities—especially the most vulnerable—benefit from science-driven solutions and regional solidarity.

The need for enhanced climate adaptation strategies, data-driven decision-making, and stronger regional coordination has never been more crucial. That is why this session is very significant. Over the next few days, we will exchange insights, refine our strategies,

and explore innovations that will shape the future of typhoon monitoring, forecasting, risk assessment, and disaster resilience. Yet, each year, we also see the fruits of our collaboration — more accurate forecasts, better early warning systems, and stronger disaster preparedness measures that save lives.

Shifts in climate normalcies continue to push the limits of our forecasting models and disaster preparedness methodologies. We must go beyond traditional approaches. We need to embrace AI and big data, strengthen cross-border information sharing, promote nature-based solutions, and build infrastructure that withstands extreme weather events.

This session provides a valuable opportunity for us to review progress, exchange insights, and develop new strategies that will further strengthen our collective efforts. As we discuss multi-hazard early warning systems, climate adaptation strategies, and resilient infrastructure, let us reaffirm our commitment to a safer, more disaster-resilient Asia-Pacific region.

Lastly, allow me to extend my heartfelt gratitude and appreciation to the members of the Local Organizing Committee, as well as the Typhoon Committee Secretariat based in Macau for bringing this event into reality, despite the many hurdles along the way.

Once again, on behalf of DOST-PAGASA, I wish everyone a fruitful day ahead and the rest of the week filled with information, ideas and inspiration. We warmly welcome everyone to this event! I hope this session will be both productive, inspiring, and encouraging, and I look forward to the many fruitful discussions ahead.

Thank you very much, at mabuhay po ang lahat!

**Opening Remarks from ESCAP (TC 57th Session)**

**Honorable Imelda G. CALIXTO-RUBIANO**

Mayor of Pasay City, represented by Attorney Peter MANZANO, OIC of DRRM Office and City Administrator of Pasay City

Distinguished guests, esteemed delegates, colleagues, ladies, and gentlemen,

Good morning, and mabuhay!

It is with great honor and pride that we welcome all of you to the 57th Session of the ESCAP/WMO Typhoon Committee right in the heart of our humble home, Pasay City.

Being at the forefront of disaster management and risk reduction, today is truly a pivotal step in our city's grand vision of becoming the first smart and sustainable EcoCity -- a vision that integrates economic dynamism, an ampowered citizenry, with a holistic and proactive stance on resilience and preservation. Truly, a vision, that with our efficient collaboration, communication, coordination, and commitment, can become a reality sooner rather than later.

Just last year, our city has experienced severe flooding in many of our areas brought by the combined effects of Super typhoon Gaemi locally named as Carina and the effects of enhanced Southwest Monsoon winds. History tells us that more often than not, no one remains unaffected by storms, monsoons, and typhoons, and at best, effects are minimized with our resources and contingency plans maximized.

It is in this light that we go all out in our collective thrust towards safeguarding our people and our city as a whole against these natural occurrences. Here in Pasay, these steps - or better yet, leaps.-- are done through our honest to goodness Tapat at Higit sa Sapat na Paglilingkod. A virtue and a value of public service that comes from genuine care and concern to our 460,000+ family members, our fellow Pasayenyos.

Once again, on behalf of the people of Pasay City (or Pasayeños) a warm welcome to all of you, and I wish you a productive and successful session. Let us work together to turn our shared goals into tangible solutions that will protect our communities from the devastating impacts of typhoons and extreme weather events.

Thank you, and may this event be a step forward in our collective pursuit of disaster resilience, safety, and solidarity.

Maraming salamat po at mabuhay!