



WMO OMM

World Meteorological Organization
 Organisation météorologique mondiale
 Organización Meteorológica Mundial
 Всемирная метеорологическая организация
 المنظمة العالمية للأرصاد الجوية
 世界气象组织

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Our ref.: 35466/2017/DRA/RAP

10 October 2017

Annexes: 4 (available in English only)

Subject: KMA/WMO Regional Workshop on Impact-based Forecasts in RA II (Asia) in Seoul, Republic of Korea, 7–9 November 2017

Action required: To complete and return the attendance form to the local programme coordinator of the Workshop **not later than 17 October 2017**

Dear Sir/Madam,

I have pleasure in informing you that the Korea Meteorological Administration (KMA) will hold the KMA/WMO Regional Workshop on Impact-based Forecasts in the Regional Association (RA) II (Asia) in Seoul, Republic of Korea from 7 to 9 November 2017.

This Workshop will be conducted as a part of the pilot project on impact-based forecast approved at the sixteenth session of the RA II in February of this year.

This workshop will address and discuss the following main topics:

- The status of impact-based forecast implementation and technology utilization in each Member State or Territory;
- The status of Multi-Hazard Early Warning system and its future ;
- Collaboration system and communication skills with relevant organizations;
- Impact-based forecast technology in the private sector;
- Hazard Impact Model technology;
- Calibration techniques for impact-based forecast and risk probability estimation method.

Please find attached some information on the meeting including the provisional programme.

I should be grateful if you could return the attendance form duly completed to the local programme coordinator of the Workshop (Ms Min-Jeong YOUN at ymj@korea.kr) as soon as possible, but **not later than 17 October 2017**.

Please note that KMA will provide selected participants from developing countries with funding support (i.e., round-trip air fare and/or accommodation).

I look forward to the participation of your Service in this important Workshop.

Yours faithfully,

(E. Manaenkova)
 for the Secretary-General

To: Permanent Representatives of Members of Regional Association II

Guidance Book for participants to Regional Workshop on Impact-based Forecasts in RA II (Asia)

November 7 ~ November 9, 2017
Korea Meteorological Administration
Seoul, Republic of Korea

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Workshop Overview

1. Title: Regional Workshop on Impact-based Forecasts in RA II (Asia)

2. Date: November 7(Tuesday) ~ November 9(Thursday), 2017

3. Objectives

- a) To enhance NMHSs' capabilities in forecasting and warnings which are impact-based and in multi-hazard configuration
- b) To share experiences and good practices by NMHSs for the successful implementation of multi-hazard impact-based forecasts and risk-based warning services
- c) To establish the International Hazard Partnership among NMHSs in Asia

4. Participants

Participants at this workshop will include those from RA II, WMO secretariat and other members interested in impact-based forecast, including lecturers from UK Met office and Korea.

5. Official Language: English

6. Venue: Seoul Garden Hotel (Seoul, Republic of Korea)

7. Contacts

- Weather Impact Forecasts Team /

KMA (Korea Meteorological Administration)

Program Coordinator: Dr. Seungbum KIM(Team Manager) / Ms. Min-Jeong YOUN

Tel: (+82) -2-2181-7147(0629)

Fax: (+82) -2-847-4419

E-mail: kmaskim@korea.kr / ymj@korea.kr

Part 1

WELCOME AND INTRODUCTION

With the approval of pilot project on impact-based forecast, proposed by the Korea Meteorological Administration (KMA) at the 16th session of the RA II on 10 February 2017, the KMA will hold **「Regional Workshop on Impact-based Forecasts in RA II (Asia)」** in Seoul, South Korea, from 7 to 9 November, 2017.

This book provides relevant workshop information, as well as details on possible requirements for all participants.

Part 2

PROGRAM

DATE	TIME		CONTENTS
Day 1	09:30 ~ 10:00		【 Registration 】
	10:00 ~ 10:20	'20	【 Opening 】 Introduction of the Workshop (KMA) Welcome Address (KMA Administrator)
	10:20 ~ 10:30	'10	【 Group photo 】
	10:30 ~ 10:40	'10	【 Coffee Break 】
	10:40 ~ 12:00	'80	【 Keynote Speech 】 WMO RA II President 【TBD】 WMO Director 【TBD】
	12:00 ~ 13:30	'90	【 Lunch 】
	13:30 ~ 15:00	'90	【 Session I 】 Implementation and Utilization of Impact based forecasting (UK - NSWWS, HIM)
	15:00 ~ 15:15	'15	【 Coffee Break 】
	15:15 ~ 16:45	'90	【 Session II-A 】 Current National Warning System, Strengthening regional cooperation and partnership (KMA)
	16:45 ~ 17:00	'15	【 Coffee Break 】
	17:00 ~ 18:00	'60	【 Session II-B 】 Current National Warning System, Strengthening regional cooperation and partnership (continued)
	18:30 ~ 20:00		【 Dinner 】
Day 2	08:30 ~ 09:00		【 Registration 】
	09:00 ~ 10:20	'80	【 Session II-C 】 Current National Warning System, Strengthening regional cooperation and partnership (continued)
	10:20 ~ 10:40	'20	【 Coffee Break 】
	10:40 ~ 12:00	'80	【 Special Session – WMO 】
	12:00 ~ 13:30	'90	【 Lunch 】
	13:30 ~ 15:00	'90	【 Session III-A 】 Technology and Utilization of Hazard Impact Modelling - Flooding and Heat Wave etc
	15:00 ~ 15:15	'15	【 Coffee Break 】
	15:15 ~ 16:45	'90	【 Session III-B 】 Technology and Utilization of Hazard Impact Modelling - Wild Fire etc
	16:45 ~ 17:00	'15	【 Coffee Break 】
	17:00 ~ 18:00	'60	【 Session III-C 】 Technology and Utilization of Hazard Impact Modelling - Weather Impact Observation or forecast based on AI and Big Data etc
	18:20 ~ 20:20		【 Dinner 】
Day 3	08:30 ~ 09:00		【 Registration 】
	09:00 ~ 10:20	'80	【 Session IV 】 Discussion - Implementation strategies of Impact based forecasts - Future cooperation on Impact based forecasts at Regional Level
	10:20 ~ 10:40	'20	【 Coffee Break 】
	10:40 ~ 12:00	'80	【 Special Session – WMO 】
	12:00 ~ 13:30		【 Lunch 】
	13:30 ~ 18:00		【 Technical Tour 】

※ The above schedule and participants may be subject to change depending on the event promotion

Part 3

APPLICATION FOR ATTENDANCE

If you participate or make a presentation at the Workshop, **please fill in the form of [appendix A] and send it to the Program Coordinator** (Ms. Min-Jeong YOUN (ymj@korea.kr) by e-mail **no later than 10 October 2017**.

Participants at this workshop will include those from RA II, WMO secretariat and other members interested in impact-based forecast, including lecturers from UK Met office and Korea.

If funding support is necessary, please fill in the required field at the form of [appendix A] . For your information, round-trip airfare or accommodation and meals will be selectively provided to participants from developing countries.

For your information, special food including halal food will be served during the workshop period by the requests. If the service is necessary, please fill in the required field(No.9) at the form of [appendix A] .

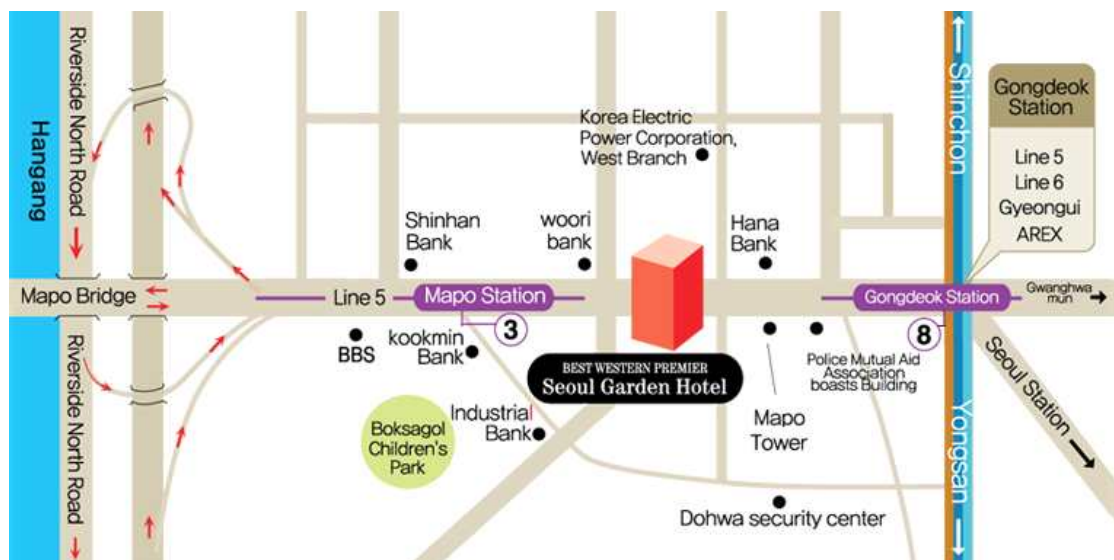
Part 4

VENUE

1. Venue

「Regional Workshop on Impact Based Forecasts in RA II (Asia)」 will be held at the Seoul Garden Hotel(58 Mapo dae-ro, Mapo-gu, Seoul, Korea / www.seoulgarden.co.kr)

Wireless Internet connection will be available anyplace in the venue.



2. Conference Room (2F)

- DATE : 2017.11.7(Thu) -9(Thu)
- Seminar Venue : 11.7(Thu)- 8(Wed) : Grand Ballroom-B
11.9(Thu) : Grand Ballroom-A
- Dinner Venue : 11.7(Thu)- 8(Wed) : Grand Ballroom-C

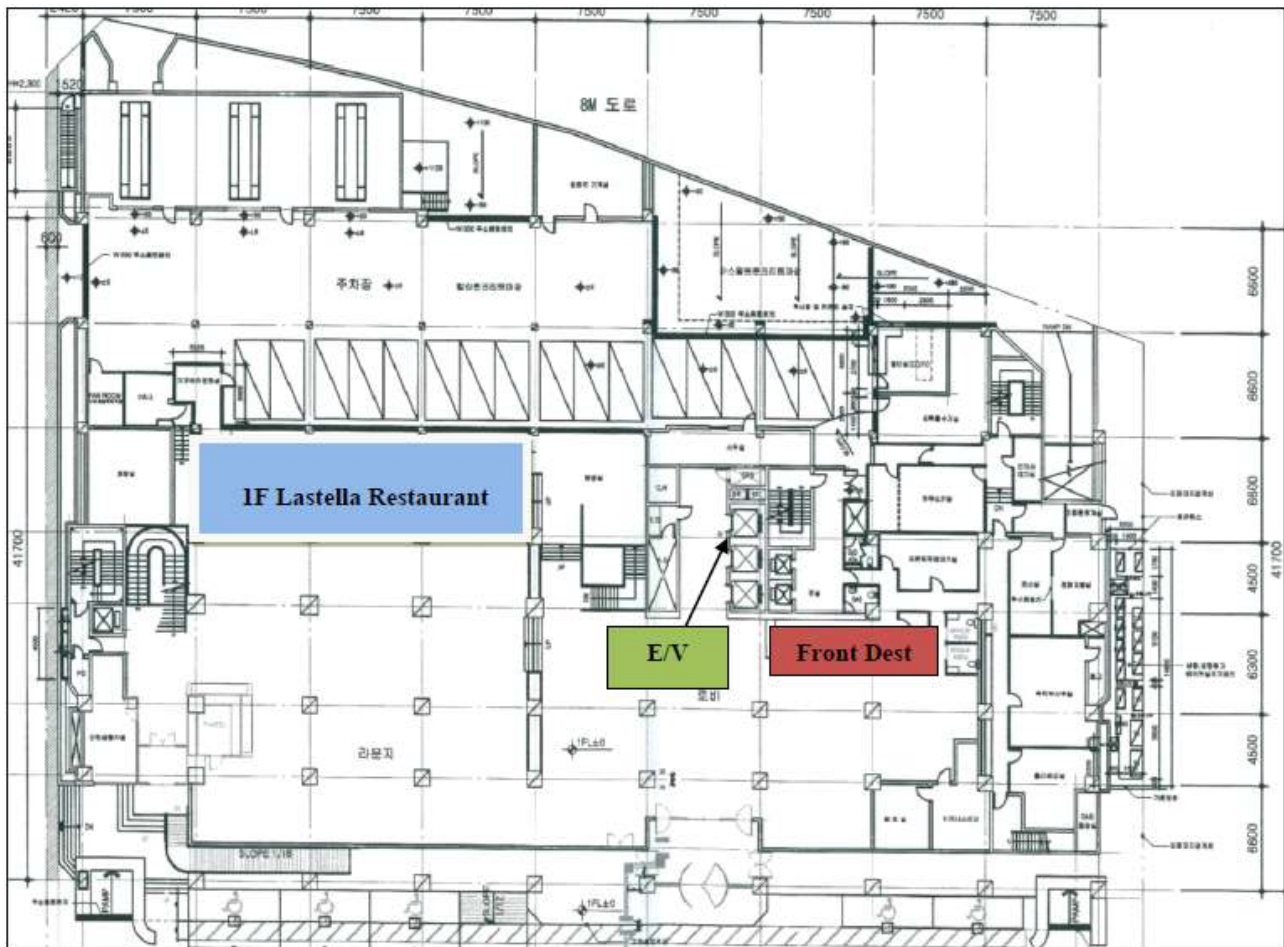
< Location (2F) >



3. Restaurant (1F)

- Lunch : 11.7(Thu)-8(Wed) : Ready at 11:30 with buffet lunch at Lastella Restaurant 1F

< Location (1F) >



Part 5

TRANSPORTATION

1. Transportation from Incheon Airport to Seoul Garden Hotel

< BUS >

From Incheon International Airport

Distance / Travel Time : 34 miles / Around 50 min.

KAL LIMOUSINE



KAL Limousine Bus (#6702)

4A, 10B on 1st Floor
(Airport) to our Hotel

Fare

Adult KRW 16,000 Child KRW 10,000

First bus 05:10 / Last bus 22:48

Interval 10~20 Minutes

Incheon Airport



The "Seoul Garden Hotel" Bus stop is just in front of Hotel

Airport Limousine



Airport Bus (#6015)

5B, 12A on 1st Floor
(Airport) to our Hotel

Fare

Adult KRW 15,000 Child KRW 11,000

First bus 05:35 / Last bus 22:50

Interval 10~20 Minutes

Incheon Airport



The "Seoul Garden Hotel" Bus stop is just in front of Hotel

- Only takes 50 minutes from Incheon International Airport

< BUS stop at Seoul Garden Hotel>



< KAL Limousine schedule >

Departure Point Incheon Airport (Bus Stop #4A) **Arrival Point** Seoul Garden Hotel

Please be advised that actual times may vary depending on traffic conditions.

Travel Time : 60~70min

Departure time					
05:10	06:00	06:47	07:20	07:51	08:20
08:52	09:27	09:54	10:28	10:54	11:24
11:54	12:23	12:55	13:21	13:54	14:24
14:53	15:21	15:55	16:25	16:55	17:19
17:48	18:16	18:44	19:15	19:41	20:12
20:44	21:15	21:44	22:13	22:44	

< Airport Limousine(#6015) schedule >

6015 (Incheon Airport ↔ Myeong-dong Station)

	Incheon Airport → Myeong-dong Station	
	Weekday	Saturday/Holidays
05	35, 50	40
06	02, 20, 35, 46, 57	05, 17, 35, 55
07	08, 19, 30, 43, 56	05, 15, 26, 38, 50
08	09, 23, 36, 48	00, 10, 20, 30, 40, 50
09	00, 10, 20, 30, 40, 50	00, 10, 20, 30, 40, 50
10	00, 10, 20, 30, 40, 50	00, 10, 20, 30, 40, 50
11	00, 10, 20, 30, 40, 49	00, 10, 20, 30, 40, 49
12	00, 09, 18, 27, 36, 45, 55	00, 09, 18, 27, 36, 45, 55
13	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
14	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
15	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
16	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
17	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
18	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
19	05, 15, 25, 35, 45, 55	05, 15, 25, 35, 45, 55
20	05, 15, 27, 39, 52	05, 15, 27, 39, 52
21	05, 18, 32, 44, 57	05, 18, 32, 44, 57
22	11, 23, 36, 50	11, 23, 36, 50

< Traffic information >

Destination	Distance	Duration	Transportation
Incheon International Airport	55km	50min	Car
Kimpo International Airport	12km	30min	Car
Seoul Station	6km	10min	Car
Yeouido Marina	2km	5min	Car
Namdaemun	7km	15min	Car
KINTEX	27km	30min	Car
Hongik Univ.	4km	5min	Subway
Dongdaemun	8km	15min	Subway
Myeong-dong	5km	15min	Subway
Gangnam	13km	35min	Subway
Mapo Station(Line5, Gate No.3)	0.3km	3min	Walking
Gongdeok Station(Line6, Gate No.8)	0.5km	5min	Walking
Gongdeok Station(Airport Railroad, Gate No.9)	0.5km	5min	Walking

- **Taxi**

- A. Regular Taxi (White, Silver, Orange)**

1. Fare: ₩55,000 ~ ₩60,000 (Toll Gate Fee Included)
2. Passengers: Max 4 ppl
3. Estimated time en route: 50min

- B. Luxury Taxi (Black)**

1. Fare: ₩80,000 (Toll Gate Fee Included)
2. Passengers: Max 4 ppl
3. Estimated time en route: 50min

- C. Jumbo Taxi (Black Van)**

1. Fare: ₩80,000 (Toll Gate Fee Included)
2. Passengers: Max 7 ppl
3. Estimated time en route: 50min

- **Airport Train**

1. Fare: About ₩3,950
2. Service Time: 05:23~23:42 (Timetable referenced)
3. Estimated time en route: About 55min, Take off at the Gongdeok Station, 8 min Walking Distance from Exit 8.

< Airport train schedule >

• Time Table

Hour	To Seoul Station (minute)		
	Express	All stop	KT×
05	20	23, 31, 38, 46, 55	
06	10, 50	03, 14, 27, 37, 45, 58	55(Busan)
07	30	06, 12, 19, 32, 46, 58	
08	10, 50	03, 17, 27, 39, 54	
09	23, 50	09, 16, 25, 40, 52	07(Busan), 38(Gwangju)
10	30	03, 15, 23, 36, 46	
11	00, 30, 52	03, 15, 23, 36, 46	
12	30	09, 16, 23, 37, 52	07(Busan), 50(Jinju)
13	00, 30	02, 08, 15, 23, 38, 53	
14	00, 30	03, 15, 23, 38, 53	
15	00, 30	02, 14, 23, 37, 52	50 (Mokpo, Expo yeosu)
16	00, 40	03, 16, 32, 42, 50, 56	30(Busan)
17	10, 50	03, 12, 25, 39, 52	
18	30	04, 14, 20, 37, 50	35(Busan)
19	10, 50	03, 15, 25, 39, 52	
20	30	04, 14, 20, 37, 50	35(Busan)
21	10, 50	03, 16, 27, 39, 52	
22		07, 20, 33, 45, 57	
23		12, 27, 42, 57 (D)	

Part 6

HOTEL RESERVATION

Participants are strongly recommended to stay at the **Seoul Garden Hotel** where the workshop will be held. A block reservation has been made with very special rates during this event.

To secure the special rates at this hotel, participants are requested to fill in the hotel reservation form in 【 Appendix B 】 and return it to the hotel contact, with a copy to **the Program Coordinator (ymj@korea.kr)** by e-mail **no later than 20 October 2017**.

For any further information please contact the Program Coordinator at the following address:

Ms. Min-Jeong, YOUN

Korea Meteorological Administration

E-mail: ymj@korea.kr

Tel: Tel: (+82) -2-2181-7147(0629)



Appendix A

Regional Workshop on Impact-based Forecasts in RA II (Asia)

7-9, November, 2017, Seoul, Republic of Korea

ATTENDANCE FORM

1. Dr./Mr./Mrs./M

s.

First Name

Middle Name

Last Name

2. Present Official Position

3. Country

4. Agency/Organization

5. Mailing address:

Fax Number:

Email

Tel. number :

Office

Home/mobile

6. Will Attend the workshop as

() PRESENTER [Title : _____]

() ADVISER

() OTHERS _____

7. In order to facilitate the application of Visa-on-Arrival or to issue the invitation letter for visa application purpose, please check the option below and provide the passport information as requested and return the Attendance Form to us. The same information is required from the accompanying person, if any.

Full name as shown on Passport

Date of birth

Place of birth

Nationality

Gender

Passport number

Profession

Place of issue

Date of issue

Place to apply for visa

Expiry Date

8. Please check if you need to be provided Funding Support. (For your information, following will be selectively provided to participants from developing country)

☐ Round-trip airfare support

☐ Accommodation support

☐ Round-trip airfare + Accommodation support

9. Any other requests for Workshop Committee of Republic of Korea

10. Please address this ATTENDANCE Form to the Workshop Committee of Republic of Korea:

(i) Ms. Min-Jeong YOUN

(+82) 2 - 2181 - 0629

ymj@korea.kr

(ii) Dr. Seungbum KIM

(+82) 2 - 2181 - 0265

kmaskim@korea.kr

[Korea Meteorological Administration]
Regional Workshop on Impact Forecasts in RA II(Asia)
Seoul Garden Hotel Reservation Form

Guest Details

First name		Last name	
Nationality		Contact no.	
E-mail address			

Hotel Reservation

Check-in date		Check-out date	
No. of guests		No. of rooms	
Arrival flight No.		Departure flight No.	
Room type	Special Room rate(10% V.A.T is included)		
<input type="checkbox"/> Standard Double(Queen Bed 1ea) Breakfast Buffet(1pax)	KRW 121,000		

Special Request

<input type="checkbox"/> Early check-in		<input type="checkbox"/> Late check-out	
Early check-in		Late check-out	
Before 09:00	09:00 ~ 12:00	13:00 ~ 16:00	After 16:00
100% charge of one night	KWR 80,000	KWR 80,000	100% charge of one night

* Check in - 14:00pm / Check out - 12:00pm

<input type="checkbox"/> Non-Smoking.	<input type="checkbox"/> Smoking.
--	--

Credit Card Information

Type	
Credit card no.	
Card holder's name	
Expiry date (Year/Month)	

Cancellation policy

If the event of any cancellation or change, please notify our reservation team at least 72hours prior to the arrival date. One night charge will be applied for no-show or failure of advance cancellation.

None guaranteed reservation(s) will be held 72hours prior to the guest's expected arrival time (Seoul time). If you wish to hold your reservation(s) without any restrictions, please do guarantee your reservation by providing us with your credit card information.

Contact No.: +82-2-710-7111 **Fax:** +82-2710-7112 **E-mail:** resv@seoulgarden.co.kr

www.seoulgarden.co.kr

Regional Workshop on Impact-based Forecasts In RA II (Asia)

Seoul, Republic of Korea, 7–9, November, 2017



INFORMATION NOTE

「Regional Workshop on Impact-based Forecasts in RA II (Asia)」 aim to share experiences and good practices by NMHSs for the successful implementation of multi-hazard impact-based forecasts and risk-based warning services. The Workshop will be held from 7 to 9 November in Seoul, Republic of Korea, hosted by the KMA(Korea Meteorological Administration) and the WMO(World Meteorological Organization).

BACKGROUND

- With the approval of pilot project on impact-based forecast, proposed by the KMA at the 16th session of the RA II on 10 February 2017, the KMA will hold the first Regional Workshop on Impact-based Forecasts in RA II (Asia).
- Even with accurate and timely weather forecasts, many people around the world still lose their lives due to the lack of understanding of the consequences of severe weather events.
- WMO is calling for the establishment and promotion of an impact-based forecasting implementation strategy accordingly.
- To do this, we would like to share experiences and information on the impact-based forecasts of countries in the region.
(To promote the concept of multi-hazard impact-based forecasts, with the aim of sharing relevant information on such services provided or planned to be provided by NMHSs, including the role of future forecasters to identify associated training needs in the Region)

TARGET GROUP

- All countries in Asia, but in particular, those who stand to benefit the most from further development of Multi-Hazard Early Warning Systems(MHEWSs) such as the least developed countries (LDCs), the small island developing states (SIDS) and landlocked developing countries (LLDCs)
- National disaster risk management/civil protection agencies
- National meteorological and hydrological services, geological surveys and institutes, health organizations and related scientific and academic institutions from nations that are interested to share good practice examples
- Government representatives from different sectors-including health, transport, environment, agriculture, finance, development cooperation-requiring hazard information for better planning
- Private sector entities that play a major role in the Impact-based forecasts and the Impact Weather Data Base
- Regional organizations supporting the development and provision of early warnings



MAIN TOPICS

SUBTHEME 1

The status of impact-based forecasting implementation and technology utilization in each country

SUBTHEME 2

The status of multi-hazard early warning system and its future

SUBTHEME 3

Collaboration system and communication skills with relevant organizations

SUBTHEME 4

Impact-based forecast technology in the private sector

SUBTHEME 5

Hazard impact modelling

SUBTHEME 6

Calibration techniques for impact-based forecast and risk probability estimation method

NOTIFICATION

Round-trip air fare or accommodations and meals will be selectively provided to participants from developing countries.

Participants wishing to make a presentation at the Workshop should contact the Program Coordinator, Ms. Min-Jeong YOUN(ymj@korea.kr) by e-mail not later than 10 Oct. 2017.

DRAFT PROGRAMS

DAY1	09:30-10:00	Registration
	10:00-10:20	Opening Introduction of the Workshop (KMA) Welcoming Address (KMA Administrator)
	10:40-12:00	Keynote speech WMO RA II President 【TBD】 WMO Director 【TBD】
	13:30-15:00	Session1 Implementation and Utilization of Impact based forecasting (UK , etc)
	15:15-18:00	Session2 Current National Warning System, Strengthening regional cooperation and partnerships (KMA , etc)
DAY2	08:30-09:00	Registration
	09:00-10:20	Session2 Current National Warning System, Strengthening regional cooperation and partnerships
	10:40-12:00	Special session – WMO 【TBD】
	13:30-18:00	Session3 Technology and Utilization of High Impact Modelling - Flooding, Heat Wave, Wild Fire - Weather Impact Observation or forecasts based on AI and BIG Data etc
DAY3	08:30-9:00	Registration
	9:00-10:20	Session4 - Discussion - Implementation strategies of Impact based forecasts - Future Cooperation on Impact based forecasts at regional level
	10:40-12:00	Special session – WMO 【TBD】
	13:30-18:00	Technical Tour

CONTACT INFORMATION

Weather Impact Forecasts Team
Korea Meteorological Administration

Program Coordinator:
Dr. Seungbum KIM (Team Manager) /
Ms. Min-Jeong YOUN

Tel: +82 - 2 – 2181 – 7147 (0629)
Email: kmaskim@korea.kr / ymj@korea.kr

