

Progress Report of The International Forum of Meteorological Societies (IFMS)

www.ifms.org

Assisting in the Development of Meteorological Societies of the World

Prepared for IFMS Global Meeting #6 (IGM-06) Version 01

 Organizations involved in creating a "Weather Ready Globe"

 Image: State of the stat

Hosted by the American Meteorological Society (AMS)

Industry

Societies

Services

Developing Nations

At the Westin Hotel, Boston

January 14 & 16, 2020

Prepared by: Dr. Harinder Ahluwalia

January 7, 2020





Contents

PA	RT I: Summary Progress Report	4			
1	Introduction	4			
2	Current Status	4			
3	Vision for the Future	5			
4	Challenges				
5	Conclusions				
PA	PART II: Detailed Progress Report				
6	Introduction	6			
7	List of Committees	6			
8	Important Point about Rules of Engagement	6			
8	Committee 1: Establishing Access to Communication Channels	7			
8	Committee 2: Working with Regional Met Societies	7			
	8.2.1 Task 1: Cooperation with Regional Met Societies	7			
	8.2.2 Task 2: Regional Weather Enterprise Forums	8			
8	Committee 3: Value Proposition Implementation	8			
	8.3.1 Collaborating on Joint Activities:	8			
	8.3.2 Membership Promotion & Outreach to Developing Societies	9			
8	Committee 4: Collaboration between IFMS and WMO, WBG, etc	.10			
	8.4.1 Task 4.1: Gain Support from WMO, WBG and HMEI	.10			
	8.4.2 Task 4.2: Assist WMO/WBG to promote PPA Sector Partnerships	.11			
	8.4.3 Task 4.3: Aligning IFMS Plans with WMO Strategic Plans/Priorities	.11			
8	3.5 Committee 5: Financing of IFMS	.11			
К	eith Seitter, Harinder Ahluwalia, Jack Hayes, Liz Bentley, Yongyun Hu, and Cam Chao	.11			
	8.5.1 Task 5.1: Developing Ways to Finance IFMS	.11			
	8.5.2 Task 5.2: Individual Funding through Member Societies	.12			
8	3.6 Committee 6: ACT Committee	.13			
8	Committee 7: Best Practices Coordination Committee	.13			
8	8.8 Committee 8: Webinar & Training	.15			
8	Committee 9: Recognition of Individual Contribution	.16			





PROGRESS REPORT FOR IGM-06

8.10	Committee 10: GWE Monitoring Committee	16
8.11	Committee 11: Industry Committee	18
8.12	Committee 12: Promotion of Climate Change Issues with Governments & Public	19
8.13	Committee 13: Meetings and Conference Committee	20
ANNEX	A: IFMS Council Members 2018-2021	22
ANNEX	B: Value Proposition of IFMS	23
ANNEX	C: Summary of Committees	24
ANNEX	D: Requirements for Holding IFMS Global Meetings (IGM)	25
ANNEX	E: How to Donate to IFMS	27
ANNEX	F: Acronyms/Abbreviations	28





PART I: Summary Progress Report

There is no point in dreaming if we do not work hard to Make it happen!

1 Introduction

With the IFMS Global Meeting #6 in Boston concurrently with AMS Centennial, January 14 and 16, 2020 looming, it is the time to provide the current status and proposal for the future development of IFMS. This information will allow the participants of IFMS GM6, to come up with their views about what IFMS should be doing. The societies which could not attend the IGM-06 will get a good idea of the current Status of IFMS. It is important to note that IFMS was incorporated in Washington DC in 2016.

2 Current Status

Following is the summary of our progress:

- 1. **An IFMS Council was created** with an Executive Committee and Regional Council Members in 2015 and subsequently the first Council Election was conducted in 2018.
 - a. Recently, an election was held for the Council Members for Region 2 and 3. Prof. Dash was reelected and Elizabeth Castañeda from CAM (Argentinian Meteorological Society) was replaced by Prof. Oscar Frumento also from CAM.
 - b. The pictures of the latest Council Members of the current Council are attached in Annex A.
- 2. An IFMS Value Proposition was created and is presented in Annex B for your ready reference.
 - a. Committees were created to implement the Value Proposition. Please see **Annex C** for the list of Committees.
 - b. As you will see from the detailed Report, some parts of the Value Proposition have already been implemented and planning is underway to implement many others.
- 3. **The IFMS Website was upgraded** and it now provides a lot of information as well as tabs for "Collaboration", "Best Practices", etc. Members are being urged to use them through articles in our Newsletter. Some volunteers are required to assist us in maintaining the Website.
 - a. We have also created our Facebook page which also requires volunteers to keep it active.
 - b. Member societies and their members are being encouraged to use the "Collaboration" tab on our Website to create collaboration.
- 4. **IFMS is working to assist WMO with WMO's recently created Initiative called "Global Campus"** which was approved at the CG18 held in Geneva in June 2019. In order to do that we have two important sessions in IGM-06: One on "What is Global Campus" and the other "Creating a Volunteer Force".
- 5. **IFMS is currently working on assistance to our member societies for Certification/ Accreditation process.** Those Societies which are interested in implementing or just discussing this Program are encouraged to send their request through the IFMS Collaboration Tab on the Website or by sending an email to ifms.collaboration@gmail.com.
- 6. **An IFMS Newsletter was created** and we plan to make it a significant contribution to the entire Global Weather Enterprise (**GWE**).
- 7. IFMS has an MOU with WMO for cooperation.
- 8. **IFMS has created Guidelines for creating and incorporating a Society** and how to operate it.
- 9. **IFMS is working to create new Hydromet Societies in countries where none exists.** It is a more difficult task than we expected because one has to work through the local National





Meteorological Services which are not very responsive. However, we are trying hard through WMO Regional offices and expect to succeed in many cases.

- 10. IFMS is working with regional NMHSs to create Regional Meteorological Societies.
 - a. Cooperation of the National Meteorological Societies is required to strengthen or create Regional Meteorological Societies.
 - b. Effort is being made to assist African National Societies to strengthen AfMS and Asian Meteorological Societies are being encouraged to create an Asian Meteorological Society on the same basis as EMS was created.
- 11. Efforts are being made to generate financing which will make IFMS much stronger and useful.

3 Vision for the Future

- 1. Strong and active professional meteorological societies supporting the weather enterprise within member countries through active communication and collaboration.
- 2. IFMS making valued contributions to the WMO, World Bank and other institutions involved in developing, strengthening and implementing the sciences and technologies that support weather, hydrology and climate.
- 3. Establishing IFMS a world leader in global collaboration that benefits society.

4 Challenges

- 1. Additional Financing. We believe that despite the lack of financing at this stage, we have laid the foundation for a strong IFMS which can serve the GWE in many different ways as outlined in our Value Proposition provided in Annex B.
 - a. We need to have a small Secretariat consisting of an Executive Director and as a minimum an Assistant. We will create that in this term.
 - b. We need to strengthen our relationship with WMO and WB (World Bank) and get them to provide some financial assistance and we also need to find additional ways of financing.
 - c. We request member societies in helping us generate finances using any of the ways outlined in Annex E.
- 2. We need to ensure that our members use the facilities we have already provided and additional ones we plan to provide.
- We need to strengthen our effort to create societies in countries where none exists and make all existing ones our members. There are 193 WMO members and less than 60 Hydromet Societies in the world.
- 4. We also foresee a Biennial or triennial Conference jointly organized by IFMS, WMO and HMEI through Regional Meteorological Societies.
- 5. There is a strong need for volunteers. We urge all the Council Members to work harder and also request Member Societies to provide volunteers.

5 Conclusions

We have worked quite hard with the IFMS Council to bring IFMS to the level where most of the Value Proposition Items are ready to be used. In the next phase, we would like to promote all these items and ensure that they are used by and provide value to our stake holders. Without the availability of additional finances, our progress will be difficult to achieve.





PART II: Detailed Progress Report

Actions speak louder than words!

6 Introduction

This Part II of the document presents in more detail the progress made by IFMS since it was incorporated and a Council was appointed. After defining the Value Proposition, we defined Committees to look after each of the Value Proposition items.

Each Committee has a Chair as the driver and Committee Members to assist. Although currently all Chairs and Committee Members are from the Council, we plan to involve people from outside the Council – especially retired people who are interested in contributing to the Society at large. The idea of creating so many Committees is to divide the work as much as possible and yet keep a close eye on the progress of each Committee.

We then requested each Committee Chair to prepare a Plan for his/her Committee which describes the details of the Value Proposition as well as the required activities and the related schedule.

In the following sections, we are first presenting the Progress Report of each Committee followed by other activities which we have undertaken as IFMS has progressed.

7 List of Committees

The list of Committees, their objectives and related personnel are presented in Annex C. A more detailed document with additional information about the Committees is available on request. We also can make Committee Plans available in due course.

This document presents the progress made by each of the 13 Committees of IFMS.

8 Important Point about Rules of Engagement

IFMS is the union of diverse National Meteorological Societies (NMSoc) which have different mandates. The current mandates of NMSocs vary from dealing with all three sectors (PPA) and more (e.g. Users, NGOs, etc.) to those which are involved only in S&T issues. With IFMS being an International Society trying to assist all types of members, our mandate encompasses the needs of all these societies.

We have constituted Committees covering all aspects of the activities with which NMSocs could get involved. *NMSocs are free to participate in only those activities which fit their Society's mandate. That way they will be helping themselves without impeding the implementation of the legitimate requirements of other NMSocs.*





8.1 Committee 1: Establishing Access to Communication Channels

Mr. Cam Chao – Prof. Liz Bentley, Dr. Buruhani Nyenzi, Dr. Sushil Dash & Dr. Harinder Ahluwalia

Objective:

To create meaningful communication channels to unite the member societies and distribute information and provide a means of creating discussion groups.

Potential Channels:



- IFMS Website, Teleconferencing, IFMS Newsletter, IFMS Journal (just a thought at this time), Webinars and Social Networks such as: Facebook, WhatsApp, LinkedIn, etc.
- We need to ensure that these channels are used to the best of their capabilities.
- We need to find very knowledgeable volunteers or even paid consultants.

Tasks Completed

- 1. We have started an IFMS Newsletter which is available through our Website. Four such Newsletters have been created.
- 2. Member Societies are requested to submit their outstanding news items, events and any relevant articles to Kung-Yueh Chao at camyalechao@gmail.com with a copy to ifms.collaboration@gmail.com
- 3. We have created a Facebook page for IFMS which is being maintained by Kung-Yueh Chao.
- 4. We have also created a WhatsApp Group of Council Members.
- 5. We hold a Council Telecon using AMS' Conferencing Facility approximately once per month.

Next Steps

- 1. We would like to have more Volunteers to maintain Communications Channels.
- 2. Popularize the usage of Communications Channels we have created to make them more useful.

8.2 Committee 2: Working with Regional Met Societies

8.2.1 Task 1: Cooperation with Regional Met Societies

Prof. Liz Bentley – Mr. Workneh Degefu, Dr. Oscar Frumento, Dr. Yongyun Hu **Objective:**



Creating a global context for the varied activities of Met Societies and to collaborate with Regional Associations of Met Societies, such as the European Met Society (EMS), Iberian and Latin American Federation of Met Societies (FLISMET), African Regional Economic Cooperation (REC) groupings, etc., is a core activity for IFMS. The purpose of the collaboration is twofold:

- (1) Share the work so that Regional Societies can look after what is more regional.
- (2) Learn from each other's experience. For example, EMS is a successful Regional Organization and can help other Regional Societies in many of their activities which are quite like those of other Regional Societies.





It is important to point out that other than EMS, the remaining Regional Societies (FLISMET and AfMS) are in their naissance stage. They need a lot of assistance to become stronger and the Regional Societies in the Asia and Pacific Region are still to be created.

Tasks Completed

This Committee has completed a review of the current Regional Societies - EMS, FLISMET, African Met Society - and has shared this review to support the proposal to form an Asian Met Society and any other Regional Meteorological Societies (**RMS**).

Next Steps

The next steps are to:

- a) Determine what RMS have implemented which will be of value to IFMS and vice versa.
- b) Determine what activities of IFMS can be shared with Regional Met Societies.
- c) Determine how we can assist each other in dividing the work

In addition to Regional Meteorological Societies, in fact, many of our associate member societies use meteorology for their business, e.g. American Geophysical Union, International Association for Urban Climate, International Association of Broadcast Meteorology, International Association of Meteorology and Atmospheric Sciences and International Society of Biometeorology. In order to have a meaningful relationship, eventually we need to determine what kind of interactions and collaborations will be helpful to strengthen this relationship.

8.2.2 Task 2: Regional Weather Enterprise Forums

Dr. Oscar Frumento, Dr. Michael Coughlan. Prof. Liz Bentley and Mr. Workneh Degefu



Objective: Regional Weather Enterprise Forums and Capacity Building Workshops to be progressed in regions, where appropriate.

Not much work has been done by this Committee. Their work will start during 2020 by our new Council Member Dr. Frumento.

8.3 Committee 3: Value Proposition Implementation

Dr. Buruhani Nyenzi/Dr. Yongyun Hu - Prof. Liz Bentley, Dr. Harinder Ahluwalia

8.3.1 Collaborating on Joint Activities:



Objective:

Collaborating on joint activities, where appropriate, to advance the science and profession of meteorology.

IFMS will connect parties interested in collaboration.

Potential Collaboration Items are:

Research Projects, Providing International opportunities, Conferences, Publications, Sharing Best Practices, Sharing Webinars, etc.





Tasks Completed

We have prepared a Plan for the operation of this Committee.

We have created the capability to make requests for collaboration. Now it is up to members societies to make any requests by sending them through email: <u>ifms.collaboration@gmail.com</u>

Next Steps

We need to regularly advertise and popularize this facility to our Member Societies.

8.3.2 Membership Promotion & Outreach to Developing Societies

Mr. Workneh Degefu – Dr. Sushil Dash, Dr. Oscar Frumento, Dr. Jack Hayes, Dr. Michael Coughlan and Prof. Liz Bentley

Objective: Help in Developing existing Societies and creating new ones to address issues concerning global warming and creating a "Weather Ready Globe"

Tasks Completed



- We are reaching out to the societies which are not yet members to become members. It is the duty of Council Members from the 6 Regions to promote membership to those societies. The Chair of this Committee, Mr. Workneh Degefu, has provided a detailed Report outlining the tasks which need to be done to make progress during 2020.
- 2. For those countries where there is currently no National Meteorological Society, we have approached their National Meteorological Services to start one.
- 3. In February 2019, a meeting of the WMO Region 1 was held in Cairo in which Workneh Degefu, an IFMS Council Member for Region 1 and Chair of IFMS Membership Committee, participated. He has been following up and has given the following report.
- 4. The Committee to reenergize the African Meteorological Society (AfMS) was formed and members of the Committee are communicating. As far as the Directors of NMHSs present in Cairo, the Regional Office for Africa is following up. In this regard there was a meeting in South Africa recently where Directors of NMHSs in Africa were present and a briefing was given to them about reactivating AfMS. Following that, an email was sent by the WMO Region I Office to all Directors requesting them to provide information on the status of their National Societies. Workneh will contact the Regional Office by email on the status of the situation since then.

5. Other Regions are requested to do similar follow-ups.

6. We have recently prepared a comprehensive Guide Document for New Societies and Developing Societies which outlines how to start and maintain a Society.

Next Steps

- We will send the above-mentioned Guide to (1) All Regional WMO Offices, (2) All the National Meteorological Societies of the countries which do not have a National Meteorological Society and (3) Developing National Meteorological Societies.
- 2. We will follow up with potential candidate societies (non-members and new societies to be created) more vigorously. <u>All six Regional Councilors are urged to do that.</u>





3. We will also set a target for each region, e.g. in 2020, at least 2 existing non-member societies to be made a member from each Region and at least one society to be created in each region.

8.4 Committee 4: Collaboration between IFMS and WMO, WBG, etc.

Dr. Harinder Ahluwalia, Dr. Jack Hayes, Dr. Keith Seitter, Dr. Michael Coughlan, Dr. Workneh Degefu **Objective:** *To build a meaningful relationship with WMO to create a win-win situation.*



This objective is being implemented through three tasks.

Task 4.1: Gain support from WMO, WBG and HMEI, etc.

Task 4.2: Assist WMO/WBG to promote PPA Sector Partnerships

 Task 4.3:
 Aligning IFMS Plans with WMO strategic plans/ priorities to increase cooperation.

8.4.1 Task 4.1: Gain Support from WMO, WBG and HMEI

Tasks Completed or Underway

- Since our motto is to advance of our S&T through collaboration and building capacity in Least Developed and Developing nations, the best way to achieve that would be through cooperation with WMO and WBG.
- We have an MOU with WMO to cooperate with each other. Dr. Ahluwalia attended a part of the cg18 Congress held in June 2019. The "Global Campus" Initiative was approved by the Congress.
- We will work on having an MOU with the WBG/GFGRR. We will also create a relationship with HMEI, the scope of which will be defined.
- We wish to assist WMO in its Global Campus Program which requires understanding of this Program and it needs Volunteers. Therefore, we have two sessions on these issues in IGM-06.

Next Steps

- Implement Volunteers Program
- Discuss with WMO the assistance required by them for "Global Campus" Initiative as well in any other Programs.
- Discuss with WBG what type of assistance they need from IFMS for Capacity Building Programs.
- If possible, these dialogues should start at this Centennial Conference.





8.4.2 Task 4.2: Assist WMO/WBG to promote PPA Sector Partnerships

Tasks Completed or Underway

- Since National Meteorological Societies have members from all three sectors PPA IFMS, through its member societies, can coordinate assistance to WMO and WBG in their PPA Collaboration Initiative.
- IFMS President has made presentations on PPA Collaboration in various countries including India, Taiwan, China, Australia, etc. on his own expense. Various other countries have invited him for the same but due to financial constraints, it has not been possible to do so till we arrange finances for IFMS.
- Through its Committee 10 "GWE Monitoring Committee", IFMS keeps its membership informed.

Next Steps

- Define this Task in more detail in consultation with Committee #10.
- Look for Volunteers to assist in this effort.
- Discuss with WMO the assistance required for explaining and implementing PPA Program in various countries.
- If possible, these dialogues should start at this Centennial Conference.

8.4.3 Task 4.3: Aligning IFMS Plans with WMO Strategic Plans/Priorities

The idea of aligning IFMS Plans/Priorities with WMO strategic plans/priorities is meant to increase collaboration between IFMS and WMO. This task has not been started and will be started in 2020.

8.5 Committee 5: Financing of IFMS

Keith Seitter, Harinder Ahluwalia, Jack Hayes, Liz Bentley, Yongyun Hu, and Cam Chao



Objective: Developing ways to finance IFMS.

This committee is divided into two Tasks to facilitate fund collection and follow-up:

Task 5.1: Financing Committee to develop various ways to finance IFMS.

Task 5.2: Individual Funding through Member Societies.

8.5.1 Task 5.1: Developing Ways to Finance IFMS

Tasks Completed

 As a part of Task 1, since financing of IFMS is becoming an urgent matter to achieve our goals, we started a Crowdfunding campaign which works on the basis of small donations by a lot of people. Since the campaign is US-based (through an Organization called Classy), we expected US citizens and citizens of affluent countries to make donations. We urge AMS, RMetS, EMS, AMOS, etc. to directly or indirectly urge their members to donate and make our Crowdfunding Project a success.





- We are planning to approach International Financial Assistance Programs of Affluent countries and Philanthropic Programs of many organizations to provide us with assistance. We have prepared a letter with a proper value Proposition stating why they should help us.
- The first organization we approached is the International Development Program of the Canadian Government. Due to the election in Canada in October 2019, our effort was interrupted. However, now that the election is over and the Government is in place, we will restart our effort after IGM-06.

Next Steps

- We will continue to promote Crowdfunding and hope that we have more success.
- We will also be approaching various donors in the very near future certainly starting in the first quarter of 2020. These donors include:
 - a. International Aid Agencies (e.g. USAid, UKAid, International Development (Global Affairs Canada), Australia Aid, etc.) of affluent countries.
 - b. Philanthropic organizations belonging to such people as Bill Gates, Michael Bloomberg, Warren Buffett, etc.
 - c. Development Aid Banks.
- We might have to involve the Private Sector for sponsorships for which in return we will have to
 assist them in any ways we feel appropriate and fit. The Private Sector being an important part
 of the PPA Sectors, needs to be involved in any case. This was one of the main reasons for
 having an item in the Value Proposition Survey. In addition, the Private Sector can help in
 establishing physical infrastructure in needy countries as has been done in the past.

8.5.2 Task 5.2: Individual Funding through Member Societies

Cam Chao - Workneh Degefu, Sushil Dash, Oscar Frumento, Jack Hayes, Michael Coughlan and Liz Bentley

Tasks Completed



- We have prepared the Committee Plan outlining activities and schedule to implement them.
- Although there is no Fee to become a member of IFMS, we do expect Member Societies – especially well-off societies based on their capacity – to contribute 1% of their membership fees to IFMS. You will get a handsome return for your investment in terms of efficiency generated by collaboration, meaningful communication channels and sharing best practices.
- Some Societies have contributed and others are urged to do the same.
- We are also requesting all Member Societies to add a line in their membership and renewal form for "Donation to IFMS".





Next Steps

• This Committee Chair is requested to follow-up above activities very strongly and monitor results.

8.6 Committee 6: ACT Committee

Dr. Liz Bentley, Dr. Keith Seitter, Mr. Cam Chao, Dr. Harinder Ahluwalia

Objective: Providing assistance in Accreditation/Certification and Training (**ACT**)

IFMS is prepared to assist any society which is interested in implementing the ACT Program.

Tasks Completed

- We have prepared the Plan for this Committee which describes the ACT Program, the related activities and schedule.
- We have provided some information about ACT to some members who asked for it.
- IFMS organized a Webinar presented by Liz Bentley from the RMetS in collaboration with Keith Seitter from AMS in July 2018 which was much appreciated by attendees.

Next Steps

 We need to investigate the viability of this Program for different sizes of Societies and make recommendations such as a large Society interested in implementing this Program can be guided





- However, smaller Societies might find it more expedient to implement this Program through their Regional Society once the Regional Society becomes strong and capable of running this Program.
- Any Society wishing to start such a program in its country can request assistance through the Collaboration mechanism provided on the IFMS Website.

8.7 Committee 7: Best Practices Coordination Committee

Dr. Michael Coughlan -Dr. Keith Seitter, Dr. Oscar Frumento and Dr, Harinder Ahluwalia **Objective:**



The objective of this committee is to develop a resource set of Best Practices across a range of activities pertinent to the effective and efficient functioning of national and regional meteorological and related societies. This activity will be especially helpful to guide the establishment of new societies and improve the operations of recently created societies.

POSSIBLE BEST PRACTICE THEMES

- 1. Establishing a National Meteorological Society
- 2. Education
 - a. Professional, e.g. Webinars, Courses, Journals
 - b. Public, e.g. K-12 interactions, Open Lectures





3. Outreach

- a. Newsletters Pros & Cons / Online
- b. Website development
- c. Use of Social Media

4. Authoritative Statements, e.g. a statement on Climate Change

A. Establishing a National Meteorological Society

A "best practices" document for this topic is well advanced and should be available for guidance to any country wishing to establish a National Meteorological Society or review an existing one. In outline it comprises the following sections:

i. Developing the case for a National Meteorological Society

- a. Enhancement of cooperative networks
- b. Professional Development
- c. Broadening of Knowledge
- d. Professional Accreditation / Certification
- e. Mentoring
- f. Career Advancement

ii. First Steps

- a. Setting up a Founding Committee
- b. Identifying the initial scope of the Society
- c. Criteria for Membership(s)

iii. Incorporated or Unincorporated

Legislative Framework

iv. Financing

v. Identifying Potential partnerships

- a. Local government, academic, corporate institutional
- b. International Other National and Regional MetSocs
- c. Related disciplines Oceanographic, Agriculture, Geophysical

B. Authoritative Statements

National Meteorological Societies have the potential to represent an amalgam of authoritative views on a wide range of topics, drawing input from government, academia, corporate entities and the general public.

Some examples:

- National priorities relating to weather, water and climate
- National perspectives on IPCC Reports
- National practices concerning data sharing and distribution

Such statements have already been prepared by several National Meteorological Societies, e.g. AMS, CMOS and AMOS. These statements could be adopted and endorsed as they stand or, preferably, modified as appropriate to increase local, national content and relevance. Typically, they should be reviewed on a regular basis, e.g. every 5 years, or as developments dictate.





Tasks Completed

- A Plan for the Operation of this Committee has been prepared. This Plan includes activities and schedule of execution of the activities. A Summary is presented above.
- A number of Best Practice examples have already been identified as available from wellestablished societies, such as the AMS, RMetSoc. AMOS and EMS.
- We are behind Schedule and must work harder in the 2020 to catch up.

Next Steps

- Complete the Best Practices list.
- We will collect all the available best practices from organizations mentioned above.
- After reviewing them to meet our requirements and finalizing them we will put them on our Website.
- We will continue creating new Best Practices as and when required.

8.8 Committee 8: Webinar & Training

Dr. Sushil Dash, Dr. Michael Coughlan, Dr. Harinder Ahluwalia, and Prof. Liz Bentley (especially for ACT Training)

Objective: Building capacity by conducting Webinars and Training Courses

Tasks Completed

• We have prepared the Plan for this Committee which provides the list of activities and schedule.



- One Webinar on Accreditation/Certification was conducted in July 2018 and one on GWE is suggested for first quarter of 2020.
- The WMO's Global Campus Program was reviewed and we believe more discussions to understand this Program as well as Volunteers are required to execute this Program.
- In our IGM-06, we have organized two one-hour sessions on these two topics: (1) Global Campus Program of WMO and (2) Creating a Volunteer Force.

Next Steps

- After the IGM-06 sessions on the above two topics, we will review and, if required, refine our Committee Plan.
- We will have a meeting with WMO to discuss how IFMS can get involved in the Global Campus Program and then plan accordingly. This meeting will also discuss reimbursement of out-ofpocket expenses for participants.
- At the same time, we will start looking for Volunteers who will be prepared to participate in the above Program.





8.9 Committee 9: Recognition of Individual Contribution

Buruhani Nyenzi, Dr. Sushil Dash, Dr. Oscar Frumento, Dr. Yongyun Hu & Dr. Liz Bentley

Objective:



Promoting the contributions of individuals within the meteorological community and beyond by highlighting excellence in science, technology, organizational development, excellence in providing services, volunteerism, etc.

Tasks Completed

- We have prepared the Plan for this Committee which defines:
 - The list of awards to be given
 - Qualifications for each category of award
 - Frequency of Awards
 - Set up an Awardee Selection Committee
 - Decide who and how the nominations are to be done.

Next Steps

- Finalize the Plan Document for this Committee.
- Approximately 6 months before IGM-07, we will start asking for nominations

The IFMS, as an international Society with membership of all top National Meteorological Societies, directly or indirectly (e.g. EMS representing all European Societies) believes that as it achieves its basic goals and collaborates with other bodies such as WMO, WBG and HMEI, its awards and recognitions will get the prestige that it needs to attach to those awards. IFMS awards should be made every two years. Although the initial target to start was at IGM-06 in Boston, it would be better to make these awards once IFMS has had some more exposure through implementing some of the Programs mentioned in this document. The new target which we will certainly meet will be IGM-07 in 2021-2022.

8.10 Committee 10: GWE Monitoring Committee

Dr. Jack Hayes, Dr, Keith Seitter and Dr. Harinder Ahluwalia

Objective:

- 1) Understand the vision, strategy and goals of the Global Weather Enterprise Forum and keep IFMS members informed.
- 2) Understand the issues and challenges facing the Global Weather Enterprise.
- 3) Have the necessary information and support to provide a neutral forum to discuss science and service challenges and potential solutions within their countries.
- 4) Have a vehicle to communicate to GWEF the challenges and issues that need to be addressed to improve and strengthen weather, water and climate science and services within their country.





- 5) Have the information needed to communicate issues, actions and GWEF progress to their membership.
- 6) Since GWE promotion through collaboration among PPA (Public, Private and Academic) sectors is a new concept, we have provided some background in this Report.

Background



The GWEF was formed in early 2018, following a meeting organized by the World Bank in late 2017. Its primary objective is to strengthen public-private-sector collaboration internationally as part of the World Bank global disaster risk reduction strategy through improved weather services in all countries. The World Bank GWEF complements and supports WMO's Open Consultative Platform (OCP) created at the 2019 WMO Congress and WMO's Capacity Building strategy for developing countries.

IFMS PLAN FOR GWE PROMOTION

IFMS plans to assist its members in GWE promotion as follows:

- 1. Keep IFMS Members informed of relevant issues and actions being considered by the GWEF and OCP. This will be accomplished through the IFMS Newsletter and Webinars. Immediate questions and issues will be addressed through email and/or telephone communication.
- 2. Serve as a vehicle to communicate IFMS Member questions and issues to the GWEF. This will be accomplished by soliciting IFMS Member input and communicating issues and questions at monthly GWEF Coordinating Group meetings and/or GWEF meetings.
- **3. Coordinate support for IFMS Member needs to support the growth of the GWEF concept.** Committee 10 will provide guidance and support on request from IFMS Members.
- **4.** Participate actively in GWEF and the GWEF Coordinating Group. Committee 10 will continue participating in monthly GWEF Coordinating Group and scheduled GWEF meetings as logistics allow.
- **5.** Assistance to Member Societies in dealing with GWE Issues. Prepare Guidelines for Member Societies how they should help in GWE with the example of AMS Role in the USA related to GWE.
- 6. Conduct Committee 10 meetings at least quarterly to discuss progress, issues and other important GWEF items. IFMS Member input will be periodically solicited prior to meetings.
- **7.** If requested, organize GWE Session in Conferences: On the Request of Member Societies especially Regional Met Societies, help organize sessions on GWE in their Conferences.

Tasks Completed

- We have prepared the Plan for this Committee which is available on request to member societies.
- In November 2017, the World Bank Global Facility for Disaster Risk Reduction (GFDRR) Group launched the Global Weather Enterprise Forum (GWEF) designed to create an open dialogue among the world's public, private, and academic sectors of the Global Weather Enterprise. Three of us participated in that meeting: Jack Hayes, Keith Seitter and Harinder Ahluwalia.





- This past June, at the 18th World Meteorological Organization (WMO) Congress, the WMO created an Open Consultative Platform (**OCP**) to advise the WMO Secretary General and its Executive Council on a range of strategic matters which include science and technology, capacity building and cross-sector collaboration. In addition, WMO declaration supported increased collaboration between WMO NMHSs and members of the private and academic sectors.
- Following the WMO Congress, the World Bank/GFDRR Group has initiated action to reorient its agenda to support and complement the WMO's recently launched Open Consultative Platform for Partnership & Innovation for the Next Generation of Weather & Climate Intelligence (OCP). A draft paper, "The Global Weather Enterprise: Evolution and Ideas for Phase 2", has been developed and will soon be distributed across the Weather Enterprise. The GWEF Monitoring Committee Chair is a member of the World Bank's GWEF Coordinating Group as well as OCP.
- A GWEF meeting is scheduled for Wednesday, January 15, 2020, during the annual AMS National Meeting in Boston. IFMS participation is welcomed. In addition, there will be an AMS International Symposium panel discussion on public-private-sector collaboration at the AMS meeting on Monday, January 13.
- We have published some articles in our Newsletter covering GWE development.
- IFMS President has given presentations in a few countries (India, China, Taiwan, etc.) on GWE Initiative.

Next Steps

- Since our Committee Chair is much respected by both WMO and WBG, he is a part of both OCP and GWEF Monitoring Committee. Through him, we will keep participating in OCP and GWEF Meetings organized by WMO and WBG, respectively.
- On an as required basis, we will organize. Webinars on GWE Progress to keep IFMS Members informed. The first such Webinar will be in the first quarter of 2020.
- We will also hold Webinars to guide our member societies about advantages of PPA Collaboration and how to implement it especially by giving examples of some successful attempts by National Meteorological Services and Societies.

8.11 Committee 11: Industry Committee

Objective:

Assistance to industry through local Met Society to increase collaboration and assistance in connecting with requirements of that country to develop required infrastructure and support WMO/WBG initiative to strengthen GWE through strong collaboration between PPA sectors through NHMSoc assistance.

Background

Since both WMO and WBG are promoting PPA Collaboration and many National Meteorological Societies have Private Sector companies as members, we found it helpful to have an Industry Committee in IFMS. This Committee will guide those interested in creating a liaison between the three PPA sectors.





Tasks Completed

• Although we have given presentations on GWE in a few countries (India, China, Taiwan, etc.) under the GWE Initiative, we have not started the work on this Committee yet.

Next Steps

- Study the potential mandate for this Committee keeping in mind the OCP and GWEF Initiatives of the GWE and the requirements of the member societies.
- Based on the results of the above study, develop a Plan for this Committee.
- These activities will be completed in the first half of 2020.

8.12 Committee 12: Promotion of Climate Change Issues with Governments & Public

Dr. Harinder Ahluwalia and all Council Members

Objective:

The objective of this Committee is to promote Government Investment and Public Education through unified strategy in all countries.

Background:



Global Warming and the resulting Climate Change are causing natural disasters with increased frequency and intensity.

In year 2017, the cost of losses caused by natural disasters exceeded \$330 Billion and over 3000 lives were lost. The trend of these losses over years is expected to be going upwards.

- It is believed that with only a reasonable part of that amount, preventive measures can be devised to reduce the loss of life and property considerably.
- However, Governments need to be convinced why they should make that investment.
- National Meteorological Societies are best suited for this because they have no vested interest and most of them have members from all three sectors.
- With so much experience and brainpower available with many societies we need to create a Value Proposition jointly which can be adjusted by each society for its own use.
- Since politicians respond to public opinion, societies also need to educate the local public. WMO seems to have a lot of material for educating the public which we can get from them and provide to member societies.
- We need to prepare the mandate of this Committee in the area of promoting Government Investment and Public Education.
- Develop steps to achieve the above defined mandate and implement those steps.

Current Status

- This is a new Committee added to the rest of the Committees.
- Although this is a very important activity, it will be started in earnest this New Year 2020.





Next Steps

• WMO appears to have a lot of material for public education. We will collect this material and adjust it to meet the requirement of this Committee.

• Promoting Government Investment

- 1) Prepare the mandate of this Committee in the area of promoting Government Investment.
- 2) Prepare a Value Proposition for convincing the Government to invest money in developing infrastructure and S&T. Take the assistance of WMO for this.
- 3) Provide this to all member societies to adjust/adopt it to their requirements and educate politicians and bureaucrats.

• Promoting Public Education

- 1) Discuss with WMO what material they have for Public Education and request a copy.
- 2) Review this material
- 3) Develop steps to achieve the above defined mandate

8.13 Committee 13: Meetings and Conference Committee

Dr. Keith Seitter, Dr. Harinder Ahluwalia, Dr. Buruhani Nyenzi

Objective:

To plan and organize IFMS Global Meetings (IGMs), any special Meetings and Conferences including those of the type of World Weather Open Science Conference (WWOSC).

Background

IFMS has been holding IFMS Global Meetings (IGM) since its formation. Up to now, six IGMs, including IGM-06, have been organized on an ad hoc basis.



We have already prepared the Organizational Requirements for holding an IGM which is presented in Annex D.

This Committee needs to prepare a procedure to call for Proposals for the next IGM and the Selection Criteria.

The responsibility for organizing the IGMs will be on the host country with the help of the IFMS Council. In addition, we have to:

- a) Ensure there is a documented procedure to run meetings
- b) Study the feasibility of holding Conferences and their logistics

Recently we have introduced a new idea of holding World Weather Open Science Conferences (WWOSC) on a biennial or triennial basis. This idea was unanimously approved by our Council. It has already been communicated to Meteorological Societies and will be further developed in the related session in IGM-06. It will then be finalized and thereafter, presented to WMO. The selected Society will hold WWOSC in collaboration with IFMS, WMO and possibly HMEI.





The idea is to request the following Regional Meteorological Societies (**RMS**) which exist or are still to be strengthened or formed to bid on having such a Conference

- EMS (European Meteorological Society),
- **AMS/CMOS** (American Meteorological Society/Canadian Meteorological and Oceanographic Society),
- Still to be formed AsMS (Asian Meteorological Society),
- FLISMET (Federacion Latinoamericana E Iberica De Sociedades De Meteorologia),
- AfMS (African Meteorological Society) after it has been consolidated and strengthened,
- Still to be formed South Pacific Meteorological Society (SPMS).

The established RMSs hold regular conferences and new RMSs and others being strengthened will hold such Conferences in the future. The Selection Process for the RMS to hold the WWOSC will be done sufficiently ahead to give at least two years to the selected RMS to prepare for the Conference. The first two Conferences can be held by AMS/CMOS and EMS and by the time of the next Conference other NMS should be ready to take such a responsibility.

Tasks Completed

- We have prepared a Plan for this Committee which is available on request to member societies.
- We have held 6 IGMs including this one in Boston.
- We have prepared the requirements for hosting an IGM which is presented in Annex D.
- We have floated the idea of WWOSC which has been unanimously approved by the IFMS Council. We are now asking RMSs to consider this idea. After discussing with RMSs, we will then take this idea to WMO.

Next Steps

- Prepare a procedure for planning and running IGMs.
- Further develop the idea of WWOSC and discuss with WMO.

ANNEX A: IFMS Council Members 2018-2021



ANNEX B: Value Proposition of IFMS

Some envisioned Value Propositions of the IFMS include:

1. Collaborating on joint activities

Objective: Collaboration between the NHMSocs on joint activities, where appropriate, to advance the science and profession of meteorology.

2. Establishing access to an information channel

Objective: To create meaningful communication channels to unite the member societies and provide a means for distributing information and creating discussion groups.

3. Gaining support from WMO and International Organizations such as the World Bank, etc.

Objective: To create a meaningful relationship with WMO to create a win-win situation.

4. Outreach to Developing Societies

Objective: Helping Developing Societies and creating new ones to address issues concerning global warming and create a "weather ready globe"

5. Creating Global Context/Collaboration with – EMS, FLISMET, EAC, etc.

Objective: Creating a global context for the varied activities of Met Societies and to collaborate with Regional Associations of Met Societies, such as the European Met Society (EMS), Iberian and Latin American Federation of Met Societies (FLISMET), African Regional Economic Cooperation (REC) groupings, etc., is a core activity for IFMS.

6. Assistance in Accreditation/Certification and Training (ACT)

Objective: Providing assistance in Accreditation/Certification and Training (ACT)

7. Assist WMO/WBG to promote Public-Private-Academic (PPA) Sector Partnerships

Objective: Help WMO and WBG create strong collaboration between Public/Private/University sectors to create bigger value by optimal use of resources.

8. Aligning IFMS Plans with WMO strategic plans/priorities to increase cooperation

Objective: To increase the probability of strong collaboration between WMO and IFMS for societal benefit, e.g. we are trying to assist WMO in their Global Campus Initiative.

9. Promoting the contributions of individuals

Objective: Promoting the contributions of individuals within the meteorological community and beyond by highlighting excellence.

10. Assistance to Industry through local Met Society to create Infrastructure & PPA Partnerships

Objective: Assistance to Industry through local Met Society to increase collaboration and assistance in connecting with business in that country to develop required infrastructure and support WMO/WBG effort to strengthen GWE through strong collaboration between PPA Sectors.

ANNEX C: Summary of Committees

#	Committee	Chairperson & Committee Members
1.	Committee 1: Access to Communications Channels	Cam Chao - Liz Bentley, Harinder Ahluwalia, Buruhani Nyenzi & Sushil Dash
2	Committee 2:	Liz Bentley - Oscar Frumento, Workneh Degefu, Yongyun Hu
	Task 1: Cooperation with Regional Met Societies	
	Task 2: Regional Weather Enterprise Forums	Oscar Frumento - Michael Coughlan, Liz Bentley and Workneh Degefu
3.	Committee 3: Value Proposition Implementation Committee	Buruhani Nyenzi - Yongyun Hu and Workneh Degefu
3.1	Task 3.1: Collaboration on joint activities	Yongyun Hu - Buruhani Nyenzi, Jack Hayes and Harinder Ahluwalia
3.2	Task 3.2: Membership Promotion & Outreach to developing	Workneh Degefu - Sushil Dash, Oscar Frumento, Jack Hayes, Michael Coughlan and
	Societies	Liz Bentley
4	Committee 4: Collaboration between IFMS and WMO, etc.	
	Task 4.1: Gain support from WMO, WBG and HMEI, etc.	
	Task 4.2: Assist WMO/WBG to promote PPA Sector Partnerships	Harinder Ahluwalia, Jack Hayes, Keith Seitter, Michael Coughlan, Workneh Degefu
	Task 4.3: Aligning IFMS Plans with WMO strategic plans/	
	priorities to increase cooperation	
5.	Committee 5	Keith Seitter - Harinder Ahluwalia, Jack Hayes, Liz Bentley, Yongyun Hu and Cam
	Task 5.1: Financing Committee:	Chao
	Task 5.2: Individual Funding through Member Societies	Cam Chao - Workneh Degefu, Sushil Dash, Oscar Frumento, Jack Hayes, Michael
		Coughlan and Liz Bentley
6	Committee 6: ACT Committee	Liz Bentley - Keith Seitter, Cam Chao and Harinder Ahluwalia
7	Committee 7: Best Practices Coordination Committee	Michael Coughlan - Oscar Frumento, Keith Seitter
8	Committee 8: Webinar & Training	Sushil Dash - Michael Coughlan, Buruhani Nyenzi and Liz Bentley (especially for T
		part of ACT)
9.	Committee 9: Recognition of Individual Contribution	Buruhani Nyenzi - Sushil Dash, Oscar Frumento, Yongyun Hu and Liz Bentley
10.	Committee 10: GWE Monitoring Committee:	Jack Hayes- Keith Seitter and Harinder Ahluwalia
11.	Committee 11: Industry Committee	Pending - To be planned once other Committees are operational
12.	Committee 12:	Harinder Ahluwalia - All Council Members
	Promotion of Climate Change Issues with Governments & Public	
13	Committee 13: Meetings and Conference Committee	Keith Seitter - Harinder Ahluwalia, Buruhani Nyenzi





ANNEX D: Requirements for Holding IFMS Global Meetings (IGM)

1. Introduction

IFMS holds its Global Meeting (**IGM**) approximately every two years. The meeting lasts 2 full days. Usually, societies try to hold it concurrently with their Conference/ Congress. In these meetings we present the progress of various Committees which have been defined to implement IFMS' Value Proposition, we make plans for the future, discuss any new plans, successes, failures, remedies, etc. In the future, we will also be honoring people with various types of awards which we have defined and are in the process of finalizing.

These meetings are attended by IFMS Council Members as well as senior members of member societies. In addition, we also welcome any other members from any society which is interested in the discussions and outcomes of the IGM.

2. Objective of this Document

The objective of this document is to outline the list of requirements for holding an IGM. Any National Meteorological Society (NMSoc), which is a bonafide member of IFMS, can bid for holding an IGM in its country as long as it can fulfill the mandatory requirements stated in the following section. Depending on the strength of the society, there might be a need to have some form of guarantee that the society can fulfill these requirements, e.g. guarantee by the National Meteorological Service or some National Body stating that they will support the Society if it wins the opportunity to hold such a meeting.

3. Mandatory Requirements

Following are the mandatory requirements for the bidding society to fulfill:

- 1) Demonstrated capability to organize similar Meetings or Conferences.
- 2) Capability to assist in preparing and finalizing the Meeting Program with the assistance of the IFMS Council.
- Capability to provide a <u>quality Conference Room</u> in a Hotel, Conference Centre or university/education establishment or any Government Facility such as facilities of the National Meteorological Service.
- 4) The proposed location must be easily reachable from International locations from where attendees will be coming.
- 5) Following meals must be arranged:
 - a) Two lunches
 - b) One formal dinner on the first day of the meeting so that we can also have a classy Recognition Ceremony.





- c) 6 tea/coffee breaks (includes morning Coffee on two days, two mid-morning breaks and two mid-afternoon breaks)
- 6) Printing sufficient number of color copies of the Program Book and any other documents, e.g. Progress Reports, latest Newsletter, etc.
- 7) Registration Facility/Capability.
- 8) Volunteers to staff the Registration Desk.

4. Non-Mandatory Requirements

The following requirements are desirable but not mandatory:

- 1) Live streaming option for members of those societies who are not able to attend in person.
- 2) Some funding to support the travel of staff of needy societies. This can be arranged through any organization local or international.
- 3) If the IGM is being held concurrently with a Conference and Exhibition, a free booth with furnishing and display system.
- 4) If possible, the material for Awards.

5. Proposal Review Process

Your Proposal will be reviewed by the Council Members for its quality and fulfillment of all the stated requirements.

We will make a scoring grid to score the Proposals and declare the winner.





ANNEX E: How to Donate to IFMS

The International Forum of Meteorological Societies (**IFMS**) is meant to coordinate the efforts of the National Meteorological Societies of the World in the same manner as the World Meteorological Organizations (**WMO**) does for the National Meteorological Services

Although IFMS operates through the generosity of its volunteers who donate their time to fulfill its objectives, it still needs some finances for a small Secretariat, covering out-of-pocket expenses, infrastructure expenses (e.g. Web Site, Communication, etc.), Event related expenses, etc., hence the appeal for donations.

Ways to Donate to IFMS

Please note that the following mechanisms for sending Contributions/Donations to IFMS can be used:

 The Crowdfunding we have established is most useful for donations between e.g. \$5 to \$500. Larger donors should use one of the other mechanisms listed below. A Charitable Donation Receipt will be issued by the site.

Please use the following link to donate funds to IFMS through the "Crowdfunding" mechanism:

https://www.classy.org/campaign/IFMS-Funding-2019/c244490

- 2. When an individual in a given country wants to make a financial contribute to IFMS, another mechanism he/she can use is to donate money to his/her National Meteorological Society clearly indicating that the donation is meant for IFMS. The local National Meteorological Society can issue its own charitable receipt to the donor and then the money so collected from all donors needs to be transferred say on a quarterly or biennial or annual basis to IFMS. An official receipt will be issued by IFMS to the Society.
- 3. When a Society wishes to contribute to IFMS, it should use the Bank Transfer information which has been provided to all member societies.
- 4. The Society can also send an international money order or cheque directly to IFMS on AMS' address (45 Beacon St, Boston, MA 02108, USA) c/o Dr. Keith Seitter clearly indicating that the contribution/donation is meant for IFMS. Please remember that societies can claim such a donation as an expense and a receipt for this purpose will be issued by IFMS with its Charitable Registration Number clearly indicated on the receipt.

We would greatly appreciate the contributions made by all practitioners and well-wishers to assist IFMS in strengthening existing societies and creating new ones.





ANNEX F: Acronyms/Abbreviations

ACT	Accreditation/Certification and Training
ACM	Asian Conference on Meteorology
AfMS	African Meteorological Society (Regional Society of Africa)
AGU	American Geophysical Union
AMOS	Australian Meteorological & Oceanographic Society
AMS	American Meteorological Society
AsMS	Asian Meteorological Society (Regional Society of Asia)
CAM	Centro Argentino de Meteorologos
CCR	Canadian Consortium for Research
CEO	Chief Executive Officer
CG18	WMO Congress #18 (held in Geneva in June 2019)
CGU	Canadian Geophysical Union
CMOS	Canadian Meteorological and Oceanographic Society
CMS	Chinese Meteorological Society
COMET	Program established by UCAR and NOAA's NWS to promote a better understanding of mesoscale meteorology
CWRA	Canadian Water Resources Association
EAC	East African Community
EMS	European Meteorological Society
FLISMET	Latino American Federation of Meteorological Societies
GFDRR	Global Facility for Disaster Reduction and Recovery
GWE	Global Weather Enterprise
GWEF	Global Weather Enterprise Forum (a body to promote PPA Collaboration)
HMEI	HydroMet Equipment Industry
Hydromet	Hydrology and Meteorology
IAMAS	International Association of Meteorology and Atmospheric Sciences
ICSU	International Council for Science
IFMS	International Forum of Meteorological Society
IGM	IFMS Global Meeting



PROGRESS REPORT FOR IGM-06



IPCC	Intergovernmental Panel on Climate Change
ISB	International Society of Biometeorology
IUGG	International Union of Geodesy and Geophysics
KMS	Korean Meteorological Society
LDC	Least Developed Countries
Met	Meteorology
MMT	Hungarian (Magyar) Meteorological Society
MOU	Memorandum of Understanding
MSCT	Meteorological Society of Chinese Taipei
MSJ	Meteorological Society of Japan
NGO	Non-Government Organization
NL	Newsletter
NMHS	National Meteorological and Hydrological Services
NMSoc	National Meteorological Society
NWS	National Weather Service
OCP	Open Consultative Platform (to advise WMO Secretary General)
PAGSE	Partnership Group for Science and Engineering
PPA	Public Private and Academic (Sectors)
PPT	Power Point
QMS	Quality Management System
REC	Regional Economic Cooperation (s) groupings in Africa USA
RMetS	Royal Meteorological Society
RMS	Regional Meteorological Society
SG	Secretary General
SPMS	South Pacific Meteorological Society
S&T	Science and Technology
STA	Science and Technology Australia
USA	United States of America





PROGRESS REPORT FOR IGM-06

Vice President
World Bank
World Bank Group
Web Conferencing Software (Proprietary)
World Meteorological Organization
Weather Ready Nation
World Weather Open Science Conference