WMO Education and Training Programme (ETRP)

Dr Yinka ADEBAYO

Director

Education and Training Office

Development and Regional Activities Department



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

CAPACITY DEVELOPMENT THROUGH EDUCATION AND TRAINING IN METEOROLOGY, HYDROLOGY AND RELATED DISCIPLINES

MEMBER NEEDS

- Regional needs assessments
- Secretariat surveys
- Member requests

GOVERNANCE, PRIORITIZATION, AND GUIDANCE

- WMO Congress and Executive Council
- Commissions and Panels
- Technical Departments

EDUCATION AND TRAINING PARTNERS

- WMO RTCs
 - Fellowship Partners
 - Universities
 - NMHSs
 - International Organizations

COURSES AND RESOURCES

- WMO sponsored and co-sponsored courses
- Fellowships
- Conference and Meetings for RTCs and Training Partners
- Courses and resources for trainers

IMPROVED MEMBER SERVICES

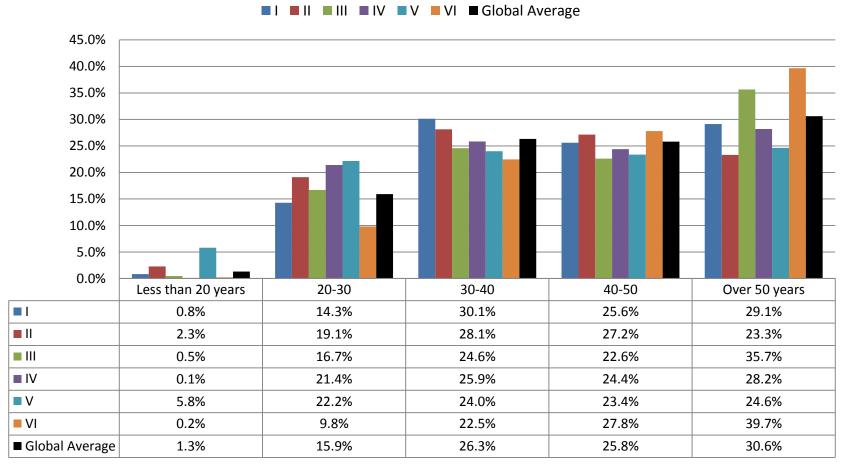
- New job candidates prepared with required qualifications
- Continuously trained, competent workforce
- Skilled researchers

Challenges of Human Resources Development in NMHSs

- WMO estimates a workforce of 200,000 globally in NMHSs. (This does not capture many other related institutions.)
- Professional development needs are increasing. Roles are changing and expanding, requiring retraining.
- We need to provide additional opportunities for ongoing learning to reach ALL those in need throughout their careers (Anytime, Anywhere Learning).

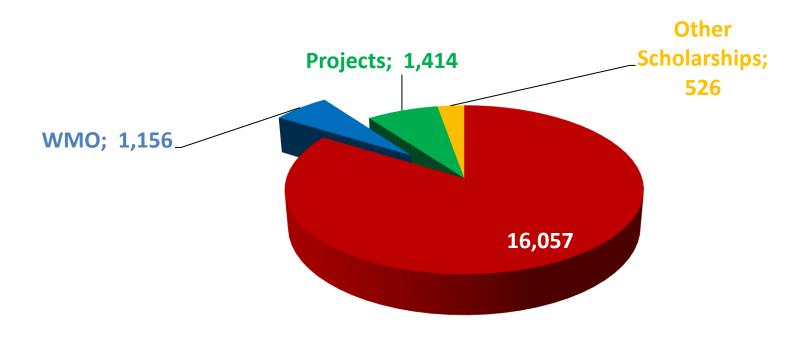


Staff situation by age bracket (Global)





Experts expected to be trained in 2017 (Global)







Strategic priorities for training and capacity development

- BIP-M and BIP-MT Review
 - 2 expert teams formed and in early stages of review, following November 2019 kick-off meeting
- Online Courses and Workshop for Trainers
 - For language groups and regions (2019 for RA-VI and others, separate course for CIS countries in Russian)
- Ongoing support for qualifications and competencies
 - Compendium of WMO Competency Frameworks in publication
 - NWP Knowledge and Skills Framework still in development (Radar and Satellite skills are completed)
- Ongoing Fellowships and short-term professional development
- Development of course packages and shared materials
- New publications (leadership and management, air quality, Member capacity development needs, competencies)
- Support to WMO Regional Training Centers
- Technical support to capacity development projects



Strategic priorities for training and capacity development

- Leadership and Management Development for NMHSs
 - 2019 Events currently planned in Singapore and South Africa
- Urban Meteorology and Air Quality
 - 2019 Event planned in Kenya (2018 in Malaysia)
- Regional Workshops on NWP Application
 - Workshops planned in Egypt, India, Indonesia (others expected)
- Marine Meteorological Services Delivery training (impact-based approaches)
 - 2 phases, Online and Regional Workshops
 - Other service delivery areas may be supported
- Climate Services (e.g. for Health and Agriculture)
- Support for CAP training



WMO ETR Office Structure

Education and Training Office

Training Activities Division

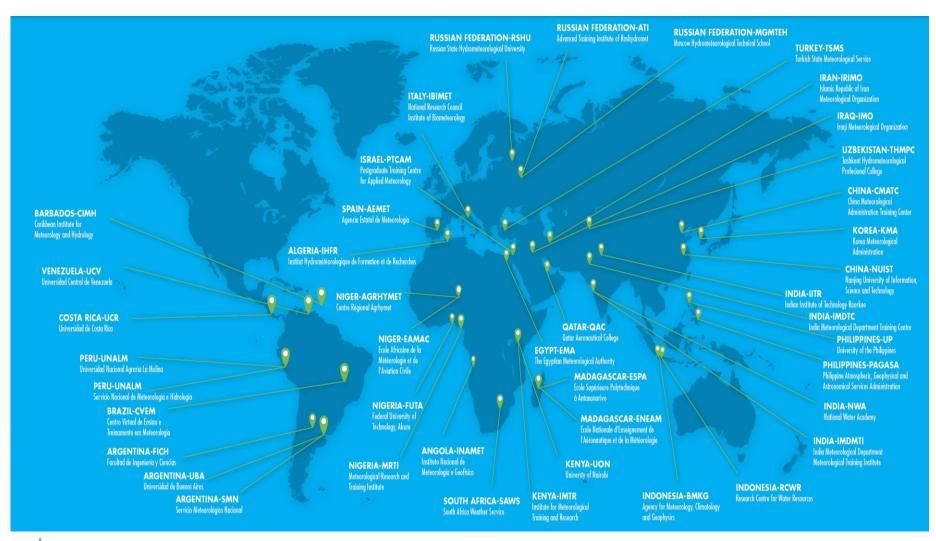
Short-Term, Continuous Professional Development

Fellowships Division

Long-Term, Qualifications



WMO Regional Training Centres





Supporting the RTC network

Providing guidance and support to the RTC network, External Assessments

Establishing best practices for regional needs assessment

Training the trainers in RTCs and national services

Increasing opportunities through distance learning and expanded learning approaches

Establishing partnerships to support all of the above

Clarifying roles and responsibilities of RTCs



Catalytic Effect of Online Courses for Trainers

2018 WMO Online Course for Trainers (Francophone), 9 Weeks

Offered by ETR Office, with support of Meteo-France

3 tracks, for Trainers, Part-time Trainers, and Training Managers

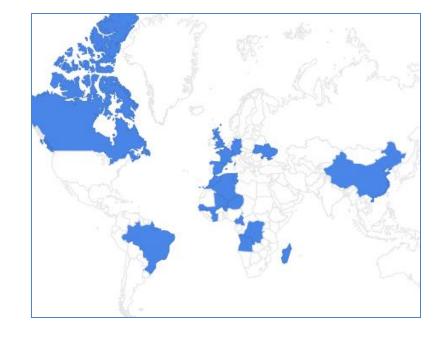
46 Participants from 15 Members

Algeria, Angola, Burundi, Cameroon, Canada, Comoros, Côte d'Ivoire, DR Congo, Madagascar, Mali, Morocco, Niger, Spain, Tunisia, Ukraine

19 Facilitators/Coaches (all voluntary)

Brazil (2016*), Canada x3 (2016*), China (2017*), France, EUMETSAT x2, Madagascar (2011*), Morocco x2 (2015*), Senegal (2015*), Switzerland (2016*), WMO/CGMS VLab (UK), WMO ETR x2

*10 Facilitators are former WMO Online Course participants from previous years indicated!





Catalytic Effect of Online Courses for Trainers

- 2018 WMO Online Course for Trainers (Francophone)
- Offered by ETR Office from 12 March to 10 June 2018
- Offered for Trainers, Part-time Trainers, and Training Managers
- 46 Participants from
- 15 Members
 - Algeria
 - Angola
 - Burundi
 - Cameroon
 - Canada
 - Comoros
 - Côte d'Ivoire
 - DR Congo
 - Madagascar
 - Mali
 - Morocco
 - Niger
 - Spain
 - Tunisia
 - Ukraine

- 17 Voluntary Facilitators/Mentors
- 10 Facilitators are Former Participants
 - Brazil (2016)
 - Canada x3 (2016)
 - China (2017)
 - France
 - EUMETSAT
 - Madagascar (2011)
 - Morocco x2 (2015)
 - Senegal (2015)
 - Switzerland (2016)
 - VLab





WMO Fellowship Programme

- three types:
 - i) Fellowships range from short-term (one month to six months) to long-term (more than six months);
 - ii) Group training;
 - iii) Familiarization visits for newly appointed PRs.



Annual SG circular letter for ETR opportunities(FEL website)

WMO OMM



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

7 bis, avenue de la Paix - Case postale 2300 CH 1211 Genève 2 - Suisse Tél.: +41 (0) 22 730 81 11 Fax: +41 (0) 22 730 81 81 wmo@wmo.int - public.wmo.int

13 December 2017

41695/2017/DRA/ETR

Annexes: 5 (Annexes B to E available in English only)

Subject:

WMO Education and Training Opportunities (2018)

Action required:

For information and appropriate action, as required

Dear Sir/Madam,

I am pleased to advise you of a wide range of education and training opportunities which WMO plans to support during the year 2018. Members interested in nominating suitable candidate(s) are required to review the "Compendium of WMO fellowships and training opportunities", and follow the instructions carefully. The Compendium can be downloaded from the link below: http://www.wmo.int/pages/prog/dra/documents/Compendium-2018.pdf

Before submission of nominations, it is suggested that the "Guide on nominations for fellowships and training" in Annex A and the "Criteria on Award of Fellowships and Training Sponsorships" in Annex B should be carefully read. As a further guide on choice of institutions for your candidate(s), it is suggested that attention be paid to the partners listed in Annexes C, D and E, which respectively contain fellowships and training opportunities available from institutions, countries and WMO RTCs that have entered into special agreement with WMO.

Unless otherwise stated on the Compendium, any candidate applying for fellowship to undergo studies in any institution is required to secure an admission letter, or be in the process of obtaining one, prior to submission of a nomination to WMO.

As the demand for training support far outweighs what the existing funds allow, I would encourage you to be selective in the number of candidates you propose. You may therefore consider paying particular attention to how your request aligns with your national priority, taking into account issues relating to succession management, gender equity and a variety of future challenges facing National Meteorological and Hydrological Services (NMHSs) and the users of their products. Furthermore, in view of the outcome of the 2017 survey on status of human resources in NMHSs, it is desirable to dedicate the available fellowship and training opportunities to supporting nominations from developing and Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

Please note that the deadline for general nomination to WMO is 28 February 2018 unless stated otherwise in the information table.

Yours faithfully,

(P. Taalas)

Annex A - Guide on nominations for fellowships and training

2018 Compendium of WMO Fellowships and Training Opportunities, Requirements and Guide for Application

(http://www.wmo.int/pages/proq/dra/documents/Compendium-2018.pdf)

- Read through the WMO EC Criteria on Award of Fellowships and Training Sponsorships in
- Check for available fellowship and training opportunities in Annexes C, D and E.
- For fellowship nomination, a completed Fellowship Nomination Form (FNF) is required (FNF can be downloaded from: https://public.wmo.int/en/resources/training/fellowships).
- The FNF must be signed by the Permanent Representative or a formally delegated alternative signatory and sent to the Secretary-General of WMO by the closing dates stipulated for that opportunity.
- For courses offered by WMO RTCs of less than one month, candidates must use the nomination forms provided by the RTC. A signed request by the PR of the WMO Member is required for WMO support. Participants who have been selected for WMO support will be asked to complete a Request for Financial Assistance (RFA) form.
- Any nomination must provide an admission letter from the institution for the requested course. The admission letter or accompanying documentation should provide the start and end dates of the course of study and the costs involved. To obtain the admission letter, candidates must apply to the institution which checks the academic, language and other requirements.
- The applicant must be proficient in the language of study and/or provide the required documentation regarding their language proficiency. Please note that some institutions require a English language test, such as IELTS and TOEFL.
- If multiple candidates are nominated, the Permanent Representative must also provide a priority listing for the candidates.
- New fellowship awards require all due and overdue post-fellowship reports from previous fellows (completion report, 3-month report or 18 to 24-month report, PR familiarization visit report) to be provided to WMO.
- Deadlines for nominations must be followed. Late nominations beyond the deadlines are normally not considered. The issuance of the admission letter from institutions, and obtaining the result of a required language test takes time. If such conditions are foreseen, candidates are suggested to take action as early as possible.



Guide on nominations for fellowships and training-1

- Read through the WMO EC Criteria on Award of Fellowships and Training Sponsorships on fellowship website.
- Check for available fellowship and training opportunities in Compendium and RTCs website.
- For fellowship nomination, a completed Fellowships Nomination Form (FNF) is required (FNF can be downloaded from fellowship website).
- The FNF must be signed by the Permanent Representative or a formally delegated alternative signatory and sent to the Secretary-General of WMO by the closing dates stipulated for that opportunity.
- Any nomination must provide an admission letter from the institution for the requested course. The admission letter or accompanying documentation should provide the start and end dates of the course of study and the costs involved. To obtain the admission letter, candidates must apply to the institution who checks the academic, language and other requirements.
- The applicant must be proficient in the language of study and/or provide the required documentation regarding their language proficiency. Please note that some institutions require a English language test, such as IELTS and TOEFL.

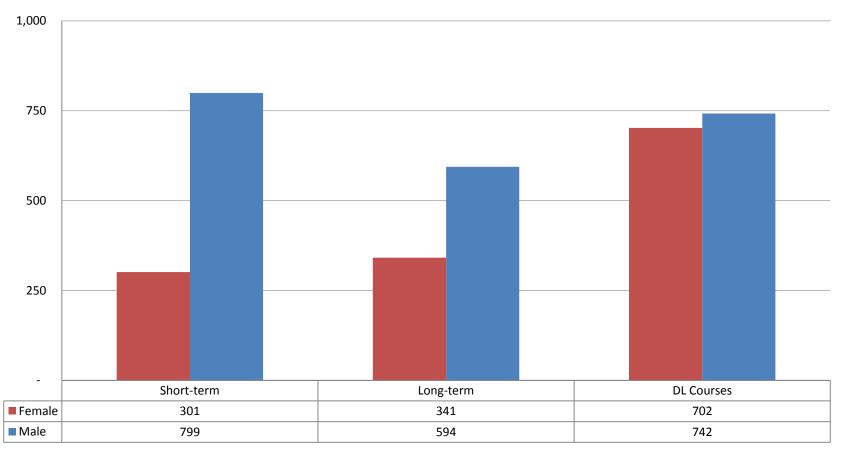


Guide on nominations for fellowships and training-1

- If multiple candidates are nominated, the Permanent Representative must also provide a priority listing for the candidates.
- New fellowship awards require all due and overdue post-fellowship reports from previous fellows (completion report and 24-month post fellowship report, PR familiarization reports) to be provided to WMO.
- Deadlines for nominations must be followed. Late nominations beyond the deadlines are normally not considered. The issuance of the admission letter from institutions and obtaining the result of a required language test takes time. If such a request is foreseen, candidates are suggested to take actions as early as possible.
- For courses offered by WMO RTCs of less than one month, candidates must use the nomination forms provided by the RTC. A signed request by the PR of the WMO Member is required for WMO support. Participants who have been selected for WMO support will be asked to complete a Request for Financial Assistance (RFA) form.
- 2019 Compendium of WMO Fellowships and Training Opportunities,
 Requirements and Guide for Application
- (http://www.wmo.int/pages/prog/dra/documents/Compendium-2019.pdf)



International Participants Served by WMO RTCs in 2018







Short-term support given by ETR in 2018

| 9 80% |
|-------|
| 4 5% |
| 3 3% |
| 0 0% |
| 1 1% |
| 9 10% |
| |
| |



Fellowship: From Application to Implementation

Candidates
become Formal
Fellows of WMO
and receive
Fellowship Award

Formal Fellows undergo their studies

Fellows complete their studies and return to their countries

SG approves the candidates to be awarded with WMO Fellowship

recommend to SG the candidates to be awarded with WMO Fellowship

Formal Candidates considered by the Education and Training Committee (ETCOM)

Secretary-General (SG) of WMO announces the opportunities to Permanent Representatives (PRs)

PRs nominate candidate(s) with Fellowship Nomination Form (FNF)

Candidates apply to Universities / Institutions and get Admission Letters



Internal process

- how do we select them
 - Application FNF signed by PR(plus admission letter), evaluation, shortlisted, ETCOM recommend, SG approval, confirmation of availability, awards
- how do we fund them
 - Regular budget, Extra-budgetary fund, VCP
 - Annual allocated: CHF 0.8M (USD 0.8M)



Monitoring of Fellows

Host Institutions

- ✓ Confirmation of arrival
- ✓ Annual progress report

Fellows and Permanent Representative of home country

- √ Post-fellowship reports
 - ➤ Completion report (Fellow)
 - ➤ 18 months report (Fellow + Permanent Representative)



Review of Manual for transparency

Manual on Policies and Procedures for WMO Fellowships

Education and Training Programme ETR-No. 18





 A review of the WMO Fellowship Manual is currently underway, to be published in 2020 after approval by EC 72

Contents include:

- Responsibilities and background Information
- Application procedure
- Processing WMO Fellowships
- Stipend, allowance, travel, insurance
- Monitoring and evaluation
- Group training and familiarization visits
- Application package and award package



The updated guide for WMO fellows

GUIDE FOR WMO FELLOWS





WORLD METEOROLOGICAL ORGANIZATION

Geneva, January 2016

- More specific and practical instruction for WMO Fellows implementation to enhance
- effectiveness and transparency.
- To be reviews frequently when necessary.

Contents include:

- 1. Introduction
- 2. General information
- 3. Obligations of WMO Fellows
- 4. Preparation for the Fellowship
- 5. Travel
- 6. Stipend
- 7. Allowances
- 8. Tuition and other fees
- 9. Final report
- 10. Hospitalization
- 11. Group medical, accident, disability and death scheme
- for Fellows
- 12. Stipend payment instruction



WMO placement

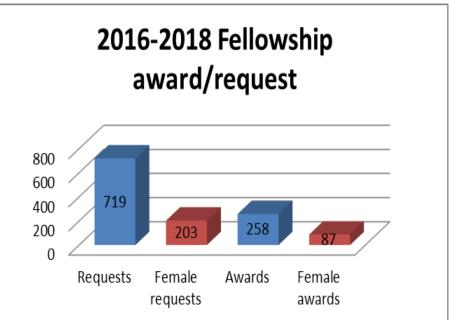
- WMO fellowship partners
- WMO RTCs
 - 28 WMO Regional Training Centres, composed of 43 components, providing a diverse portfolio education and training opportunities through residence classes, distance-learning and blended learning.

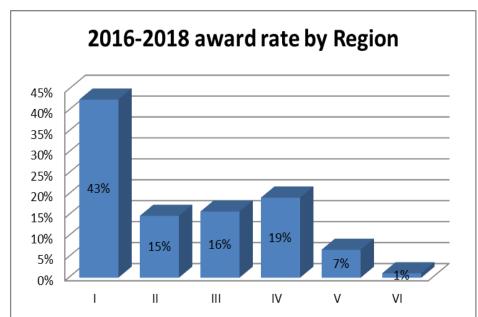


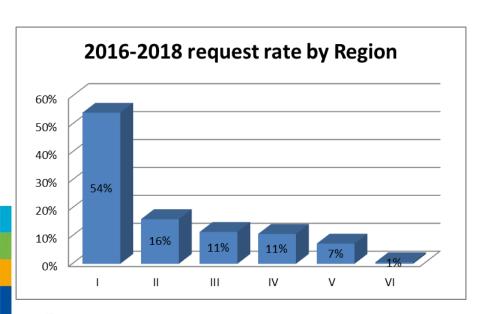
Consolidated partnerships - MoUs

| | Host | MoU or agreement | Year of | Major | Number/year |
|---------|----------------------|---|-----------|---|---|
| | Member | | signature | | |
| 1. 1 | China | Ministry of Education, China | 2018 | Meteorology and Hydrology | 15 full scholarship BSc, MSc and PhD. |
| 1. | China | Nanjing University of Information Science and technology (NUIST) | 2016 | Meteorology | 10 full scholarship MSc and PhD. |
| 1. 3 | China | Hohai University | 2016 | Hydrology | 20 full scholarship MSc |
| 2 | France | Ecole Nationale de la Météorologie (ENM) | 2014 | Meteorology | Varies, mainly for francophone Members |
| 3 | Germany | Leibeniz University Hanover | 2019 | Hydrology | Up to 2 MSc |
| 4 | Japan | Disaster Prevention Research Institute(DPRI), Kyoto University | 2017 | Meteorology (research oriented) | 3 full scholarship for up to 6 months |
| 5 | Korea | EWHA Womens University (EWU) | 2016 | Meteorology | 3 MSc for Female fellow |
| 6 | Netherlands | IHE-Delft, Institute for Water Education | 2017 | Hydrology | Up to 3 MSc |
| 7 | Russia Federation | Russian State Hydrometeorological University (RSHU) | 2016 | Meteorology, Hydrology and Environment | 5 BSc and MSc |
| 8. 1 | United Kingdom | University of Reading | 2017 | Meteorology | Up to 5 MSc, 10% tuition reduction |
| 8. 2 | United Kingdom | European Centre for Medium Range Weather Forecast (ECMWF) | 2014 | Meteorology | Attachment work up to 1 year |
| 8. 3 | United Kingdom | SCAR (Scientific Committee on Antarctic Research) | 2018 | Meteorology | Several research fellowship |
| 9 | The USA | National Oceanic and Atmospheric Administration (NOAA) | | Meteorology | 24 attachment to African and South American/Tropical Desk for 4 months |





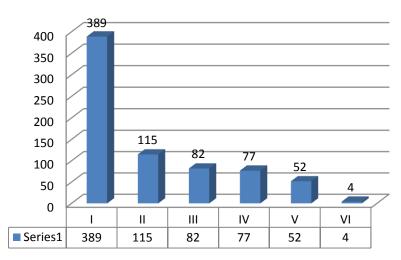


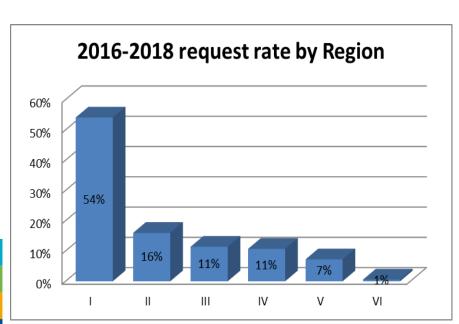


During the financial period from 2016 to 2018 (cut-off dates from 1 Jan 2015 to 31 Dec 2018), there were 719 requests out of which 285 awarded. The request and reward rate, broken down by region, shows the highest rates in both for RA-I. The total award/request rate is 40%, with a female award/request rate of 44%, 4% higher than the overall award rate.

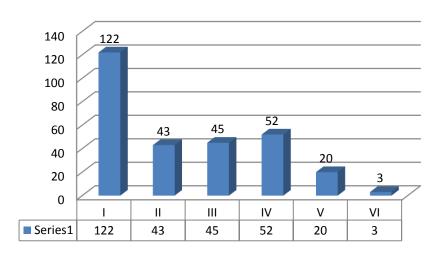


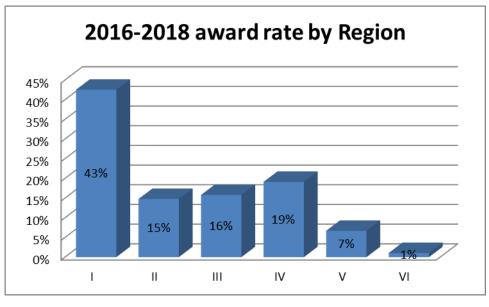
2016-2018 request by Region





2016-2018 awarded by Region







WMO Global Campus Fundamentals

Collaboration, Cooperation, Sharing

Builds upon the existing WMO ETR Programme (RTC network, national centres, and other national and international training partners)

Activities should increase learning opportunities for Members, through (a) increased visibility, (b) sharing resources, (c) facilitating innovations, (d) promoting compliance, (e) enhancing quality.

WMO Global Campus is an ETRP initiative, not a new programme or a proposal to move all training online.



WMO Global campus Initiatives

- Supporting regional and global partnerships
 - Ibero-American RTCs (ongoing)
 - RA-I RTCs (November, 2019)
- University collaborations and contributions
 - Expanding offerings, widening reach, increasing visibility of programmes, collaborations in resource development, sharing innovations
- Translations Resource Center
- WMO Global Campus Events Calendar
- WMO Global Campus E-Library
- WMO publication on educational innovations by WMO Members (WMO Global Campus Innovations)



Training Processes: Nomination Guidelines

- Establish national training needs and priorities in advance
- Review course announcement guidelines, ensure that nominees meet stated qualifications
- Announcements are made by circular letter and on WMOLearn Events
 Calendar, and via the annual Compendium announcement
- Apply directly, as early as possible, to the course organizer
- PR must approve and sign nominations
- Due to limited resources, seek internal funding first, including projects
- Co-sponsorship allows more nominations to be supported
- If required, explicitly request financial support through signed letter
- Support for short-term training prioritized to developing and least developed Member states, with fair distribution to Members
- Participants should possess a valid passport. WMO cannot pay for Visas.



Training Processes: Offering a Co-Sponsored Course

- Process begins 4 months before start of a course.
- RTC provides Course Information, Information Note, and Nomination Form to WMO ETR
- WMO Technical Departments and ETR Office will review and may request revisions
- Nomination deadlines should be 6 weeks before the start of the course
- ETR considers level of WMO support possible
- ETR advertises the course through WMO Circular Letter
- RTC should also advertise through WMOLearn Events Calendar
- RTC sends WMO a list of accepted candidates after nomination deadline
- ETR selects candidates for funding based on PR requests received
- ETR and RTC processes travel and subsistence support
- RTC communicates with all participants on logistics
- RTC reports on attendance and completions of the course



Permanent Representative Role in Supporting RTCs

- Inform WMO if the Director of the RTC changes
- Ensure ongoing communication the RTC and the regional association
- Promote support of the RTC through national and international funding mechanism
- Review and approve annual reports on the RTC activities, to be submitted to WMO
- Collaborate with other PRs hosting RTCs
- Advocate for the RTC to comply with national and WMO standards and guidelines, and keep pace with evolving technological and education developments



Key issues for Members

- Need to realize that WMO is not the only training provider, but we have a responsibility for specialized training
- 2. Need to look into the succession management taking into account age distribution
- 3. Long-term staffing profiles and evolving needs should be taken into account in strategic plans as an integral part of human resources development at national level
- Increase bi-lateral and multilateral collaboration at regional and global levels



Key issues for WMO

- Need to help regions build increased capacity for self-support
- Need to increase education and training support from WMO in the near-term
- Need to look for resources to meet up to expectations of Members in terms of training
- WMO Regional Training Centres and other providers need to consider regional priorities
- WMO will continue to collaborate with training partners to build a more coherent and effective network of training partners



Thank you Merci



World Meteorological Organization Organisation météorologique mondiale

The processing procedure

The life-cycle of Candidates and Fellows

