



GFDRR Hydromet

Global Facility for Disaster Reduction and Recovery

**Improving delivery of weather, climate
and hydrological services and
early warnings in developing countries**

**GFDRR learning course
April 23, 2019**



Meet the team



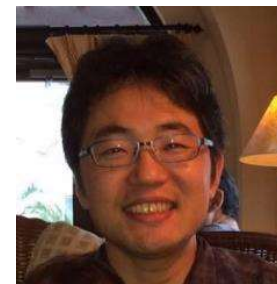
Vladimir Tsirkunov



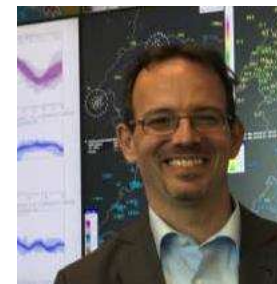
Makoto Suwa



Anna-Maria Bogdanova



Naohisa Koide



Daniel Kull



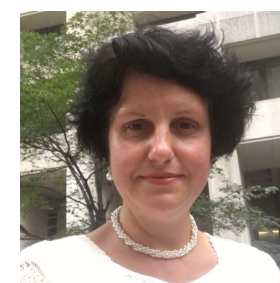
David Rogers



Haleh Kootval



Alice Soares



Tetiana Shalkivska



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Agenda for the next three days

April 23, Tuesday		April 24, Wednesday		April 25, Thursday	
12.30 - 13.00	LUNCH	12.30 - 13.00	LUNCH	12.30 - 13.00	LUNCH
13.00 - 13.15	Welcoming Notes	13.00 - 14.00	Session 4: Strengthening Interagency Collaboration to Improve the Quality of Services	13.00 - 14.00	Session 7: Public-Private Engagement in Hydromet Services
13.15 - 13.45	Session 1: GFDRR Hydromet Updates and Introduction to the Course		Session 5: Hydrometeorological Services as “System of Systems” and Change Management	14.00 - 15.45	Session 8: How to find pathways for sustainable hydromet projects? What can be done better? (Continuation of Session 6).
13.45 - 14.30	Session 2: Weathering the Change: How to Improve Hydromet Services in Developing Countries	14.00 - 15.00		15.45 - 16.00	Learning Course Closure
14.30 - 15.45	Session 3: Group Exercise - How to make certain decisions in uncertainty?	15.00 - 15.45	Session 6: How to find pathways for sustainable hydromet projects?	16.00 - 17.00	Reception
15.45 - 16.00	Summary of the Day 1	15.45 - 16.00	Summary of the Day 2		

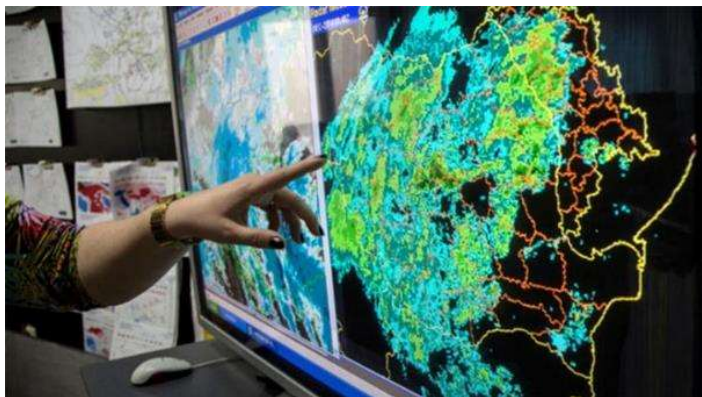


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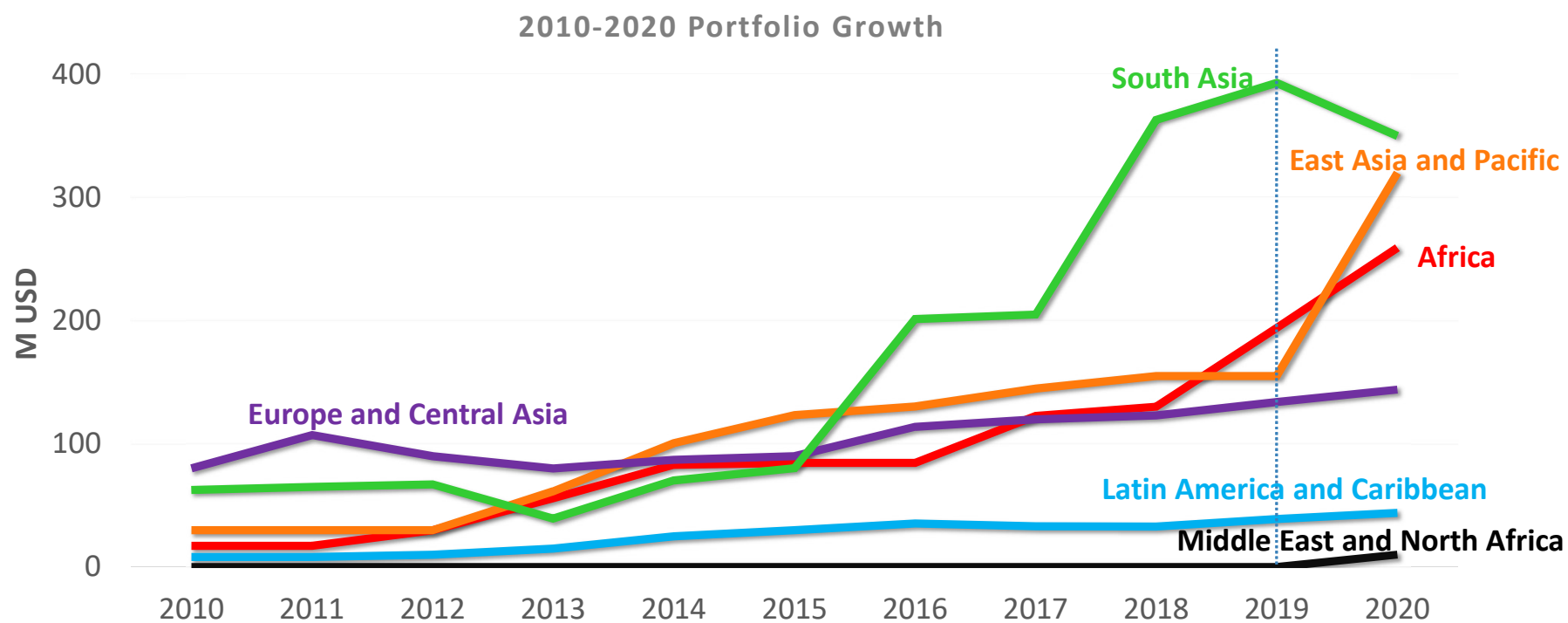
GFDRR Hydromet Program



- ❑ GFDRR Hydromet was created in 2011 as a **service center** to provide analytical, advisory and implementation support to WBG teams involved in preparation/implementation of programs/projects aiming at strengthening hydromet and early warning services
- ❑ GFDRR business modality enabled Hydromet team to provide support to investments and TA across all regions and GPs (SURR, CC Group, Water, Environment and Agriculture) and facilitate knowledge exchange among them on the subject
- ❑ Direct access to GFDRR donors created additional opportunities for donor support to hydromet and EWS (e.g. CREWS)
- ❑ GFDRR Hydromet has been instrumental in mainstreaming hydromet in Bank operation and increasing WB portfolio
- ❑ GFDRR Hydromet is intrinsic part of and main contributor to the activities of the Hydromet Community of Practice



Status of the Bank hydromet portfolio



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GFDRR Hydromet: FY2019 highlights

Analytical work

- ❑ Weathering the Change: How to improve hydromet services in developing countries.
- ❑ The Power of Partnerships: Public-Private Engagement in hydromet services
- ❑ The team has been involved in 13 ASAs in FY19

Investment support

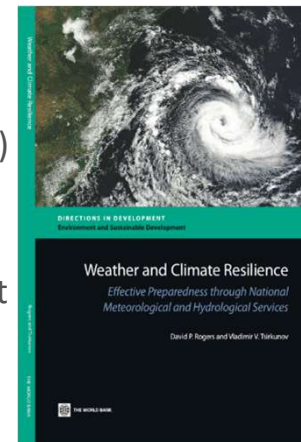
- ❑ Continuing support to WB teams on project design and implementation applying new knowledge (the team has been supporting 15 IPFs in FY19)
- ❑ Procurement initiatives
 - WMO retainer contract (for BE) / borrower template agreement (for RE)
 - DBOT

Capacity Building

- ❑ Knowledge exchange and learning sessions/BBLs for the Bank's staff on latest trends in hydromet services and their application to the Bank's projects

Partnerships

- ❑ Alliance for Hydromet Development
- ❑ Global Weather Enterprise Forum
- ❑ InterMET Asia (March 2019)



GFDRR Hydromet

Knowledge sharing platform – under development, will be launched in FY20

ROAD MAPS FOR MODERNIZING HYDROMET AND EARLY WARNING SERVICES

In nearly a dozen countries, the Global Facility for Disaster Reduction and Recovery (GFDRR)'s hydromet initiative has been working with national governments to develop road maps for strengthening their respective hydrological and meteorological (hydromet) and early warning systems. Below, we share some of our key findings and assessments in these road maps. Learn more: www.gfdrr.org/hydromet

AFGHANISTAN (2018)

STRENGTHENING HYDROMET AND EARLY WARNING SERVICES IN AFGHANISTAN: A ROAD MAP

The existing regulatory, operational, and institutional framework governing hydromet and early warning systems in Afghanistan provides a good foundation for developing and implementing effective products and services. To help it reach its potential, however, this roadmap identifies two challenges that must be overcome: the lack of a comprehensive national strategy and weaknesses in institutional communication and coordination. [Learn more in our hydromet and early warning systems road map for Afghanistan.](#)

READ MORE:

1. HONDURAS (2015) 2. NICARAGUA (2015) 3. AFGHANISTAN (2018) 4. ARMENIA (2018) 5. ST. LUCIA (2017) 6. JAPAN (2016) 7. SRI LANKA (2016) 8. BHUTAN (2015) 9. ALBANIA (2015) 10. CENTRAL ASIA (2009)

Collaboration with WMO: WB-WMO Action Plan for CY2019



Action Plan for 2019, signed on April 1, 2019

Area of Collaboration	Objective
Global collaboration	
Alliance for Hydromet Development	Create the Alliance for Hydromet Development and launch it at World Bank Group 2019 Annual Meetings
Eighteen World Meteorological Congress	WMO Members welcome the collaboration established with the World Bank in support of WMO Strategic Plan Objectives to close the capacity gap of developing countries Members through effective partnerships



Collaboration with WMO: WB-WMO Action Plan for CY2019



Area of Collaboration	Objective
Regional collaboration	
Africa	Align Africa Hydromet Program activities with Alliance for Hydromet Development
South Asia	South Asia Hydromet Forum: Specify and start implementation of South Asia Hydromet Programme activities
Europe and Central Asia	South East European Multi-Hazards Early Warning Advisory System (SEE-MHEWS-A) Regional Specialized Meteorological Center (RSMC) Tashkent and Central Asia Regional Flash Flood Guidance System (CARFFGS)



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Collaboration with WMO: WB-WMO Action Plan for CY2019



Area of Collaboration	Objective
Country and project level collaboration	
CREWS	Maximize complementarity through joint programing and project preparation with clear implementation roles and responsibilities and aligned communication of implementing partners with CREWS Steering Committee members
WMO advisory services via borrower template agreement and through direct contracting	Bring benefits of WMO institutions and WMO standard and recommended practices into World Bank projects via standardized contractual arrangements

Collaboration with WMO: Alliance for Hydromet Development



The Alliance Hydromet would be the **collective commitment and framework for scaled-up, coordinated, sustained, and more impactful action**, aiming at achieving the following objectives:

- › capacity
- › collaboration
- › relevance
- › innovation
- › sustainability
- › accountability

In 2019, the Alliance will:

- Be officially launched during the 2019 WBG Annual Meetings
- Develop **code of conduct** for sustainable hydromet investments which will be supported by main development partners
- Initiate development of a shared, integrated and practical approach to **benchmarking of NMHS performance**
- Prepare an approach for the development of **joint WMO-WB Road Maps** for NMHS modernization and improvement of hydromet services
- Jointly develop preliminary concept of a potential **new financing vehicle**
- Will be discussed at 18th World Meteorological Congress and its High-Level event on development partnerships



Collaboration with WMO: WMO Country Support Initiative



The WMO CSI is a building block of the Alliance for Hydromet Development. While the Alliance will create the political commitment, the CSI will provide technical support



The WMO Country Support Initiative will, among others:

- Support developing countries and development partners in five inter-linked areas to increase effectiveness of hydromet investments
- Create a hydromet knowledge platform and support the development of a regular “hydromet gap” global flagship report
- Support development partners in the design of hydromet-related projects based on WMO standards and good practices
- Support public-private engagement and facilitate mobilization of private sector expertise and resources for the benefit of hydromet development in developing countries



Global Weather Enterprise



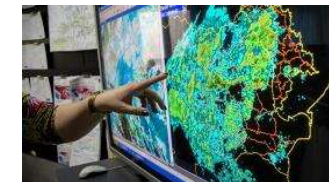
GWE is a global engagement between public, private and academic sectors and NOT a legal entity



The goal is to provide accurate and reliable weather information and services that save lives, protect infrastructure and enhance economic output.



The GWE is fully aligned with the requirements of the universally-agreed Sustainable Development Goals of the UN 2030 Agenda for Sustainable Development.

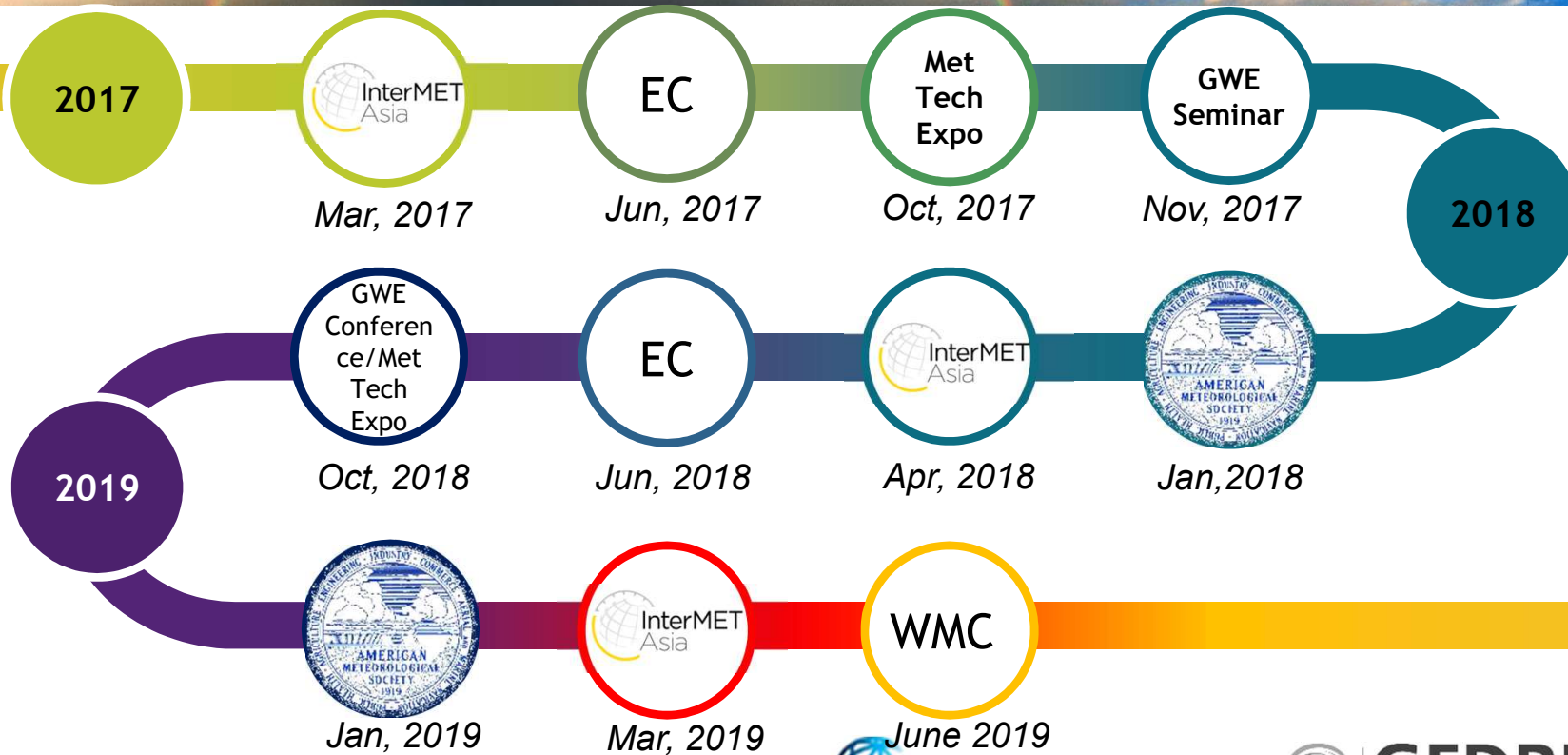


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Global Weather Enterprise



Global Weather Enterprise

Highlights of the GWE discussions: Opportunities and Challenges

☐ Better collaboration/partnerships needed among GWE players

- Roles & responsibilities clarified
- Culture change & Improving trust
- Ensure a level playing field
- Dialogue needed

☐ Data

- Opportunities for more observations
- Enhancing data access and exchange
- Quality assurance for inputs and outputs

☐ Business Model

- Defining business models that lead to “win-win-win” for PPP
- There is a discernible move from the provision of capital-based infrastructure to a service-based approach
- Need to account for regional and country differences - One model will not fit all
- Better linkages with emerging users: Insurance



GFDRR New Publication: The Power of Partnerships

Primary **questions** of the study to address:

- ❑ What are the characteristics, advantages, challenges and potential risks of different models of public-private engagement (PPE) in the hydromet sector?
- ❑ What are the available options for developing countries who wish to streamline and augment public and private engagement in strengthening the provision of hydromet services?

In-depth discussion is planned during the Session 7 on April 27.



Hydromet Community of Practice



KNOWLEDGE SHARING

Knowledge Sharing across GPs/CCSAs through activities such as BBLs, clinics & seminars.



HYDROMET NEWS

Update core and extended members with current hydromet news, publications & other information periodically.



OPERATIONAL SUPPORT

Support design & quality of operations through peer reviews; informal advise to teams; contribute to the climate change evaluation paper.



Hydromet Community of Practice



Knowledge Sharing

[GSURR Forum 2019] Working together on weather, water and climate services
March 13, 2019

[BBL] Predicting Flash Floods: What Tools Do We Have?
February 13, 2019

[BBL] Innovative Tech for Environmental Monitoring, Forecasting and Early Warning - The COMET Training & Innovation Program from UCAR
January 17, 2019



CONFERENCES

ECCAS Hydromet Forum – Libreville, Gabon
November 14-16, 2018

ECOWAS Hydromet Forum – Abidjan, Cote d'Ivoire
September 21, 2018

South Asia Hydromet Services Forum - Geneva
September 18-20, 2018



