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

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عدد المرفقات: 1 (متوافر بالإنكليزية فقط)

الموضوع: مناقشة سياسة المنظمة (WMO) الخاصة بالبيانات في الجزء الثالث من الدورة الأولى للجنة البنية التحتية ((INFCOM-1(III))، في الفترة 12-16 نيسان/ أبريل 2021

الإجراءات المطلوبة: (1) التسجيل في عضوية اللجنة (INFCOM)

(2) مراجعة سياسة البيانات والوثيقة (INFCOM-1(III))/Doc. 5.1.5

(3) التسجيل للمشاركة في الدورة ((INFCOM-1(III))، وتقديم أوراق الاعتماد الخاصة بالمندوبين

تحية طيبة وبعد،

يشرفني أن أبلغكم أن الجزء الثالث من الدورة الأولى للجنة الرصد والبنية التحتية ونظم المعلومات ((INFCOM-1(III)) التابعة للمنظمة (WMO)، سيُعقد على الإنترنت من خلال منصة افتراضية متعددة اللغات، في الفترة 12-16 نيسان/ أبريل 2021.

ويرجى ملاحظة أنه في أعقاب المبادرة التي اتخذتها الدورة الثامنة عشرة للمؤتمر العالمي للأرصاد الجوية، بموجب القرار 56 (Cg-18) - سياسات وممارسات البيانات، أُعد مشروع جديد بعنوان **"السياسة الموحدة للمنظمة (WMO) للتبادل الدولي لبيانات نظام الأرض"**. وستناقش الدورة القادمة للجنة (INFCOM) قرار مقترح على المؤتمر بشأن السياسة الجديدة للبيانات (في الوثيقة (INFCOM-1(III))/Doc. 5.1.5). ونشجع الممثلين الدائمين والمندوبين الآخرين، وكذلك المراقبين، المهتمين بسياسة المنظمة (WMO) الخاصة بالبيانات على التسجيل في الدورة والمشاركة فيها.

وسيتسنى الاطلاع على جدول الأعمال المؤقت والمذكرة التفسيرية، فضلاً عن وثائق الدورة، بما فيها الوثيقة 5.1.5، على الموقع الشبكي للدورة. كما يمكن الاطلاع على ملخص موجز لسياسة المنظمة (WMO) الخاصة بالبيانات في المرفق، وهو متاح أيضاً للتنزيل على الموقع الشبكي للدورة.

ومن أجل التمثيل في اللجنة (INFCOM)، يرجى توجيه رسالة إلى الأمين العام من وزارة الخارجية في بلدكم، أو الوزارة المسؤولة عن مرفق الأرصاد الجوية، أو من البعثة الدائمة للعضو في جنيف، إذا لم تكونوا قد فعلتم ذلك بالفعل. ويمكن الاطلاع هنا على قائمة بأسماء الممثلين الحاليين. كما يمكن إرسال الرسائل عبر البريد الإلكتروني على العنوان: wmo@wmo.int.

ونظراً إلى الوضع الرسمي للممثلين الدائمين لدى المنظمة (WMO)، يرجى منهم التفضل بالقيام بدور المنسق فيما يتعلق بالتسجيل الإنترنتي لوفدهم في الدورة ((INFCOM-1(III)). وتظل الوصلة الخاصة بنظام التسجيل في الاجتماعات عبر الإنترنت (ERS)، وكذا اسم المستخدم وكلمة السر التي أُرسلت إلى الممثلين الدائمين لدى

إلى: الممثلين الدائمين لأعضاء المنظمة (WMO)

صورة إلى: المستشارين الهيدرولوجيين

المنظمة (WMO) عن طريق البريد الإلكتروني، صالحة لجميع الاجتماعات المقبلة للمنظمة (WMO). وللحصول على مزيد من المعلومات بشأن نظام التسجيل المسبق عبر الإنترنت، يرجى عدم التردد في الاتصال بأمانة المنظمة (WMO) عبر البريد الإلكتروني على العنوان التالي: registration@wmo.int.

ويرجى ملاحظة أن تقديم المعلومات من خلال النظام (ERS) لا يعفي الأعضاء من ضرورة تقديم وثائق اعتماد لوفودهم المشاركة في الدورة، مع الإشارة بوضوح إلى المندوب الرئيسي وبديله، على أن تكون الوثائق موقعة من، أو نيابة عن، سلطة حكومية مختصة في العضو. ويمكن إرسال الرسائل عبر البريد الإلكتروني على العنوان: registration@wmo.int.

ونظراً إلى ضيق الوقت خلال الدورة الافتراضية لمناقشة الوثائق، وتيسيراً للمناقشات، يُدعى الممثلون الدائمون والمندوبون في الدورة إلى تقديم تعليقاتهم والتغييرات المقترحة على الوثائق قبل انعقاد الدورة على العنوان: plenary@wmo.int.

وتفضلوا بقبول فائق الاحترام،

الدكتور وينتيان تشانغ
عن الأمين العام

WEATHER CLIMATE WATER

WORLD METEOROLOGICAL ORGANIZATION

WMO Data Policy

Introducing the draft WMO Unified Data Policy
INFCOM-1 (III)/Doc. 5.1.5

Why is WMO updating and reviewing its data policy?

The last decades have seen explosive growth in the demand for weather, climate and water monitoring and prediction data to support essential services needed by all sectors of society, as they face issues such as climate change, increasing frequency and impact of extreme weather, and implications for food security.

The free and unrestricted exchange of observational data from all parts of the world and of other data products among all WMO Members must be updated and strengthened to accommodate this growing demand. As the responsibilities of the National Meteorological and Hydrological Services (NMHSs) continue to expand, a growing list of application areas beyond the traditional weather, climate and water activities need to be supported by WMO observing, data exchange and modelling systems. WMO data policy must therefore evolve to accommodate areas such as atmospheric composition, oceans, cryosphere and space weather.

WMO data exchange – 70 years of global collaboration on monitoring, understanding and predicting the Earth system

The World Weather Watch was established in 1961 to coordinate the acquisition and international exchange of meteorological observations and derived data products among WMO Members via its component systems: the Global Observing System, the Global Telecommunication System and the Global Data-processing and Forecasting System.

All NMHSs around the world contribute input data to these systems every day and they rely on what they receive in return – data from other NMHSs and model products and other processed data - for their service delivery. The success of the World Weather Watch has led to the establishment of related systems in other areas, for example, the Global Atmosphere Watch and the Global Cryosphere Watch.

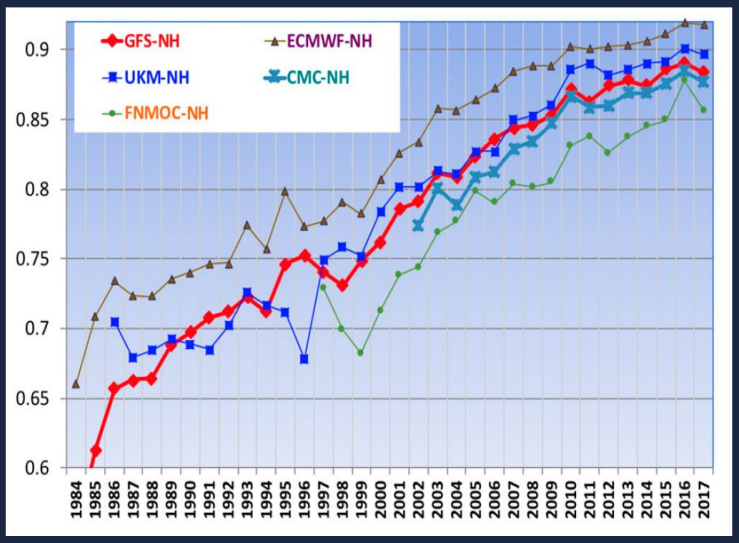
"We live in a time of brilliant technologies and the rhythm of innovation is increasing at an unprecedented pace. We have access to a wealth of earth observations, and high-performance computing platforms allow us to tackle previously unsolvable problems. Not only is this forcing us to rethink our business models and our partnership strategies at the national level, it will also have a fundamental impact on the global meteorological enterprise."

Michel Jean, President of WMO Infrastructure Commission, at the WMO Data Conference 2020.

What is the role of WMO data policy?

Weather and climate are local in impact but global in nature. International data exchange is therefore needed to help us understand and predict them. WMO is updating its data policy to accommodate the growing need for global access to observations and model data and to reflect the interdisciplinary nature of Earth system monitoring and prediction.

Delivery of weather and climate services depends on routine international exchange of weather and climate data, 24/7, 365 days per year, often within minutes of real time. Observations are ingested into prediction models, and model output is disseminated to all 193 WMO Members and used as a basis for their weather and climate services. A primary aim with the establishment of WMO in 1951 was to create a coordination mechanism for the acquisition and international exchange of such data. WMO data policy, as articulated in Resolution 40 (Cg-XII), Resolution 25 (Cg-XIII) and Resolution 60 (Cg-17), establishes the general framework for the international exchange of weather, climate and water data.



Progress in key quality measure of Numerical Weather Prediction output from five centres over the period 1984–2017; a value of 1.0 indicates a perfect five-day forecast.
Source: Taken from Benjamin et al., 2019: 100 years of progress in forecasting and NWP applications. *Meteorological Monographs* 59.

Value of global data exchange in weather and climate prediction

- Modern weather and climate services depend on universal access to output from numerical weather prediction (NWP) systems;
- Global exchange of observational data as input for NWP is indispensable;
- NWP output is also exchanged among centres to monitor and foster continued progress;
- There have been decades of systematic improvement in numerical weather predictions, thanks to data exchange coordinated by WMO (plot to the left).

Climate change – a generational challenge that requires an integrated Earth system approach to monitoring, prediction, mitigation and adaptation efforts

Monitoring and understanding climate change require observations and simulations of the chemical composition of the atmosphere in addition to the traditional meteorological data. Seasonal and inter-annual prediction requires marine observations and coupled atmosphere–ocean modelling. Furthermore, longer-term predictions and projections increasingly depend on observations from the deep ocean. The efforts required to adapt to and mitigate climate change require detailed local information, supported by global reanalysis data. Integration of hydrological observations and model data is essential for research and development, for advisories and warnings, for food security and energy supply. Monitoring freshwater supplies and understanding and adapting to changes in sea-ice cover, permafrost and seasonal snow cover require strong cryosphere-monitoring efforts.

Proposed WMO unified policy for international exchange of Earth system data

Data exchange for the 21st century

Integrated Earth system data policy – encompassing all WMO-relevant Earth system data: weather, climate, hydrology, ocean, atmospheric composition, cryosphere, space weather. It builds on existing WMO data policies used successfully in the past: Resolutions 40 (Cg-XII) (weather), 25 (Cg-XIII) (hydrology) and 60 (Cg-17) (climate).

Clear commitment to free and unrestricted data exchange – clarifying the explicit and literal interpretation of the term "free and unrestricted" exchange, and expressing clear organizational commitment to it as the core principle of the policy.

Expanded scope and purpose – introducing new terminology on data, replacing "Essential" and "additional" data (Resolution 40), with "mandatory" data (standard practice, shall be exchanged) and "Recommended" data (best practice, should be exchanged). The scope and purposes of mandatory and recommended data, respectively, are described in general terms for each domain or discipline.

Call for subsequent implementation of policy via regulatory material – specific details of what data are to be considered mandatory and recommended will be included, and regularly updated, in the WMO Technical Regulations.

Includes guidelines for national implementation and public–private engagement.

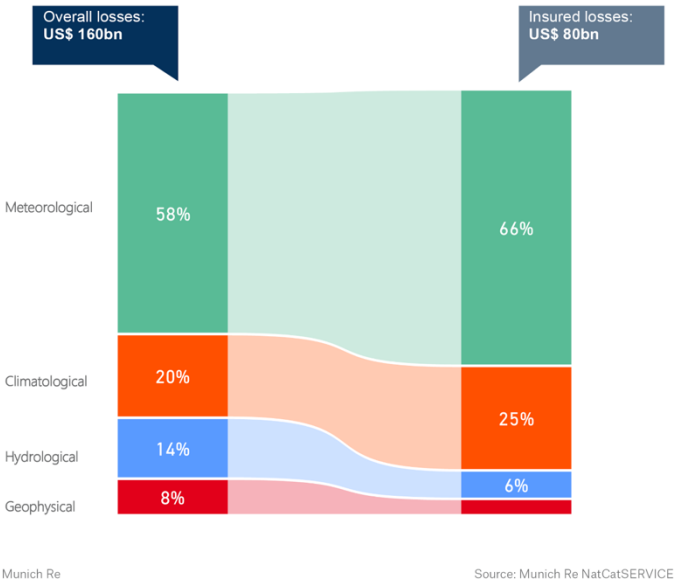
WMO data policy milestones

- June 2019 – Eighteenth World Meteorological Congress triggered comprehensive review on WMO data policy
- February 2020 – First session of Study Group of Data Issues and Policies (SG-DIP) recommended that a new unified WMO data policy resolution should be drafted
- September 2020 – Seventy-second session of the Executive Council gave green light for SG-DIP to proceed with drafting of new data policy resolution
- November 2020 – WMO Data Conference (preceded by preparatory stakeholder consultations) discussed proposed new policy. More than 1200 participants and strong endorsement
- April 2021 – WMO Infrastructure Commission – first intergovernmental test of new data policy
- June 2021 – Seventy-third session of the Executive Council will provide final recommendation to Congress
- October 2021 – WMO Extraordinary Congress – submission of new WMO data policy

Find the draft Resolution 42 at https://meetings.wmo.int/INFCOM-1-III/English/Forms/

What are the benefits of the new WMO data policy?

More than 90% of all economic losses due to natural disasters in 2018 were caused by weather-, climate- and water-related phenomena.



The growing number of weather-related disasters and the associated economic losses show the challenge facing the WMO community: How best to serve all Members and their citizens with timely and reliable data products and services?

The proposed data policy update will help the WMO community strengthen and better sustain monitoring and prediction of all Earth-system components, with massive socioeconomic benefits as a result. It will lead to additional exchange of all types of environmental data, which in turn will enable all WMO Members to deliver better, more accurate and timely weather- and climate-related services to their constituencies.