



REPORT BY THE CHAIR OF THE TECHNICAL COORDINATION COMMITTEE

Background

1. The Technical Coordination Committee (TCC) was established in 2018 by [Resolution 35 \(EC-70\)](#) — World Meteorological Organization (WMO) Executive Council (EC) structures, to act as a two-way interface between the EC and the technical bodies of the Organization: technical commissions, the Research Board (RB), and other relevant bodies. The coordination and oversight role of the TCC is further clarified by the terms of reference of the different bodies represented in it:

- (a) Technical commissions ([Resolution 7 \(Cg-18\)](#));
- (b) Research Board ([Resolution 8 \(Cg-18\)](#));
- (c) EC panels ([Resolution 4 \(EC-71\)](#), [Resolution 5 \(EC-71\)](#) and [Resolution 7 \(EC-71\)](#)).

2. The membership of the TCC is established by [Resolution 35 \(EC-70\)](#) — WMO Executive Council structures, and [Decision 1 \(EC-71\)](#) — Membership of Subsidiary Bodies of the Executive Council.¹

3. The role of TCC is further clarified by Rule 2.8 of *the Rules of Procedure for the Executive Council* (WMO-No.1256), revised by the Council through [Resolution 13 \(EC-72\)](#):

Recommendations from constituent bodies and other bodies established by Congress or the Executive Council [...] on technical matters should normally be submitted after an analytical review by the TCC, accompanied by a draft decision. Adoption of such decisions would normally not require further discussion by the Council unless discussion is requested by a member of the Council.

¹ Second Vice-President of WMO (Chair) (A. Martis); the presidents and vice-presidents of the technical commissions (M. Jean, B. Forgan, N. Pinardi, S. Pecora; I. Lisk, R. Stone, M. Brunet, Y. Simonov), the presidents of regional associations (D. Konate, A. Al Mandoos, Y. González, E. Thompson, 'O. Fa'anunu, M. Staudinger) the Chair and vice-Chair of the Research Board (C. Saulo, D. Terblanche), the chairs of any other bodies established by Congress or Executive Council (Policy Advisory Committee [PAC], G. Adrian; Climate Coordination Panel [CCP], G. Adrian; Hydrological Coordination Panel [HCP], J. Danhelka; Panel of Experts on Polar and High Mountain Observations, Research and Services [PHORS], S. Barrell; Capacity Development Panel [CDP], A. Kajazi; Joint WMO-IOC Collaborative Board [JCB], L. Uccellini; Scientific Advisory Panel [SAP], G. Brunet).

Activity

Tasks

4. Tasks were assigned to the TCC by the Eighteenth World Meteorological Congress (Cg-18),² Seventy-first Session of the Executive Council (EC-71)³ and Seventy-second Session of the Executive Council (EC-72).⁴

Meetings

5. Since EC-72, the TCC held two sessions by videoconference, TCC-1/2021 on 3–5 March and TCC-2/2021 on 26–28 April 2021. The agenda of the sessions consisted of the following categories:

- (a) Matters related to the technical regulatory framework, including compliance with existing technical regulations; definition of user needs for information and services; progress with the further development of the regulatory framework; and prior assessment of the impacts of proposed new standards and technology [29 documents];
- (b) Matters related to technical coordination, including between technical bodies and regional associations; among technical commissions, the Research Board and other bodies regarding research to operations; common aspects affecting the progress of implementation of the Strategic and Operating Plans [2 documents];
- (c) Matters related to methods and procedures, such as the development and revision of terms of reference and Rules of Procedure of technical bodies [4 documents];
- (d) Any other matters assigned to the TCC by the EC [3 documents].

Consideration of items and recommendations

6. During 2021, the TCC, based on the assignments by EC-71 and its terms of reference, including the provision of the necessary analytical information to inform EC decisions on technical matters, considered the topics and produced the recommendations indicated in [Table 1](#).

² [Resolution 47 \(Cg-18\)](#) — Ocean Observations in Support of Earth System Prediction and WMO Support to the Global Ocean Observing System Strategy 2030 (Including Tropical Pacific Observing System 2020); [Resolution 73 \(Cg-18\)](#) — Strengthening the Capacity of Members in Service Delivery.

³ [Resolution 1 \(EC-71\)](#) — Development of the Global Multi-Hazard Alert System Framework and the WMO Coordination Mechanism Concept; [Resolution 4 \(EC-71\)](#) — Climate Coordination Panel; [Resolution 5 \(EC-71\)](#) — Hydrological Coordination Panel; [Resolution 11 \(EC-71\)](#) — Rules of Procedure for the Constituent Bodies.

⁴ [Resolution 7 \(EC-72\)](#) — Upgraded recognition mechanism for long-term climate observing stations; [Resolution 12 \(EC-72\)](#) — Rules of Procedure for the non-Constituent Bodies established by Cg-18 and EC-71; [Decision 7 \(EC-72\)](#) — WMO Data Policy; [Decision 9 \(EC-72\)](#) — Operationalization of objective seasonal forecasts and tailored products on sub-regional scales.

Table 1. Summary of recommendations concerning the adoption of documents containing resolutions and recommendations

<i>Strategic objective</i>	<i>Recommended for adoption by consensus without debate</i>	<i>Recommended for adoption with debate</i>
1.1		1
1.2	1	2
1.3	1	
1.4	1	1
2.1	5	3
2.2	5	4
2.3	1	
5.1	3	1
TOTAL	17	12

Concept of operations

7. To better discharge its tasks, the TCC agreed on a revised concept of operations ([Annex](#)).

Recommendations**Technical regulatory framework**

8. The TCC recommends to EC-73 that it adopt, by consensus without debate, the following draft resolutions and decisions (more detailed information can be found in [Table 2](#)):

Long-Term Goal 1 — Better serve societal needs: delivering, authoritative, accessible, user-oriented and fit-for-purpose information and services:

Strategic Objective 1.2 — Broaden the provision of policy- and decision-supporting climate information and services

[Draft Resolution 4.1\(2\)/1 \(EC-73\)](#) — Concept Note on a Global Drought Classification System.

Strategic Objective 1.3 — Further develop services in support of sustainable water management

[Draft Resolution 4.1\(4\)/1 \(EC-73\)](#) — Concept Note on the Sustainability Strategy for the Flash Flood Guidance System with Global Coverage.

Strategic Objective 1.4 — Enhance the value and innovate the provision of decision-supporting weather information and services

[Draft Resolution 4.1\(5\)/1 \(EC-73\)](#) — Amendment to the *Technical Regulations, Volume II - Meteorological Service for International Air Navigation* (WMO-No. 49), Reflecting Amendments Already Adopted by International Civil Aviation Organization (ICAO).

Long-Term Goal 2 — Enhance Earth system observations and predictions: Strengthening the technical foundation for the future:

Strategic Objective 2.1 — Optimize the acquisition of Earth system observation data through the WMO Integrated Global Observing System (WIGOS)

- (a) [Draft Resolution 4.2\(1\)/1 \(EC-73\)](#) — Plan for the WIGOS Initial Operational Phase (2020-2023);
- (b) [Draft Decision 4.2\(4\)/1 \(EC-73\)](#) — WIGOS Readiness Indicators;
- (c) [Draft Resolution 4.2\(5\)/1 \(EC-73\)](#) — Regional WIGOS Centres audit process, noting the importance of the collaboration with Regional Associations (RAs) in the audit process;
- (d) [Draft Resolution 4.2\(6\)/1 \(EC-73\)](#) — *Guide to the WMO Integrated Global Observing System* (WMO-No. 1165);
- (e) [Draft Resolution 4.2\(7\)/1 \(EC-73\)](#) — Collaboration with the International Air Transport Association (IATA) on the Development of the Global Aircraft Meteorological Data Relay (AMDAR) Programme, noting that the WMO-IATA Collaborative AMDAR Programme (WICAP) Data Policy was approved through [Resolution 11 \(EC-72\)](#) and collaboration with IATA is already established.

Strategic Objective 2.2 — Improve and increase access to, exchange and management of current and past Earth system observation data and derived products through the WMO Information System

- (a) [Draft Resolution 4.2\(8\)/1 \(EC-73\)](#) — Publication of the *Guide to Instruments and Methods of Observation* (WMO-No. 8), 2020 Edition;
- (b) [Draft Resolution 4.2\(11\)/1 \(EC-73\)](#) — Strengthening Regional Instrument Centres, noting the importance of the collaboration with RAs;
- (c) [Draft Resolution 4.2\(14\)/1 \(EC-73\)](#) — Collection of Climatological Standard Normals, noting the importance of regional consultations for promoting and explaining the process;
- (d) [Draft Resolution 4.2\(17\)/1 \(EC-73\)](#) — Climate service requirements for the update of the *Manual on the High-quality Global Data Management Framework for Climate* (WMO-No. 1238), noting the maturity assessment of climate data sets at regional level;
- (e) [Draft Decision 4.2\(16\)/1 \(EC-73\)](#) — Establishment of Data Acquisition Centre (DAC) in the Marine Climate Data System (MCDS).

Strategic Objective 2.3 — Enable access and use of numerical analysis and Earth system prediction products at all temporal and spatial scales from the WMO seamless Global Data Processing and Forecasting System (GDPFS)

- (a) [Draft Resolution 4.2\(19\)/1 \(EC-73\)](#) — Amendment to the *Manual on the Global Data-processing and Forecasting System* (WMO-No. 485) and the designation of new GDPFS centres, reflecting new WMO governance structure, noting the need to review the role of RAs in the designation approval process.

9. The TCC recommends to EC-72 that it adopt, with debate, the following draft resolutions and decisions:

Long-Term Goal 1 — Better serve societal needs: delivering, authoritative, accessible, user-oriented and fit-for-purpose information and services:

Strategic Objective 1.1 — Strengthen national multi-hazard early warning/alert systems and extend reach to better enable effective response to the associated risks

[Draft Resolution 4.1\(1\)/1 \(EC-73\)](#) — Implementation Plan for the Methodology for Cataloguing Hazardous Events, noting the importance to cover all regions, with no event left underreported.

Strategic Objective 1.2 — Broaden the provision of policy- and decision-supporting climate information and services

[Draft Resolution 4.1\(3\)/1-2 \(EC-73\)](#) — WMO recognition mechanism for long-term observing stations.

Strategic Objective 1.4 — Enhance the value and innovate the provision of decision-supporting weather information and services

[Draft Resolution 4.1\(7\)/1-2 \(EC-73\)](#) — Integrated Health Services.

Long-Term Goal 2 — Enhance Earth system observations and predictions: Strengthening the technical foundation for the future:

Strategic Objective 2.1 — Optimize the acquisition of Earth system observation data through WIGOS

- (a) [Draft Resolution 4.2\(2\)/1 \(EC-73\)](#) — Update of Regulatory Material Related to Establishment of the Global Basic Observing Network (GBON);
- (b) [Draft Resolutions 4.2\(3\)/1-3 \(EC-73\)](#) — Amendments to the *Manual on the WMO Integrated Global Observing System* (WMO-No. 1160), including Annex 1 on Amendments to the *Technical Regulations, Volume I, General Meteorological Standards and Recommended Practices* (WMO-No. 49) and Annex II on Amendments to the *Manual on the WMO Integrated Global Observing System* (WMO-No. 1160);
- (c) [Draft Resolutions 4.2\(10\)/1-2 \(EC-73\)](#) — Update of the Commission for Observation, Infrastructure and Information Systems (INFCOM) related part of Technical Regulations Volume III - Hydrology.

Strategic Objective 2.2 — Improve and increase access to, exchange and management of current and past Earth system observation data and derived products through the WMO Information System

- (a) [Draft Recommendation 3.4/1 \(EC-73\)](#) — Draft Recommendation on WMO Unified Policy for the International Exchange of Earth System Data;
- (b) [Draft Resolution 4.2\(12\)/1-2 \(EC-73\)](#) — Transition and the pre-operational Plan of the Global Cryosphere Watch (GCW);
- (c) [Draft Resolution 4.2\(18\)/1 \(EC-73\)](#) — WMO Information System 2.0 (WIS 2.0) Implementation Plan, Functional Architecture and Demonstration Projects;

- (d) [Draft Resolution 4.2\(20\)/1-2 \(EC-73\)](#) — Modernization of climate data – Open Climate Data Management System Specifications (CDMS) project.

Methods and procedures

10. The TCC recommends to EC-73 that it adopt, by consensus without debate, the following draft resolutions:

Long-Term Goal 5 — Strategic realignment of WMO structure and programmes for effective policy- and decision-making and implementation:

Strategic Objective 5.1 — Optimize WMO constituent body structure for more effective decision-making

- (a) [Draft Resolution 5.2\(1\)/1 \(EC-73\)](#) - Amendments to the Rules of Procedure for Technical Commissions;
- (b) [Draft Resolution 5.2\(2\)/1 \(EC-73\)](#) — Rules of procedure of the Joint WMO-IOC Collaborative Board (JCB);
- (c) [Draft Resolution 5.6\(2\)/1 \(EC-73\)](#) — Terms of reference of the Climate Coordination Panel.

11. The TCC recommends to EC-73 that it adopt, with debate, the following draft resolutions:

Long-Term Goal 5 — Strategic realignment of WMO structure and programmes for effective policy- and decision-making and implementation:

Strategic Objective 5.1 — Optimize WMO constituent body structure for more effective decision-making

[Draft Resolution 5.6\(3\)/1](#) — Terms of reference of the Panel of Experts on Polar and High-mountain Observations, Research and Services.

Technical coordination

Long-Term Goal 5 — Strategic realignment of WMO structure and programmes for effective policy- and decision-making and implementation:

12. The TCC considered the joint analysis of relations between the technical commissions and other bodies as requested by INFCOM and the Commission for Weather, Climate, Water and Related Environmental Services & Applications (SERCOM).⁵ The TCC took note of the development and noted the importance of further advancing the analysis as a living document based on the inputs of other bodies, providing the Organization with a clear picture of the reformed governance system and its evolution. The TCC underlined the importance of the clear identification of the leading body on any technical matter. In this regard, bodies such as the RB, RAs, the Hydrological Coordination Panel (HCP) and other EC panels do support the coordination functions of the TCC that is needed to facilitate the work of the Organization in the new perspective provided by the Earth system approach and open to the participation of partner organizations. In light of the Joint Inspection Unit (JIU) review of management and administration of WMO⁶ and the future review of the effectiveness of the governance reform by Congress, in order to facilitate understanding by Members, the information paper will be further developed into a concept note. This concept note will address the division of the

⁵ Respectively, [Decision 11 \(INFCOM-1\)](#) – Coordination of the Infrastructure Commission with other bodies and [Decision 6.3/1 \(SERCOM-1\(II\)\)](#) on the same topic.

⁶ The report will be available on the JIU website

connection diagrams into two, distinguishing between structural relations and the flow of information. Hence, oversee the level of coordination between the constituent bodies to ensure that the technical work of the Organization is properly guided by the priorities of the Members as adopted at Congress.

Other assignments by the Executive Council

13. Among the tasks assigned to it by the Council (see notes 2, 3, and 4), the TCC addressed the following.

Data policy

14. The TCC noted that ahead of Cg-Ext. (2021) RAs can facilitate national consultations and coordination for the adaptation of national frameworks for the exchange of data, the importance of capacity building initiatives and training activities, the role the research community, as catalysed by the Research Board, concerning the exploitation of data, and the need for guidance on the involvement of the private sector, under the leadership of the National Meteorological and Hydrological Services (NMHSs).

Coordination mechanisms for the Global Multi-hazard Alert System (GMAS)

15. The TCC was informed about progress with the development of GMAS by SERCOM through the Standing Committee on Disaster Risk Reduction and Public Services (SC-DRR). Such development primarily refers to the setting up of adequate structures and the initiation of the required consultation processes. In this regard, President/SERCOM (P/SERCOM) recommended the suppression of [Resolution 1 \(EC-71\)](#) tasking the TCC to coordinate and establish an appropriate ad hoc and flexible mechanism to work with Members, technical commissions and RAs to advance GMAS, given the progress now accounted for. The TCC took note of progress with the development of GMAS and recommended to EC that [Resolution 1 \(EC-71\)](#) be suppressed.

Coordination mechanisms for objective seasonal forecasts

16. The TCC was informed of and agreed to proposals by SERCOM Standing Committee on Climate Services (SC-CLI) related to [Decision 9 \(EC-72\)](#) and the coordination tasks assigned to TCC in relation to the development of objective seasonal forecasts. The TCC agreed to invite President /INFCOM (P/INFCOM), P/SERCOM and Chief/RB(C/RB) and relevant chairs of their subsidiary bodies to review the outcomes and outputs identified in the annex to [Decision 9 \(EC-72\)](#). The TCC further agreed to invite P/INFCOM, P/SERCOM and C/RB to jointly report back to the TCC on progress in defining the leadership and contributing roles, technical coordination mechanisms and associated actions required for the achievement of the outcomes and delivery of the outputs identified in the annex to – and in fulfilment of Requests (d) in – [Decision 9 \(EC-72\)](#).

Future directions

17. Following the sessions held in 2020 and 2021 ([Table 3](#)), There was general agreement among TCC members that, as the reform is being implemented, more time should be devoted to address other aspects foreseen in its terms of reference, in particular:

- (a) The review of the status of compliance with technical regulations;
- (b) Impact and risk assessment of new standards and technology;
- (c) Ensure regional priorities are consider in the planning of technical commissions;

- (d) Aspects regarding the transition of research to operation;
- (e) Issues of common concern affecting the implementation of the Strategic and Operating Plans.

In relation to the forthcoming sessions of Regional Associations (RA II-17, videoconference, 25-26 May 2021; RA I-18(II), RA V-18 and RA VI-18(II) later August-September, the TCC agreed that the Chair will provide an overview of the work of the TCC and recommendations to enhance the contributions from and benefits for the RAs. The TCC agreed to hold a third session after EC-73 to address the issues of compliance with the technical regulatory framework and requested the Secretariat to consult members on suitable dates

Table 2. Topics considered by TCC -1 and TCC-2 upon request of EC-73 and additional items considered

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
Technical regulatory framework	Resolution 35 (EC-70)	The Committee shall report to the Executive Council on the following issues: (1) Progress in developing further the WMO technical regulatory framework in a consistent manner by all technical bodies involved; (2) Status of compliance with technical regulations of the WMO Members, including advice on identified barriers to compliance and ways to address them to resolve deficiencies; (3) Impact and risk assessment of new standards and technology on the systems operated by Members,	Every EC session	LTG 1: Draft Resolution 4.1(1)/1 (EC-73) – Implementation Plan for the Methodology for Cataloguing Hazardous Events, noting the importance to cover all regions, with no event left underreported	TCC-1/2021	Adoption with debate , based on the implications for Members
				Long-Term Goal 1: Draft Resolution 4.1(2)/1 (EC-73) – Concept Note on a Global Drought Classification System	TCC-1/2021	Adoption by consensus without debate
				LTG 1: Draft Resolution 4.1(3)/1-2 (EC-73) – WMO recognition mechanism for long-term observing stations	TCC-1/2021	Adoption with debate , based on the implications for Members, with the recommendation to include in the text of the resolution a request to Members to support the WMO recognition mechanism for long-term observing stations

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
		including financial and human resources impact; (4) Evolving user needs for information and services and alignment of the plans of the WMO technical bodies to meet those needs;		LTG 1: Draft Resolution 4.1(4)/1 (EC-73) – Concept Note on the Sustainability Strategy for the Flash Flood Guidance System with Global Coverage	TCC-1/2021	Adoption by consensus without debate
				LTG 1: Draft Resolution 4.1(5)/1 (EC-73) – Amendment 80 to <i>Technical Regulations, Volume II, Meteorological Service for International Air Navigation</i> (WMO-No. 49), reflecting amendments already adopted by ICAO	TCC-1/2021	Adoption by consensus without debate
				LTG 1: Draft Resolution 4.1(7)/1-2 (EC-73) – Integrated Health Services	TCC-1/2021	Adoption with debate , based on the implications for Members
				LTG 2: Draft Recommendation 3.4/1 (EC-73) – Draft Recommendation on WMO Unified Policy for the International Exchange of Earth System Data	TCC-2/2021	Adoption with debate. <i>See below under other assignments.</i>
				LTG 2: Draft Resolution 4.2(1)/1 (EC-73) – Plan for the WIGOS Initial Operational Phase (2020-2023)	TCC-1/2021	Adoption by consensus without debate
				LTG 2: Draft Resolution 4.2(2)/1 (EC-73) – Update of	TCC-1/2021	Adoption with debate , based on the implications for Members

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
				Regulatory Material Related to Establishment of the Global Basic Observing Network (GBON)		
				LTG 2: Draft Resolutions 4.2(3)/1-3 (EC-73) – Amendments to the <i>Manual on the WMO Integrated Global Observing System</i> (WMO-No. 1160), including Annex 1 on Amendments to the <i>Technical Regulations, Volume I, General Meteorological Standards and Recommended Practices</i> (WMO-No. 49) and Annex II on Amendments to the <i>Manual on the WMO Integrated Global Observing System</i> (WMO-No. 1160)	TCC-1/2021	Adoption with debate
				LTG 2: Draft Resolution 4.2(4)/1 (EC-73) – WIGOS Indicators	TCC-2/2021	Adoption by consensus without debate
				LTG 2: Draft Resolution 4.2(5)/1 (EC-73) – Regional WIGOS Centres audit process	TCC-2/2021	Adoption by consensus without debate , noting the importance of the collaboration with RAs in the audit process.
				LTG 2: Draft Resolution 4.2(6)/1 (EC-73) – <i>Guide to the WMO Integrated Global Observing System</i> (WMO-No. 1165)	TCC-2/2021	Adoption by consensus without debate

Topic	Resolution	Instructions	Deadline	Document for EC consideration	Discussed at	Recommendations / comments
				LTG 2: Draft Resolution 4.2(7)/1 (EC-73) – Collaboration with IATA on the Development of the AMDAR Programme, noting that the WICAP Data Policy was approved through Resolution 11 (EC-72) and collaboration with IATA is already established	TCC-1/2021	Adoption by consensus without debate
				LTG 2: Draft Resolution 4.2(8)/1 (EC-73) – Publication of the <i>Guide to Instruments and Methods of Observation</i> (WMO-No. 8), 2020 Edition	TCC-1/2021	Adoption by consensus without debate
				LTG 2: Draft Resolution 4.2(10)/1 (EC-73) – Update of the INFCOM related part of Technical Regulations Volume III - Hydrology	TCC-1/2021 TCC-2/2021	Adoption with debate , noting that it will be considered in conjunction with the sister recommendation by SERCOM.
				LTG 2: Draft Resolution 4.2(11)/1 (EC-73) – Strengthening Regional Instrument Centres	TCC-2/2021	Adoption by consensus without debate , noting the importance of the collaboration with RAs.
				LTG 2: Draft Resolution 4.2(12)/1 (EC-73) – Transition and the pre-operational Plan of the Global Cryosphere Watch (GCW)	TCC-2/2021	Adoption with debate , noting its contribution to Strategic Objectives 1, 2, 3, & 4, its focus on polar and high-mountains, and the foreseen engagement of RAs in regional

Topic	Resolution	Instructions	Deadline	Document for EC consideration	Discussed at	Recommendations / comments
						projects.
				LTG 2: Draft Resolution 4.2(14)/1 (EC-73) – Collection of Climatological Standard Normals	TCC-2/2021	Adoption by consensus without debate , noting the importance of regional consultations for promoting and explaining the process
				LTG 2: Draft Resolution 4.2(15)/1 (EC-73) – Update of the <i>Manual on the High-quality Global Data Management Framework for Climate</i> (WMO-No. 1238)	TCC-2/2021	Adoption by consensus without debate , noting the maturity Assessment of climate data sets at regional level
				LTG 2: Draft Resolution 4.2(18)/1 (EC-73) – WIS 2.0 Implementation Plan, Functional Architecture and Demonstration Projects	TCC-1/2021	Adoption with debate , based on the implications for Members
				LTG 2: Draft Resolution 4.2(16)/1 (EC-73) – Establishment of DAC in the MCDS	TCC-1/2021	Adoption by consensus without debate
				LTG 2: Draft Resolution 4.2(17)/1 (EC-73) – Modernization of climate data – Open CDMS project	TCC-2/2021	Adoption with debate , noting links to RA I, III, IV and V through EU ClimSA ACP project.
				LTG 2: Draft Resolution 4.2(19)/1 (EC-73) – Amendments to the <i>Manual on the Global Data-processing and Forecasting System</i> (WMO-	TCC-1/2021 TCC-2/2021	Adoption by consensus without debate , noting the need to review the role of RAs in the designation approval process.

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
				No. 485) and the designation of new GDPFS centres		
Technical coordination	Resolution 35 (EC-70)	<p>(5) Collaboration and coordination between the technical bodies and RAs to ensure that regional priorities and requirements are considered into the technical bodies' planning;</p> <p>(6) Collaboration among the technical commissions, the Research Board and any other bodies established by Congress or Executive Council required to facilitate the transition of research to operations through co-design, operational testing and feedback from operational community;</p> <p>(7) Issues of common concerns of RAs, technical commissions, the Research Board and any other bodies established by Congress or Executive Council affecting the progress of implementation of the Strategic</p>	Every EC session	Preliminary discussion on coordination between technical commissions and other bodies (INF. 6.3/INFCOM-1(III))	TCC-1/2021 TCC-2/2021	The TCC took note of the development and noted the importance of further advancing the analysis as a living document based on the inputs of other bodies, providing the Organization with a clear picture of the reformed governance system and its evolution.
				Reports on the sessions of RA III-18, 25-27 November 2020; RA IV-18, 8-11 February 2021; and RA VI-18, 20 November 2020 and report on the activities of the Task Force on the regional concept	TCC-1/2021	The TCC considered the outcomes of RA III-18 (25-27 November 2020), RA IV-18 (8-11 February 2021) and RA VI-18 (20 November 2020). In particular, the TCC was appraised of the alignment of working structures of regional associations with the technical commissions and the Research Board, with the establishment in all regions of working groups on infrastructure, services and research, the formation of task teams on the regional concept and the adoption of priorities for 2021-2023.

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
		and Operating Plans; (8) Coordination with other bodies, such as Scientific Advisory Panel (SAP) and Policy Advisory Committee (PAC) and any other issues that might be referred to by the Executive Council.				
	Resolution 8 (Cg-18)	To provide oversight on the work of the Research Board through the participation of the Chair and vice-Chair of the Board in the TCC, To facilitate, through the TCC, the integration of science into all the domains covered by the technical commissions;	Undetermined			<i>To be considered at a later stage based on the inputs of the RB.</i>
	Resolution 47 (Cg-18)	The TCC to provide advice on any required interfaces between Global Ocean Observing System (GOOS) and the WMO Technical Commissions and the Research Board;	Undetermined			<i>To be considered at a later stage based on the inputs of INFCOM/SG-OOIS and JCB.</i>
Methods and procedures	Resolution 4 (EC-71)	Requests the TCC in consultation with the PAC to review these	EC-72	Draft Resolution 5.6(2)/1 — Amendments to the terms of reference of the	TCC-2/2021	Adoption by consensus without debate

Topic	Resolution	Instructions	Deadline	Document for EC consideration	Discussed at	Recommendations / comments
		Terms of Reference [CCP] and report to EC-72.		Climate Coordination Panel		
	Resolution 5 (EC-71)	Requests the EC Technical Coordination Committee (EC/TCC) to review these Terms of Reference [HCP] in alignment with the new WMO governance structure and directions from Cg-Ext in 2021;	EC-74			<i>To be considered following guidance of Cg-Ext. (2021)</i>
	Resolution 11 (EC-71)	The TCC to keep the Rules of Procedure for the technical commissions and for the RAs under review, to develop the Rules of Procedure for the Research Board and for other bodies of the Organization and to propose amendments as necessary, in line with the general effort for effectiveness, efficiency and consistency across the WMO working structure,	Undetermined	Draft Resolution 5.6(3)/1 — Terms of reference of the Panel of Experts on Polar and High-mountain Observations, Research and Services	TCC-2/2021	Adoption with debate , with minor editorial adjustments. The TCC supported that the EC-PHORS would continue to play a lead role in fostering the coordination across engaged WMO bodies on activities relevant to polar and high-mountain regions and that the revised terms of reference would be considered by PAC due to their policy aspects.
			Undetermined	LTG 2: Draft Recommendation 6.1/1 (INFCOM-1(III)) — Rules of procedure for technical commissions	TCC-2/2021	Adoption by consensus without debate , endorsing minor agreed edits effected by INFCOM in coordination with the Management Group of the SERCOM (related to advisory groups and Annex IV).
			Undetermined	Draft Resolution	TCC-	Adoption by

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
				5.2(2)/1 (EC-73) – Rules of procedure for the Joint WMO-IOC Collaborative Board	2/2021	consensus without debate
Other assignments by the Council	Resolution 73 (Cg-18)	Requests the Executive Council with the support of the TCC, the Capacity Development Panel, and relevant technical commissions to: (1) Analyse Members' competency assessments through the WMO Community Platform (Country profile Database) and prioritize interventions; (2) Develop training and other capacity development initiatives to address gaps in Members' ability to deliver services; and (3) Address the necessary implementation measures for these initiatives.	Undetermined		TCC-2/2021	<i>To be considered at a later stage.</i>
	Resolution 1 (EC-71)	GMAS: Requests the TCC to coordinate and establish an appropriate ad hoc and flexible mechanism to: (1) Work with Members,	EC-72	TCC-2021-2/Doc. 6(a)	TCC-1/2021 TCC-2/2021	The TCC took note of progress with the development of GMAS and recommended to EC that Resolution 1 (EC-71) be suppressed.

Topic	Resolution	Instructions	Deadline	Document for EC consideration	Discussed at	Recommendations / comments
		technical commissions and RAs; (2) Take the draft Terms of Reference (ToRs) provided in EC-71/INF. 2(1) as a basis for this work; (3) Inform EC-72 of progress;				
	Resolution 2 (EC-71)	Requests the PAC, in consultation with the TCC, to accord the highest priority on the follow-up of Resolution 56 (Cg-18) and to: (1) Initiate as soon as possible the review process of the WMO data policies in accordance with the directions given by Congress, with the aim of reporting to the Extraordinary Congress in 2021; (2) Report progress at EC-72 in 2020;	EC-72	Draft Recommendation 5.1.5/1 (INFCOM-1(III)) – Draft Recommendation on WMO Unified Policy for the International Exchange of Earth System Data	TCC-1/2021 TCC-2/2021	The TCC noted that ahead of Cg-Ext. (2021) RAs can facilitate national consultations and coordination for the adaptation of national frameworks, the importance of capacity building initiatives and training activities, the role the research community, as catalysed by the Research Board, concerning the exploitation of data, and the need for guidance on the involvement of the private sector, under the leadership of the NMHSs.
	Decision 9 (EC-72)	(2) Requests: (a) The TCC to identify the activities, and necessary coordination mechanisms amongst WMO bodies and programmes, to be undertaken for implementation of the	Undetermined	TCC-2021-2/Doc. 6(b)	TCC-2/2021	The TCC was informed of and agreed to proposals by SERCOM SC-CLI related to Decision 9 (EC-72) and the coordination tasks assigned to TCC in relation to the development of objective seasonal

<i>Topic</i>	<i>Resolution</i>	<i>Instructions</i>	<i>Deadline</i>	<i>Document for EC consideration</i>	<i>Discussed at</i>	<i>Recommendations / comments</i>
		proposal;				forecasts. The TCC invited P/INFCOM, P/SERCOM and C/RB to lead contributions.

Table 3. Strengths and opportunities of the TCC

Terms of reference and reporting to EC		Agenda of the TCC in 2020-21		
		Technical regulatory framework	Coordination	Methods and procedures and other assignments
1	Technical regulatory framework	39		
2	Status of compliance of technical regulations	0		
3	Risk assessment of new standards	0		
4	Alignment of the work plans		6	
5	Ensure regional priorities are considered in the TC planning		1	
6	Ensure transition of R2O		1	
7	Common concerns affecting the implementation of the SP and OP		0	
8	Other matters assigned by EC			14

ANNEX

Revised concept of operations for the Technical Coordination Committee

Modalities of work

The general modalities of work of the TCC shall be consistent with the Rules of Procedure for the panels reporting to the Executive Council adopted through [Resolution 12 \(EC-72\)](#). Specific modalities concerning the process of analytical review established by [Resolution 35 \(EC-70\)](#) for proposals from constituent and other bodies are detailed in the following sections.

Agenda setting

The revised Rules of Procedure of the Executive Council adopted through [Resolution 13 \(EC-72\)](#) establish (Rule 2.8) that:

[...] Recommendations from constituent bodies and other bodies established by Congress or the Executive Council on technical matters should normally be submitted after an analytical review by the Technical Coordination Committee (TCC), accompanied by a draft decision.

Adoption of such decisions would normally not require further discussion by the Council unless discussion is requested by a member of the Council.

Therefore, the provisional agenda of the TCC should include technical items being submitted by constituent and other bodies to the upcoming regular Session of the Executive Council.

Proposals concerning amendments to the Technical Regulations:

- (a) Standard practices and procedures;
- (b) Recommended practices and procedures;
- (c) Notes and attachments and guides.

will be considered by the TCC only if already adopted by the relevant technical commission or in fully compliance with General Regulation 59.⁷

The items on the agenda of the TCC should contribute to the ability of the Executive Council at its upcoming session to make decisions in the most efficient way based on the collective advice of constituent and other bodies. This will entail prior discussion, analysis and recommendations by the TCC on the given items.

Based on the terms of reference of the TCC, these items concern:

⁷ General Regulation 59: The President of a constituent body may approve a proposal on behalf of that body, without a vote by correspondence, under the following conditions: (a) When presenting the proposal to the constituent body, the President shall have indicated the intention to do so provided that no objection is expressed; (b) A period of 90 days from the date of the issue of the circular letter presenting the proposal shall have been allowed for replies; (c) No objection shall have been received within that 90-day period from any of those entitled to vote.

- (a) Matters related to the technical regulatory framework, including compliance with existing technical regulations; definition of user needs for information and services; progress with the further development of the regulatory framework; and prior assessment of the impacts of proposed new standards and technology;
- (b) Matters related to technical coordination, including between technical bodies and RAs; among technical commissions, the Research Board and other bodies regarding research to operations; common aspects affecting the progress of implementation of the Strategic and Operating Plans;
- (c) Matters related to methods and procedures, such as the development and revision of terms of reference and rules of procedure of technical bodies;
- (d) Any other matters assigned to the TCC by the Executive Council.

The examination of the agenda items will be carried out following the protocol described in the next section.

The drafting, production and dissemination of the report should be facilitated by the Secretariat and it should be published as an information document at least 20 working days before the Session of the EC.

Protocol

The analytical review requested by art. 2.8 of the Rules of Procedure of EC for measures proposed for adoption by EC through recommendations by technical commissions, the Research Board and other relevant bodies may be done according to the following criteria.

Analysis

In performing its analysis of recommendations, the TCC will consider the following aspects:

- (a) Whether the proposed measure has been recommended at a session of the constituent body or by the President of the body on behalf of it;
- (b) The degree to which the proposed measure contributes to the further development of the technical regulatory framework;
- (c) The degree to which the proposed measure contributes to the implementation of the WMO Operating Plan;
- (d) The degree to which the proposed measure contributes to addressing Members' needs and reducing capacity gaps in different regions;
- (e) The degree of impact of the proposed measure on the systems operated by the members;
- (f) Overall clarity of the text.

It is expected that the members of the TCC will bring to the meetings the views of the constituencies they represent on the feasibility of proposed measures.

Presidents of RAs, regional specialized centres and presidents of technical commissions may assist through consultations on the technical aspects of their competence, in particular concerning readiness of Members to implement the proposed measure.

The Secretariat will support the TCC by preparing a first analysis, with annotations as needed, according to the above protocol for the consideration of the members.

The analytical framework would help identify those measures that, because they are difficult or complex, would require deeper examination and endorsement by the Committee before being submitted to EC.

In collaboration with the Capacity Development Panel, the Committee may advise on capacity development actions to support the implementation of the proposed measures.

Since TCC and PAC are bodies of EC – delegated by it to facilitate its decision-making – requests by EC members to debate documents recommended by TCC or PAC for adoption without debate should be based on the merit of the proposal rather than on the fact that the membership of PAC and TCC is not open to all EC members.

Feedback

Given the role of the TCC as a two-way interface between the EC and the technical bodies of the Organizations, it is expected that it would provide feedback to the technical and regional bodies on their proposals.

Recommendations to EC

Recommendations to EC concerning the proposed measures may be done according to the following categories:

- (a) Recommended for adoption;
- (b) Recommended for adoption with amendments;
- (c) Not recommended for adoption; to be re-discussed at the next session of the TCC for resubmission to EC.

It is expected that, based on the analysis, the TCC may recommend to EC that certain proposals can be adopted without discussion.

The recommendation of documents for adoption without debate may be done according to the following criteria, in particular by distinguishing:

- (a) Between proposals by constituent bodies and proposals by other bodies and;
- (b) Between proposals with implications for Members and proposals without implications for Members.

Table 1. Framework for identifying documents to be recommended for adoption by consensus without debate

		Implications for Members			No implications for Members
		<i>Technical Regulations (Vol. I-III): approved by Congress or, by delegation, by EC (C 14 (c)) or, in case of urgency, by President (GR 8 (5))</i>	<i>Manuals (Vol. I-IX) and Guides: approved by EC or, in case of urgency, by delegation, by President (GR 8 (5))</i>	<i>Other decisions</i>	<i>Other decisions</i>
Submitter	<p><i>Constituent bodies (TCs, RAs)</i></p> <p><i>Intergovernmental, composed of Members</i></p>	<p>Resolutions concerning changes to Technical Regulations would normally not be recommended for adoption by consensus without debate⁸ except for Vol. II, in accordance with the Working Arrangements with ICAO, when a decision has already been made by ICAO.⁹</p>	<p>Resolutions concerning changes to Manuals may be recommended for adoption by consensus without debate if they regard recommended practices and procedures, not standard practices.</p> <p>Notes and attachments to Technical Regulations may also be recommended for adoption by consensus without debate.</p> <p>Guides may also be recommended for adoption by consensus without debate.</p>	<p>Resolutions not related to technical requirements that entail commitments for Members may be recommended for adoption by consensus without debate provided they are accompanied by sufficient background information.</p>	<p>Decisions of an administrative or procedural nature (endorsement of concept notes or drafts for further development, (re)scheduling of events etc.) may be recommended for adoption by consensus without debate provided they are accompanied by sufficient background information.</p>
	<p><i>Other bodies (RB, SAP, JCB, CCP, HCP, PHORS, CDP)</i></p> <p><i>Non-intergovernmental, composed of individuals</i></p>	X	X	<p>Resolutions not related to technical requirements that entail commitments for Members may be recommended for adoption by consensus without debate provided they are accompanied by sufficient background information.</p>	<p>Decisions of an administrative or procedural nature (changes to rules of procedure, endorsement of concept notes or drafts for further development, (re)scheduling of events etc.) may be recommended for adoption by consensus without debate provided they are accompanied by sufficient background information.</p>

⁸ Technical Regulations, Basic Documents No. 2, Volume I – General Meteorological Standards and Recommended Practices, 13 (a): Technical commissions should not recommend that a Regulation be a standard practice unless it is supported by a strong majority.

⁹ Cit., 17: The material in Volume II is prepared by the World Meteorological Organization and the International Civil Aviation Organization (ICAO) working in close cooperation, in accordance with the Working Arrangements agreed by these Organizations. In order to ensure consistency between Volume II and Annex 3 to the Convention on International Civil Aviation – Meteorological Service for International Air Navigation, the issuance of amendments to Volume II is synchronized with the respective amendments to Annex 3 by ICAO

In synthesis, documents involving the following issues should normally be debated:

- (a) Changes to Technical Regulations (cf. General Regulation 49 (c) (i));
- (b) Initiatives affecting the work programme (in terms of resources or multidisciplinary efforts) (cf. General Regulation 49 (c) (ii));
- (c) Collaboration with outside bodies (cf. General Regulation 49 (c) (iii));
- (d) Initiatives with high impact/risk for Members (cf. General Regulation 49 (c) (iv)).

Draft recommendations to EC could be screened on a yes/no basis against the above four issues to determine their suitability for being recommended for adoption without debate.

Reporting

Reporting on the review of individual documents

The report of the Chair of the TCC to EC should include a list of documents examined with the comments and recommendations provided by the TCC (see [INF. 2.5\(2\) \(EC-72\)](#) for an example).

Draft decision accompanying the review

The report of the Chair of the TCC to EC should include a draft decision recommended to EC concerning the documents recommended for adoption by consensus without debate (example from [Decision 8 \(EC-72\)](#)).

Presentation of draft resolutions

Draft resolutions for consideration by EC will be preceded by a summary stating whether the proposed document has been reviewed by the TCC and the corresponding recommendation.
