**Inventory of Regulatory and Guidance Material related to Early Warning Services– Responsibility for review and updates (as of 26 March 2025)**

In *Italic*: already mentioned in other sections

| ***WMO-No.*** | ***Sub part*** | ***Title*** | ***Responsible entity*** | ***Other Expert Teams or bodies to consult*** | ***Revision planned?*** | ***Comment*** |
| --- | --- | --- | --- | --- | --- | --- |
| **Global (and regional) observation of variables (Strategic Objective 2.1):** |
| 49 | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part I | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart I – WMO Integrated Global Observing System (WIGOS) | INFCOM |  | Yes, for Cg-20 | Tier 1 |
| 49 | [Volume III](https://library.wmo.int/index.php?lvl=notice_display&id=10700#.X2Hf-Wgzabg) | Basic Documents, 2. Technical Regulations, Volume III: Hydrology | SERCOMINFCOM | HCP (coordination role) | Yes, for Cg-20 | Tier 1Pending approval of Draft Resolution 2 (SERCOM-Ext(2025)) |
| [386](https://library.wmo.int/index.php?lvl=notice_display&id=10728#.X2HggGgzabg) |  | Manual on the Global Telecommunication System | INFCOM |  |  | Tier 2 |
| [407](https://library.wmo.int/index.php?lvl=notice_display&id=5357#.X2HgcGgzabg) |  | International Cloud Atlas: Manual on the Observation of Clouds and Other Meteors | INFCOM |  |  | Tier 2 |
| [1160](https://library.wmo.int/index.php?lvl=notice_display&id=19223#.X2HgKmgzabg) |  | Manual on the WMO Integrated Global Observing System (WIGOS) | INFCOM |  | Yes, for Cg-20 | Tier 2 |
| [8](https://library.wmo.int/index.php?lvl=notice_display&id=12407#.X2HhJ2gzabg) |  | Guide to Instruments and Methods of Observation | INFCOM |  | Yes, for INFCOM-4 | Tier 3 |
| [100](https://library.wmo.int/index.php?lvl=notice_display&id=5668#.X2HhW2gzabg) |  | Guide to Climatological Practices | SERCOM |  |  | Tier 3 |
| 168 | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=542#.X2Hib2gzabg) | Guide to Hydrological Practices, Volume I – From Measurement to Hydrological Information | INFCOM | HCP (coordination role)SERCOM |  | Tier 3 |
| 385 |  | International Glossary of Hydrology | INFCOM, SERCOM | HCP |  | Tier 3 |
| [488](https://library.wmo.int/index.php?lvl=notice_display&id=12516#.X2HiTWgzabg) |  | Guide to the Global Observing System (GTS) | INFCOM | INFCOM |  | Tier 3 |
| 1044 |  | Guide to Stream Gauging, Volume I and Volume II | INFCOM, SERCOM |  |  | Tier 3 |
| 1131 |  | Climate Data Management System Specifications | INFCOM |  | Yes, for INFCOM-4 | Tier 3 |
| [1155](https://library.wmo.int/index.php?lvl=more_results&autolevel1=1#.Y5HbNnbMI2w) |  | World Hydrological Cycle Observing System Guidelines | INFCOM |  |  | Tier 3 |
| [1165](https://library.wmo.int/index.php?lvl=notice_display&id=20026#.X2HhFGgzabg) |  | Guide to the WMO Integrated Global Observing System (WIGOS) | INFCOM | GAW | Yes, for INFCOM-4 | Tier 3 |
| 1177 |  | Contributions to WMO/GAW Aerosol Measurement Procedures, Guidelines and Recommendations | GAW |  |  | Tier 3 |
| 1187 |  | Guidelines on Best Practices for Achieving User Readiness for New Satellite Systems | INFCOM | CGMS |  | Tier 3 |
| [1185](https://library.wmo.int/index.php?lvl=notice_display&id=20119#.X2HiAmgzabg) |  | Guide to Direct Broadcast Network for Near-real-time Relay of Low Earth Orbit Satellite Data | INFCOM |  |  | Tier 3 |
| 1197 |  | Handbook on Use of Radio Spectrum for Meteorology: Weather, Water and Climate Monitoring and Prediction | INFCOM |  |  | Tier 3 |
| [1200](https://library.wmo.int/index.php?lvl=notice_display&id=20116#.X2Hhh2gzabg) |  | Guide to Aircraft-based Observations | INFCOM |  | Yes, for INFCOM-4 | Tier 3 |
| 1223 |  | Satellite Data Telecommunication Handbook | INFCOM |  |  | Tier 3 |
| 1224 |  | Technical Guidelines for Regional WIGOS Centres on the WIGOS Data Quality Monitoring System | INFCOM |  | Yes, for INFCOM-4 | Tier 3 |
| 1243 |  | Vision for the WMO Integrated Global Observing System in 2040 | INFCOM |  | Yes, for Cg-20 | Tier 3 |
| [SP 12](https://library.wmo.int/records/item/55487-guidelines-on-satellite-skills-and-knowledge-for-operational-meteorologists#.Y5HeI3bMI2w) |  | Guidelines on Satellite Skills and Knowledge for Operational Meteorologists | INFCOM |  |  | Tier 3 |
| 1257 |  | Guide to Operational Weather Radar Best Practices | INFCOM |  |  | Tier 3 |
| 1334 |  | High-Level Guidance on the Evolution of Global Observing Systems during the period 2023–2027 in response to the Vision | INFCOM |  |  | Tier 3 |
| **International exchange of data (both observation and products) (Strategic Objective 2.2):** |
| 49 | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part II | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart II – WMO Information System (WIS) | INFCOM |  |  | Tier 1 |
| *49* | [*Volume III*](https://library.wmo.int/index.php?lvl=notice_display&id=10700#.X2Hf-Wgzabg) | *Basic Documents, 2. Technical Regulations, Volume III: Hydrology* | *SERCOM**INFCOM* | *HCP (coordination role)* | *Yes, for Cg-20* | *Tier 1**Pending approval of Draft Resolution 2 (SERCOM-Ext(2025))* |
| 306 | [Volume I.1](https://library.wmo.int/index.php?lvl=notice_display&id=13617#.X2HgoWgzabg) | Manual on Codes - International Codes, Volume I.1 | INFCOM |  | Updated regularly through fast-track procedure | Tier 2 |
| [1060](https://library.wmo.int/index.php?lvl=notice_display&id=9254#.X2HgYWgzabg) |  | Manual on the WMO Information System (WIS) | INFCOM |  |  | Tier 2 |
| [1238](https://library.wmo.int/index.php?lvl=notice_display&id=21686#.X2HgUGgzabg) |  | Manual on the High-quality Global Data Management Framework for Climate | SERCOMINFCOM |  |  | Tier 2 |
| [*100*](https://library.wmo.int/index.php?lvl=notice_display&id=5668#.X2HhW2gzabg) |  | *Guide to Climatological Practices* | *SERCOM**INFCOM* |  |  | *Tier 3* |
| *168* | [*Volume I*](https://library.wmo.int/index.php?lvl=notice_display&id=542#.X2Hib2gzabg) | *Guide to Hydrological Practices, Volume I – From Measurement to Hydrological Information* | *INFCOM* | *HCP (coordination role)**SERCOM* |  | *Tier 3* |
| 788 |  | Guide on World Weather Watch Data Management | INFCOM | SERCOM |  | Tier 3 |
| [1061](https://library.wmo.int/index.php?lvl=notice_display&id=6856#.X2HgzGgzabg) |  | Guide to the WMO Information System (WIS) | INFCOM |  |  | Tier 3 |
| [1115](https://library.wmo.int/index.php?lvl=notice_display&id=15901#.X2HiD2gzabg) |  | Guide to Information Technology Security | INFCOM |  |  | Tier 3 |
| 1116 |  | Guide to Virtual Private Networks | INFCOM |  |  | Tier 3 |
| 1131 |  | Climate Data Management System Specifications | INFCOM | SERCOM | Yes, for INFCOM-4 | Tier 3 |
| [1159](https://library.wmo.int/index.php?lvl=notice_display&id=19056#.X2HiHmgzabg) |  | Guide to Participation in Radio-Frequency Coordination | INFCOM | SERCOM |  | Tier 3 |
| [1192](https://library.wmo.int/index.php?lvl=notice_display&id=19925#.Y5Hd4nbMI2w) |  | WIGOS Metadata Standard | INFCOM | Updated regularly through fast-track procedure |  | Tier 3 |
| 1223 |  | Satellite Data Telecommunication Handbook | INFCOM |  |  | Tier 3 |
| **Global and limited-area numerical weather prediction (NWP) (Strategic Objective 2.3):** |
| 49 | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part III | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart III – Data Processing and Forecasting | INFCOM |  |  | Tier 1 |
| [485](https://library.wmo.int/index.php?lvl=notice_display&id=12793#.X2HgOmgzabg) |  | Manual on the WMO Integrated Processing and Prediction System (WIPPS) | INFCOM | SERCOM RB | Yes, for INFCOM-4 | Tier 2 |
| [305](https://library.wmo.int/index.php?lvl=notice_display&id=6832#.X33WzGgzYuU) |  | Guide to the WMO Integrated Processing and Prediction System (WIPPS) | INFCOM |  | Yes, for INFCOM-4 | Tier 3 |
| 1311 |  | Guidelines on High-resolution Numerical Weather Prediction | INFCOM |  |  | Tier 3 |
| 1254 |  | Guidelines on Ensemble Prediction System Postprocessing | INFCOM |  |  | Tier 3 |
| 1220 |  | Guidance on Verification of Operational Seasonal Climate Forecasts | INFCOM | SERCOM |  | Tier 3 |
| 1204 |  | WMO Guidelines on Generating a Defined Set of National Climate Monitoring Products | INFCOM | SERCOM |  | Tier 3 |
| [1194](https://library.wmo.int/index.php?lvl=notice_display&id=16963#.Y5HbG3bMI2w) |  | Global Guide to Tropical Cyclone Forecasting | SERCOM |  |  | Tier 3 |
| [TD 1269](https://library.wmo.int/index.php?lvl=notice_display&id=10685#.Y5HddXbMI2w) |  | Climate Watch System Early Warning against Climate Anomalies and Extremes | SERCOM |  |  | Tier 3 |
| **Nowcasting (Strategic Objective 2.1 and 2.3):** |
| [1198](https://library.wmo.int/index.php?lvl=notice_display&id=20008#.Y5HZPHbMI2w) |  | Guidelines for Nowcasting Techniques | WWRP | SERCOM |  | Tier 3 |
| **Local data processing, forecast, guidance products (human intervention) (Strategic Objective 1.1, 1.2, 1.3 and 1.4** |
| 49 | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part IV | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart IV – Meteorological, Hydrological and Climatological Services | SERCOM | INFCOM | Yes, for Cg-20 | Tier 1Pending approval of Draft Resolution 2 (SERCOM-Ext(2025)) |
| *49* | [*Volume III*](https://library.wmo.int/index.php?lvl=notice_display&id=10700#.X2Hf-Wgzabg) | *Basic Documents, 2. Technical Regulations, Volume III: Hydrology* | *SERCOM**INFCOM* | *HCP (coordination role)* | *Yes, for Cg-20* | *Tier 1**Pending approval of Draft Resolution 2 (SERCOM-Ext(2025))* |
| [558](https://library.wmo.int/index.php?lvl=notice_display&id=9784#.X2Hgjmgzabg) |  | Manual on Marine Meteorological Services - Volume I - Global Aspects | SERCOM |  |  | Tier 2 |
| [*100*](https://library.wmo.int/index.php?lvl=notice_display&id=5668#.X2HhW2gzabg) |  | *Guide to Climatological Practices* | *SERCOM* |  |  | *Tier 3* |
| [134](https://library.wmo.int/index.php?lvl=notice_display&id=12113#.X2HiMGgzabg) |  | Guide to Agricultural Meteorology Practices (GAMP) | SERCOM | INFCOM |  | Tier 3 |
| 168 | [Volume II](https://library.wmo.int/index.php?lvl=notice_display&id=543#.X2Hikmgzabg) | Guide to Hydrological Practices, Volume II – Management of Water Resources and Applications of Hydrological Practices | SERCOM | HCP (coordination role) |  | Tier 3 |
| [471](https://library.wmo.int/index.php?lvl=notice_display&id=7469#.X2HhSWgzabg) |  | Guide to Marine Meteorological Services | SERCOM |  |  | Tier 3 |
| [702](https://library.wmo.int/index.php?lvl=notice_display&id=7700#.X2Hg9Wgzabg) |  | Guide to Wave Analysis and Forecasting | SERCOM | INFCOM |  | Tier 3 |
| [732](https://library.wmo.int/index.php?lvl=notice_display&id=7644#.X2Hiy2gzabg) |  | Guide to Practices for Meteorological Offices Serving Aviation | SERCOM |  |  | Tier 3 |
| [904](https://library.wmo.int/index.php?lvl=notice_display&id=7796#.X2HivGgzabg) |  | Guide to Aeronautical Meteorological Services Cost Recovery | SERCOM |  |  | Tier 3 |
| [1006](http://www.wamis.org/agm/pubs/brochures/WMO1006e.pdf) |  | Drought Monitoring and Early Warning: Concepts, Progress, and Future Challenges | SERCOM |  |  | Tier 3 |
| [1072](https://library.wmo.int/index.php?lvl=notice_display&id=5841#.Y5HcHHbMI2w) |  | Manual on Flood Forecasting and Warning | SERCOM |  | Part of SERCOM work programme | Tier 3Will be renamed “Guide to flood forecasting and warning” |
| [1076](https://library.wmo.int/index.php?lvl=notice_display&id=6648#.X2HiQWgzabg) |  | Guide to Storm Surge Forecasting | SERCOM | INFCOM |  | Tier 3 |
| [1090](https://library.wmo.int/records/item/39629-standardized-precipitation-index-user-guide#.Y5HdPXbMI2w) |  | Standardized Precipitation Index User Guide | SERCOM |  |  | Tier 3 |
| [1100](https://library.wmo.int/index.php?lvl=notice_display&id=15574#.X2Hh8mgzabg) |  | Guide to the Implementation of Quality Management Systems for NMHSs and other Relevant Service Providers  | SERCOMINFCOM |  |  | Tier 3 |
| [1132](https://library.wmo.int/doc_num.php?explnum_id=7868) |  | Forecast Verification for the African SWFDPs | SERCOM |  |  | Tier 3 |
| [1173](https://library.wmo.int/index.php?lvl=notice_display&id=19498#.Y5HdVXbMI2w) |  | Handbook of Drought Indicators and Indices | SERCOM |  |  | Tier 3 |
| [1195](https://library.wmo.int/index.php?lvl=notice_display&id=20172#.X2Hi5mgzabg) |  | Guidelines on the Role, Operation and Management of National Meteorological and Hydrological Services | SERCOM |  |  | Tier 3 |
| [1234](https://library.wmo.int/records/item/56760-guidance-on-integrated-urban-hydrometeorological-climate-and-environmental-services?offset=2) | Volume I | Guidance on Integrated Urban Hydrometeorological, Climate and Environmental Services - Volume I | SERCOM | GAW |  | Tier 3 |
| [1234](https://library.wmo.int/records/item/57316-guidance-on-integrated-urban-hydrometeorological-climate-and-environment-services?offset=1) | Volume II | Guidance on Integrated Urban Hydrometeorological, Climate and Environmental Services - Volume II | SERCOM | GAW |  | Tier 3 |
| [1293](https://library.wmo.int/records/item/58169-guidelines-on-implementation-of-a-coastal-inundation-forecasting-early-warning-system?offset=4) |  | CIFI Guidelines | SERCOM |  |  | Tier 3 |
| [1337](https://library.wmo.int/records/item/68789-the-wmo-strategy-for-service-delivery?language_id=13&back=&offset=) |  | The WMO Strategy for Service Delivery | SERCOM |  |  | Tier 3 |
| **Producing impact- and risk-based forecast and warnings (Strategic Objective 1.1, 1.2, 1.3 and 1.4)** |
| *49* | [*Volume III*](https://library.wmo.int/index.php?lvl=notice_display&id=10700#.X2Hf-Wgzabg) | *Basic Documents, 2. Technical Regulations, Volume III: Hydrology* | *SERCOM**INFCOM* | *HCP (coordination role)* | *Yes, for Cg-20* | *Tier 1**Pending approval of Draft Resolution 2 (SERCOM-Ext(2025))* |
| *168* | [*Volume II*](https://library.wmo.int/index.php?lvl=notice_display&id=543#.X2Hikmgzabg) | *Guide to Hydrological Practices, Volume II – Management of Water Resources and Applications of Hydrological Practices* | *SERCOM* | *HCP (coordination role)* |  | *Tier 3* |
| [*1072*](https://library.wmo.int/index.php?lvl=notice_display&id=5841#.Y5HcHHbMI2w) |  | *Manual on Flood Forecasting and Warning* | *SERCOM* |  | *Part of SERCOM work programme* | *Tier 3**Will be renamed “Guide to flood forecasting and warning”* |
| [1109](https://library.wmo.int/index.php?lvl=notice_display&id=14699#.Y5HchnbMI2w) |  | Guidelines for Implementation of Common Alerting Protocol (CAP)-Enabled Emergency Alerting | SERCOM |  |  | Tier 3 |
| [1150](https://library.wmo.int/index.php?lvl=notice_display&id=17257#.Y5HZ9HbMI2w) | Part I | Guidelines on Multi-hazard Impact-based Forecast and Warning Services | SERCOM |  |  | Tier 3 |
| [1150](https://library.wmo.int/index.php?lvl=notice_display&id=21994#.Y5HZrnbMI2w) | Part II | WMO Guidelines on Multi-hazard Impact-based Forecast and Warning ServicesPart II: Putting Multi-hazard IBFWS into Practice | SERCOM |  |  | Tier 3 |
| [TD 1556](https://library.wmo.int/records/item/54452-administrative-procedure-for-registering-wmo-alerting-identifiers) |  | Administrative Procedure for Registering WMO Alerting Identifiers | SERCOM |  |  | Tier 3 |
| [link](https://library.wmo.int/index.php?lvl=notice_display&id=20228#.Y5HZd3bMI2w) |  | Multi-hazard Early Warning Systems: A Checklist | SERCOM |  |  | Tier 3 |
| **Support to decision-making (Strategic Objective 1.1, 1.2, 1.3 and 1.4)** |
| *49* | [*Volume III*](https://library.wmo.int/index.php?lvl=notice_display&id=10700#.X2Hf-Wgzabg) | *Basic Documents, 2. Technical Regulations, Volume III: Hydrology* | *SERCOM**INFCOM* | *HCP (coordination role)* | *Yes, for Cg-20* | *Tier 1**Pending approval of Draft Resolution 2 (SERCOM-Ext(2025))* |
| *168* | [*Volume II*](https://library.wmo.int/index.php?lvl=notice_display&id=543#.X2Hikmgzabg) | *Guide to Hydrological Practices, Volume II – Management of Water Resources and Applications of Hydrological Practices* | *SERCOM* | *HCP (coordination role)* |  | *Tier 3* |
| [*1109*](https://library.wmo.int/index.php?lvl=notice_display&id=14699#.Y5HchnbMI2w) |  | *Guidelines for Implementation of Common Alerting Protocol (CAP)-Enabled Emergency Alerting* | *SERCOM* |  |  | *Tier 3* |
| [TD. 1422](https://library.wmo.int/index.php?lvl=notice_display&id=12000#.Y5HaFnbMI2w) |  | Guidelines on Communicating Forecast Uncertainty | SERCOM |  |  | Tier 3 |
| [TD 1560](https://library.wmo.int/index.php?lvl=notice_display&id=5524#.Y5Hc0XbMI2w) |  | Guidelines on international and cross-border collaboration in the warning process | SERCOM |  |  | Tier 3 |
| [GAW 235](https://library.wmo.int/index.php?lvl=notice_display&id=20244#.Y5Her3bMI2w) |  | Vegetation Fire and Smoke Pollution Warning and Advisory System (VFSP-WAS): Concept Note and Expert Recommendations | GAW | RBSERCOM |  | Tier 3 |
| [GAW 254](https://library.wmo.int/index.php?lvl=notice_display&id=21755#.Y5He33bMI2w) |  | Sand and Dust Storm Warning Advisory and Assessment System | GAW | RBSERCOM |  | Tier 3 |
| **Capacity Development** |
|  | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part V | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart V – Qualification and Competencies of Personnel Involved in the Provision of Meteorological (Weather and Climate) and Hydrological Services | CDP | INFCOMSERCOM |  | Tier 1 |
|  | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part VI | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart VI – Education and Training of Meteorological Personnel | CDP | INFCOMSERCOM  |  | Tier 1 |
|  | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Part VII | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesPart VII – Quality Management | TRCG | INFCOMSERCOM |  | Tier 1 |
|  | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Appendix A | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesAppendix A – Basic Instruction Package | CDP |  |  | Tier 1 |
|  | [Volume I](https://library.wmo.int/index.php?lvl=notice_display&id=14073#.X2Hfu2gzabg) Appendix B | Basic Documents, 2. Technical Regulations, Volume I - General Meteorological Standards and Recommended PracticesAppendix B – Criteria for Designation of Regional Training Centres | CDP | RAs |  | Tier 1 |
| [1205](https://library.wmo.int/index.php?lvl=notice_display&id=20181#.X2HhN2gzabg) |  | Guide to Competency | CDP | INFCOMSERCOM |  | Tier 3 |
| 1209 |  | Compendium of WMO Competency Frameworks | CDP | INFCOMSERCOM |  | Tier 3Proposal to add a new paragraph and consequently develop supplementary second-level competency provisions to be added to the Compendium of WMO Competency Frameworks (WMO-No. 1209) pending approval of Doc 2 SERCOM(Ext(2025). |
| **General – to be updated by TRCG** |
| [1127](https://library.wmo.int/index.php?lvl=notice_display&id=15872#.X2Hi2Ggzabg) |  | Guidelines on the Preparation and Promulgation of the WMO Technical Regulations | TRCG |  |  | Tier 3 |

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