1. Background

Regional Climate Outlook Forums (RCOFs) are platforms that bring together national, regional and international climate experts, with users and stakeholder representatives from countries of a climatologically homogeneous region, to produce climate predictions for the target season based on input from Regional Climate Centers (RCCs), Global Producing Centers for Long Range Forecasts (GPC-LRF), National Meteorological and Hydrological Services (NMHSs), relevant regional institutions, and other climate prediction centers. Built into the RCOF process is a regional networking of the climate service providers and user-sector representatives. Participating countries recognize the potential of climate prediction and seasonal forecasting as a powerful development tool to help general population and decision-makers face the challenges posed by climatic variability and change. RCOFs are widely recognized as key elements in the implementation of the World Meteorological Organization (WMO) led Global Framework for Climate Services (GFCS) at the regional and national scale.

In different regions RCOFs have evolved in different ways, based on specific needs and capabilities, and have been tailored to respond to existing conditions. At the same time, in all regions, they constitute reliable and authentic sources of high-quality climate information, developed through a cooperative endeavor and on a sustainable basis. In many regions, the users involved in the RCOFs recognize benefits from products generated through RCOF process, and start contributing to and fully supporting the organization of sessions and the evolution of the process, thus ensuring RCOF sustainability (e.g., Central American COF). Following the recommendations of the Global RCOF review conducted in 2017, RCOFs are transitioning to the next generation (RCOFv2) with more homogenized operational processes and an objective approach for producing seasonal outlooks by combining all sources available of information at seasonal time scale, and by also enhancing users and stakeholder involvement to promote co-design and co-production of consensus outputs.

2. Arab Climate Outlook Forum

Background

The establishment of the Arab Climate Outlook Forum (ArabCOF) was proposed by the Arab Permanent Committee on Meteorology (APCM) at its 30th meeting in Kuwait (10-13 March 2014), and its important role was recognized in providing the seasonal forecasting and climate predictions/projections for the Arab region, providing the various users with regional climate information and building the capacities for the provision of climate services at National
Meteorological Services in Arab States. Also, the ArabCOF is one of the main instruments towards the implementation of the Global Framework for Climate Services (GFCS) within the region. Thus, the Committee called for organizing a meeting to discuss the actions needed and the institutional aspects related to the setup of the ArabCOF.

The Scoping Meeting for the Establishment of the ArabCOF was co-organized by the League of Arab States (LAS), United Nations Economic and Social Commission for Western Asia (UNESCWA) and World Meteorological Organization (WMO) in Amman, Jordan, on 14-16 October 2014, hosted by the Jordanian Meteorological Department (JMD). Heads of the Meteorological Authorities or their representatives, and experts on seasonal forecasting and climate projections from the Arab meteorological offices and international organizations participated in the meeting.

The Scoping Meeting supported the proposal to establish an ArabCOF and agreed on the overall concept, the scope and institutional arrangements. The proposed objectives of an ArabCOF are as follows:

- Generate consensus outputs on seasonal forecasts (1-2 per year) and to carry out regional climate change assessments
- Facilitate knowledge sharing and exchange for seasonal forecasting and climate change projections in a common language.
- Capacity building of the Arab Meteorological Offices to generate common approach to ArabCOF outputs and products serving various stakeholders.
- Identify climate information needed by end users and try to respond to those user needs taking into consideration that the data provided by the Arab Met Services to inform the discussions remains the property of the Met Service as represented in the Forum.

In light of the implementation of recommendations of the Scoping meeting on the establishment of the ArabCOF, the terms of reference of the ArabCOF were presented to the Arab Permanent Committee on Meteorology (APCM) at its thirty-first session (Jeddah, 26-28 April 2015). The Technical Secretariat was assigned in coordination with ESCWA to consider the financial aspects contained in the terms of reference of the ArabCOF to include the cost of the systems and other technical aspects of the Forum.

**Previous Sessions**

The first session of Technical Secretariat of the ArabCOF was held in September 2017 in Beirut. Along with organizational matters, participants discussed the seasonal predictions for autumn 2017 and issued a seasonal outlook for the Arab region, as a model for building the outcomes of the ArabCOF.

The second session of Technical Secretariat of the ArabCOF was held in February 2018 in Cairo hosted by the General Meteorological Authority of the Arab Republic of Egypt with the support of WMO and ESCWA. It was agreed that the process of developing the consensus statement is the main outcome of the meeting. The role of other regional mechanisms was also discussed, especially the North Africa RCC-Network, which will provide technical support to ArabCOF according to the scope of its work focusing mainly on North African countries with possible expansion of the domain. In the meantime a need for establishment of an RCC for the Gulf countries was recognized. It was also emphasized that there is a need for the engagement of stakeholders and users from different sectors to understand their needs, also raise their awareness and guide them on the use of climate information in the decision-making process.
The third session of ArabCOF took place during the period 26-29 November 2018 at the headquarters of the Egyptian Meteorological Authority in Cairo, in conjunction with other RCOFs with overlapping domains, in particular, the Mediterranean, North Africa and South-Eastern European COFs (MedCOF, PRESANORD, SEECOF). ESCWA, WMO and State Meteorological Agency of Spain (AEMET) supported these events. A number of international experts and representatives from RAVI RCC Network and North Africa RCC-Network provided technical guidance and facilitated the development of seasonal outlooks for each of sub-regions, including for Arab region.

**The fourth Session of ArabCOF and first Session of GCC-COF**

The fourth Session of ArabCOF will be hosted by the General Authority for Meteorology and Environmental Protection (GAMEP) in Jeddah, Saudi Arabia from 26-28 November 2019. The ArabCOF-4 aims to:

- Evaluate and validate previous outlook comparing with observed values;
- Assess current state of climate drivers and oceanic indices (ENSO, NAO, IOD, etc);
- Verify validity and applicability of different model outputs for Arab region;
- Discuss seasonal forecasts for the boreal winter, e.g. from December 2019 to February 2020, across the entire Arab region, and develop seasonal outlook for each of sub-regions, i.e. North Africa and Arabian Peninsula;
- Engage users and stakeholders from various sectors, e.g. environment, agriculture and water resources sectors, to understand their needs and guide them on the use of climate information in the decision-making process and maximize the use of seasonal predictions to take appropriate actions for managing climate risks;
- Discuss the possibility of producing user friendly tools and products as a key outcome of the RCOF’s to serve stakeholders and sectors benefiting from the consensus based seasonal outlooks;
- Assess climate trends for the Arab region and discuss regional climate change projections for Arab region;
- Define a way forward for the next sessions, including challenges and gaps. Discuss preparation of next ArabCOF session, to further focus on climate change projection.

### 3. GCC-COF

Due to large geographical extent of ArabCOF domain, there are distinct differences in climate conditions across different sub-regions. Members of the Gulf Cooperation Council (GCC) have thus put forth an effort to establish an RCC for the Arabian Gulf region.

The Arab countries located in North Africa have been benefiting from the North African RCOF (PRESANORD) coordinated by the North Africa RCC Network. However the countries of Arabian Peninsula are not covered by an RCC that can produce products and services specific for their sub-regional climate features. In view of aforesaid, Saudi Arabia proposed to host an RCC for GCC region and launch an GCC-COF under the umbrella of the ArabCOF. The GCC-COF will produce climate outlooks for GCC countries. Both PRESANORD and GCC-COF outputs will then form integral parts of the broader ArabCOF outputs. The initiation of GCC-COF was discussed during the 3rd session of the ArabCOF, where it was agreed to conduct the 1st session of GCC-COF in conjunction with the 4th session of the ArabCOF in November 2019. The proposed GCC-COF session aims to discuss in more detail the scope of work of the GCC-COF as well as relevant actions for the way forward for the implementation of an RCC for GCC, which...
the General Authority for Meteorology and Environmental Protection (GAMEP) of Saudi Arabia has offered to host in Jeddah.

**Participation:**

The meeting will be attended by representatives from the Met Services that are members of the ArabCOF as well as some other countries, namely Algeria, Bahrain, Kuwait, Oman, Saudi Arabia, Egypt, Morocco, Tunisia, Jordan, and Palestine. International experts and representatives from UNESCWA and the WMO Secretariat will also contribute to the meeting.

4. **Provisional agenda of the Joint Meeting of the 4th Sessions of ArabCOF and 1st Session of GCC-COF**

The provisional agenda of the meeting is attached.