



World Meteorological Organization
Working together in weather, climate and water

MedCOF Scoping Meeting

MedCOF from the perspective of the
Regional Association VI

RA VI President



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RCOF Concept

Forum

- o **bring together** national, regional and international **climate experts**, on an operational basis, to
- o **produce regional climate outlooks** based on input with common climatological characteristics from
 - ✓ NMHSs
 - ✓ regional institutions
 - ✓ Regional Climate Centres - RCCs
 - ✓ global producers of climate predictions
- o **ensure consistency** in the access to, and interpretation of, climate information
- o **assess** the most pertinent **socio-economic** sectors through interaction with
 - ✓ sectoral users
 - ✓ extension agencies
 - ✓ policy makers
- o **explore** ways of the optimal outlook usage



RCOFs Mission and Users

- **Mission**

- **bring together** the **experts** from **regions** which are climatologically similar
- provide **consensus-based climate predictions** and **information**
usually based on the season which has the highest socio-economic significance

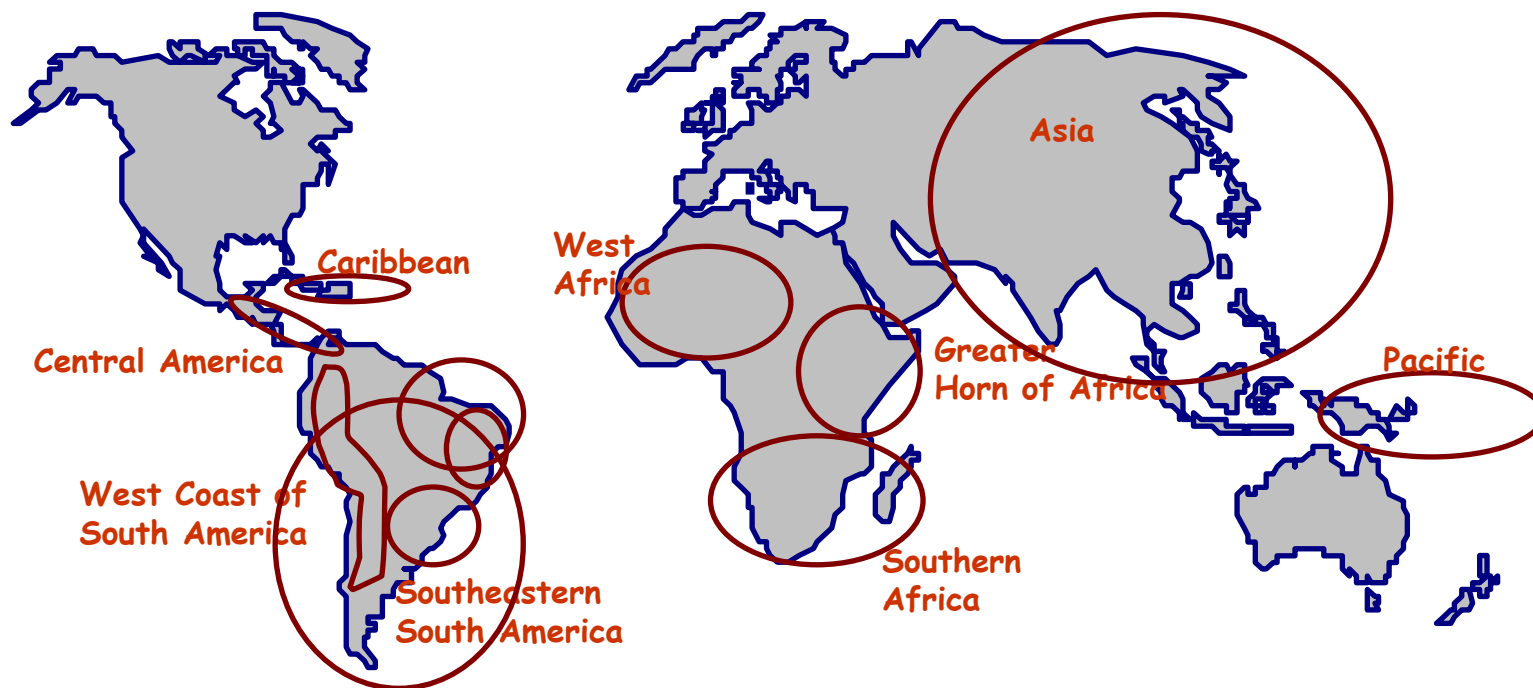
- **RCOF Users**

- Agriculture and food security
- Water resources
- Energy production and distribution
- Public health
- Disaster risk reduction and response
- Outreach and communication



RCOFs initiation

- Late 1990's – initiated Regional Climate Outlook Forum (RCOF)



RCOFs Concept and Mission have been applied in several parts of the world to reduce climate-related risks and support sustainable development



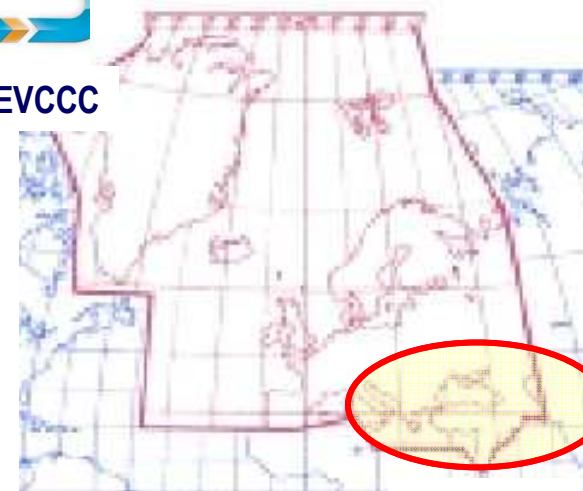
RCOFs in RA VI

2008 - South-East European Climate Outlook Forum (SEECOF)

- [SEECOF 1 Seasonal Climate Outlook for Summer 2009, Zagreb, Croatia](#)
- [SEECOF 2 Seasonal Climate Outlook for Winter 2009/2010, Budapest, Hungary](#)
- [SEECOF 3 Seasonal Climate Outlook for Summer 2010, Belgrade, Serbia](#)
- [SEECOF 4 Seasonal Climate Outlook for Winter 2010/2011, Belgrade, Serbia](#)
- [SEECOF 5 Seasonal Climate Outlook for Summer 2011, **online-COF**](#)
- [SEECOF 6 Seasonal Climate Outlook for Winter 2011/2012, Belgrade, Serbia](#)
- [SEECOF 7 Seasonal Climate Outlook for Summer 2012, **online-COF**](#)
- [SEECOF 8 Seasonal Climate Outlook for Winter 2012/2013, Podgorica, Montenegro](#)
- [SEECOF 9 Seasonal Climate Outlook for Summer 2013, **online-COF**](#)



SEEVCCC



SEECOF

SEECOF- 8 Climate Outlook for 2012/13 Winter Season



Figure 1. Graphical presentation of 2012/13 winter temperature outlook

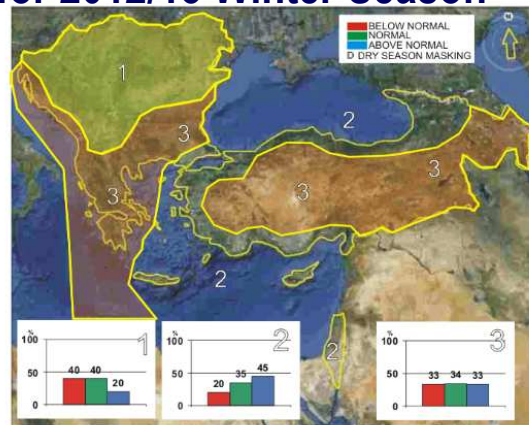
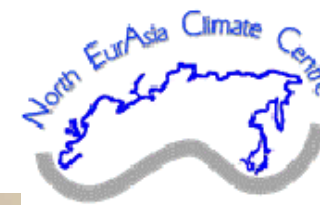


Figure 2. Graphical presentation of 2012/13 winter precipitation outlook

Albania , Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus Georgia, Greece, Hungary, Israel, Moldova, Montenegro, The former Yugoslav Republic of Macedonia, Romania, Serbia, Slovenia and Turkey



RCOFs in RA VI



6/19

2009 - XV Session of RA VI (Brussels,) strongly encouraged further development of the RCOF mechanism in RA VI



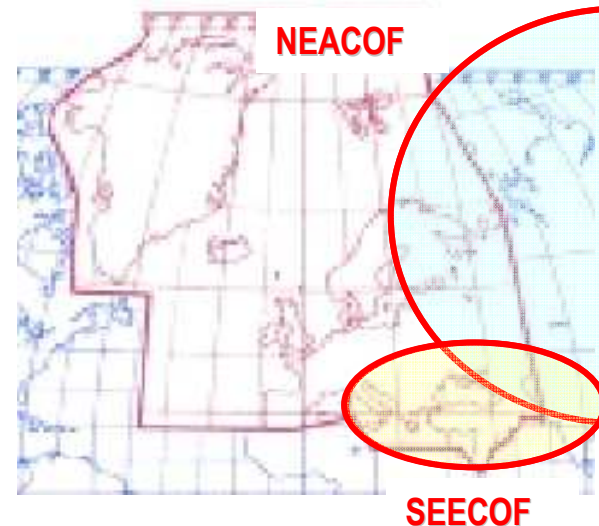
2011 - North EURASIAN Climate Outlook Forum (NEACOF) cover North-eastern part of Region VI, the Caucasian countries, and the countries in Central Asia, mostly located in Region II

NEACOF-1 The first Regional Climate Outlook Forum, 2011

NEACOF-2 The second Regional Climate Outlook Forum, 2012

NEACOF-3 The third Regional Climate Outlook Forum, 2013

Climate Outlook for 2012/13 Winter Season



ДЕКАБРЬ 2012

ЯНВАРЬ 2013



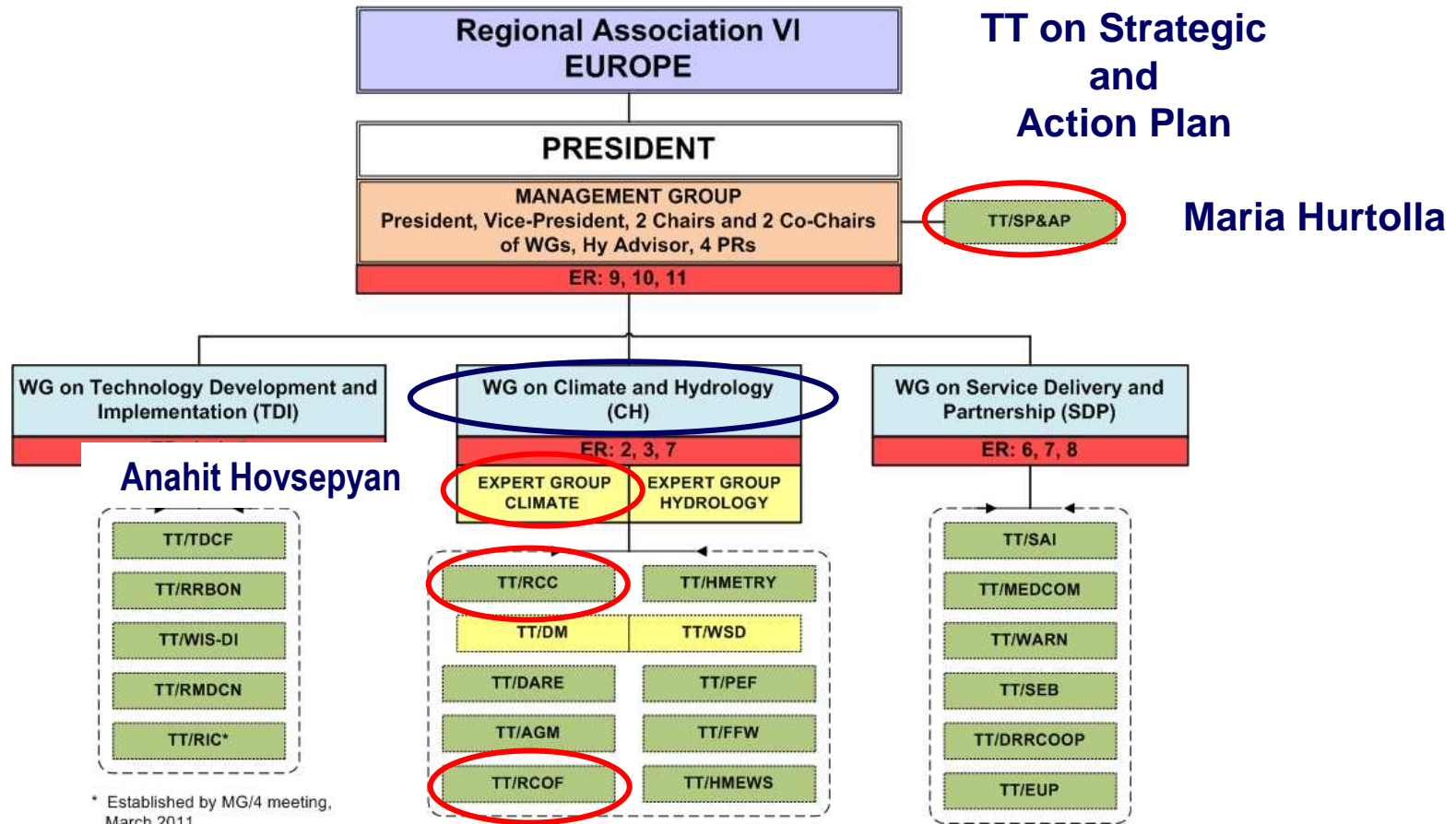
Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Ukraine



RCOFs Support by the RA VI MG

RA VI structure

WORK STRUCTURE OF RA-VI (EUROPE)
(Approved by MG/2, Feb 2010, updated May 2011)



Dmitry Kiktev



RA VI Operating Plan 2012 - 2015

Expected Result 3									
Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, prediction and warnings to support in particular climate impact and adaptation strategies									
Key Outcome 3.1 Improved operational long-range forecasts and long-term projections									
KPI 3.1.1 Number of Members providing standardized products (e.g. monthly and seasonal predictions, climate watches)									
Deliverables	Activities	WG	TT	2012	2013	2014	2015	WMO Progr.	WMO Comm.
3.1.1	Collect and examine information on RCOF activity in various parts of the world. Review RCOF products, practices and organization models/mechanisms. Develop a Concept paper on possible development of RCOFs in RA-VI and its liaison with RCC network	WG CH	RCOF	x				WCP/RP	CCI
	Discuss needs and propose possible steps for RCOF organization in the areas beyond SE Europe	WG CH	RCOF & RCC	x	x	x		WCP/RP	CCI
	Include downscaled LRF products in SEECOF practice. Provide objective verification of SEECOF products. Make SEECOF outcomes available for interested NMHSs via authorised access to web/ftp-server of SEECOF	WG CH	RCOF	x				WCP/RP	CCI

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WG CH
 TT RCOF & RCC
 WCP/RP
 CCL



RA VI Operating Plan 2012 - 2015

Expected Result 3

Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, prediction and warnings to support in particular climate impact and adaptation strategies

Key Outcome 3.2	Improved delivery of climate information and prediction products for climate adaptation and risk management									
KPI 3.2.1	Number of operational NMHS/partners providing inputs to the RA VI RCC-Network serving the National Climate Centres									
KPI 3.2.2	Number of Members developing and implementing effective climate monitoring systems, including Climate Watch Systems									
KPI 3.2.3	Number of Members with formal National Climate Centres, accessing global and regional products, using the guidance materials and transmitting climate products for national needs									
KPI 3.2.4	Number of Members making use of climate services in defining their national climate adaptation policies									
KPI 3.2.5	Number of Members participating in and making use of the output of the Regional Climate Outlook Forums, in support of adaptation and climate risk management									
Deliverables	Activities	WG	TT	2012	2013	2014	2015	WMO Progr.	WMO Comm.	
3.2.1	Conduct WMO RA VI (Pilot) RCC-Network coordination meetings, including virtual meetings	WG CH	RCC	x	x			WCP/IRP	CCI	
	Develop a WMO RA VI RCC-Network web-portal and implement DCPC functions	WG CH	RCC	x	x			WCP/IRP	CCI	
3.2.2	Enlarge the RCC Network services through RCC workshops and carrying out pilot Climate Watch Services, including also hydrology	WG CH	RCC	x	x	x		WCP/IRP	CCI	
	Analyze requirements and feedback on effectiveness, gaps and improvement of RCC-services in RA-VI.	WG CH	RCC		x	x		WCP/IRP	CCI	
3.2.3	Complete and publish catalogue of available products and services provided via RAVI RCC-Network web-portal	WG CH	RCC	x	x			WCP/IRP	CCI	
	Promote the establishment of National Climate Centres within RA VI NMHSs.	WG CH (partly)	RCC		x	x		WCRP	CCI	
3.2.4	Examine and search for ways of expansion of the RCOF scope in RA-VI - Add forum functionality to the LRF-Node of the RA-VI RCC Network and explore the possibility of inclusion of climate change section in RCOFs.	WG CH	RCC	x	x	x		WCP/IRP	CCI	
3.2.5	Analyse requirements and feedback on effectiveness, gaps and improvement of RCOF-activity in RA-VI, to address what still has to be done.	WG CH	RCOF & RCC		x	x	x	WCP/IRP	CCI	

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WG CH
TT RCOF & RCC
WCP/IRP
CCL



TT Regional Climate Outlook Forum

Report by Dmitry Kiktev

- **Examine** RCOF activity worldwide, **review** RCOF products, practices and organization models / mechanisms, **propose** relevant solutions for RCOFs in RA-VI
 - A “*Concept paper on development of RCOFs in RA-VI including their liaison with the RA VI (Pilot) RCC-Network*” was
 - ✓ **prepared** and **presented** in the **MG meeting**
 - ✓ **disseminated** to **TT RCC** members with positive feedback.
 - **Concept paper** and, as **most** of the **tasks planned**, are **accomplished**
 - **TT RCOF** was **suspended** with the **condition** that **TT RCC** further **coordinates** RCOF related **activities**, and in terms of the **implementation** of **MedCOF liaison** with **AEMET** (through *Ernesto Rodriguez*)



TT Regional Climate Outlook Forum

Report by Dmitry Kiktev

- Examine and search for ways of expansion of RCOF functionality in RA-VI
 - **RCOF functionality** to the **LRF-Node** of the **RA-VI RCC Network** was added to **serve** the needs of **both RCOF** and **RCC**.
(see <http://seakc.meteoinfo.ru/forum> *at the moment is available only in Russian*)
 - **Possibility** of **inclusion** of **climate change** section in **RCOFs** was **explored**
Currently **Climate change** reports and discussions are **practiced** in both
 - ✓ SEECOF
 - ✓ NEACOF



TT Regional Climate Outlook Forum

Report by Dmitry Kiktev

- Analyze requirements and feedback on effectiveness, gaps and improvement of RCOFs activity in RA-VI, to address the identified issues
 - **Most** part of the **feedback** is provided **during** the **RCOFs meeting** by their **participants**
Besides that, a survey on LRF-needs was conducted for CIS countries
 - **Collection** of **feedback** is **still not properly organized**, therefore this **task remains valid** and needs to be addressed in the future
 - One **option** could be in conducting a **short survey-assessment** after each COF session to collect the feedback from participants and identify existing gaps



TT Regional Climate Outlook Forum

Report by Dmitry Kiktev

- Elaborate a study on predictability in Southeast Europe
 - A **draft** version of the **paper** has been **prepared**
 - **Potential sources of predictability** for Europe, are **described** in general, and furthermore the **predictability** of winter and summer seasons is **analyzed**
i.e. those phenomena which favor the development of recurrent patterns such as El Nino Southern Oscillation (ENSO) and North Atlantic Oscillation/Arctic Oscillation (NAO/AO)
 - The **draft paper** is **shared** among the **LRF experts** for their feedback and further elaboration and improvement



WG Regional Climate Outlook Forum

Report by Anahit Hovsepyan at the RA VI MG 7

- Explore possibility and search for ways to expand RCOF geography in RA-VI
 - SEECOF sessions regularly conducted
 - NEACOF - North Eurasian COF - initiated by Roshydromet / NEACC
(North EurAsian Climate Centre)
for CIS countries (2 "physical" and 1 "virtual" meetings)
<http://neacc.meteoinfo.ru/neacc/north-urasian-climate-outlook-forum>
 - Mediterranean COF – first interregional forum



WG Regional Climate Outlook Forum

Report by Anahit Hovsepyan at the RA VI MG 7

- **Mediterranean COF – MEDCOF**

- Possibility of **establishing** the **MedCOF** was **discussed** in the **TT RCOF meeting in 2011** during **SEECOF-6** *Ernesto Rodriguez (AEMET)* was proposed as a **focal point** of the WG
- **Several rounds of discussions** at technical level e.g.:
 - ✓ PRESANORD-2 and PRESANORD-3 (COF for north African countries) in January and September 2012
 - ✓ discussion with WMO climate experts during the Extraordinary Congress
- MedCOF is supposed to **cover** the entire **Mediterranean basin**, in the future could serve as a platform for climate risk management activities
- **AEMET** is **willing** to **coordinate MedCOF** activities, **letter with expression of interest to coordinate MedCOF activities** was sent to **Presidents of RAVI and RAI**
- **AEMET** and **MF** meeting
- **AEMET has accepted to host the first MedCOF**



WG Regional Climate Outlook Forum

Report by Ivan Cacic at the RC 65

- **Mediterranean COF – MEDCOF**
 - **Recommended by RA VI Task Team on RCOF** and supported by the **RA VI Working Group on Climate and Hydrology** – target region South Western Europe / Mediterranean basin
 - **Extension of existing RA I PRESANORD to Mediterranean area** involving thus **RA I** and **RA VI** - supported by the *Scoping Workshop on Seasonal climate Prediction, Algeria, 2012*
 - **Letter of the PR of Spain, Dr. Daniel Cano Villaverde**, expressing **strong support** of the **AEMET** for the **establishment** of the SW Europe/W Mediterranean Outlook Forum (**MedCOF**) with readiness to coordinate all needed activities



RA VI RCOFs opportunities

- **SPECS EU FP7 project :**
SPECS - Seasonal to Decadal Climate Prediction for Improvement of European Climate Services
 - **research and dissemination activities** to deliver a **new generation of European climate forecast systems**, with improved forecast quality and efficient regionalization tools to
 - ✓ **produce** reliable, local **climate information** at **seasonal-to-decadal** time scales
 - ✓ **provide** an enhanced **communication protocol** and **services**
 - relevant **operational platforms** include:
 - ✓ European global producing centres (**GPCs**) of climate forecasts
 - ✓ Regional Climate Outlook Fora (**RCOFs**)
 - ✓ WMO Lead Centre for Long-Range Forecasts Multi-Model Ensemble (**LC-LRFMME**)

RCOFS - stakeholders for SPECS



Conclusions 1/2

- RCOFs Mission is to reduce climate-related risks and to support sustainable development by providing consensus-based climate predictions and information
- RCOFs started to develop worldwide since late 1990s, in RA VI since 2008
- SEECOF South-East European Climate Outlook Forum (the oldest RA VI RCOF) covers South-eastern part of Region VI, including eastern Mediterranean and the Caucasian countries
- SEECOF has activity twice a year, with alternate meetings - one in physical and one on-line
- NEACOF - North EURASIAN Climate Outlook Forum covers North-eastern part of Region VI, the Caucasian countries and the countries in Central Asia, mostly located in Region II with performance once a year (up to now: 2 physical and 1 “virtual”)
- RCOF activities are coordinated by the RA VI Management Group through its Working Group on Climate and Hydrology / Expert Group on Climate / Task Team on RCOF-RCC on the basis of the RA VI Operating Plan 2012 – 2015



Conclusions 2/2

- TT RCC further coordinates RCOF related activities, and in terms of the implementation of MedCOF, liaise with AEMET
- MEDCOF – Mediterranean COF is first interregional forum (RA VI and RA I) with plan to cover target region South Western Europe / Mediterranean basin
- MedCOF is forcing extension of existing RA I PRESANORD to Mediterranean area involving thus RA I and RA VI
- Vital elements for the success of the MedCOF establishment and performance
 - ✓ win-win approach based on demands for the RCOF functionality (not governance)
 - ✓ practice to migrate physical meetings through partner countries in order to give a chance to meet RCOF with each national users



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Thank you