

## Collaborative Project



# CLIM-RUN

Climate Local Information in the Mediterranean  
region Responding to User Needs



WP 4 – Climate Services Pilot Case Studies  
Task 4.2 Case Study Implementation

## First workshops synthesis report

Project No. 265192– CLIM-RUN

Start date of project: 1st March 2011

Duration: 36 months

Organization name of lead contractor for this deliverable: UEA

Due Date of Deliverable: month 12 (Mar 2012)

Version 1: 13 March 2012  
Submitted: 13 March 2012

**Author:** Clare Goodess (UEA)

## Table of Contents

1.	Introduction.....	3
2.	Summary of the CLIM-RUN workshops .....	3
3.	Assessment of the use and utility of the D4.1 material .....	5
4.	Use of the perception questionnaire.....	6
5.	Engaging stakeholders .....	8
6.	Continuing the stakeholder engagement.....	9
7.	Translating user needs .....	11
8.	Summary and concluding remarks .....	12

## 1. Introduction

The first two key stages of CLIM-RUN are:

- Stage setting (originally planned for May to September 2011)
  - First (stage-setting) stakeholder workshops
  - First formal stakeholder contact
  - Beginning to define 'who' and 'what'
- Mapping the issues (originally planned for May to September 2011)
  - Prior to/during/after first stakeholder workshops
  - Perception and data needs questionnaires

Thus the first round of stakeholder workshops plays a major and critical role in the early stages of CLIM-RUN. While the local case-study groups were each responsible for organising and running the relevant workshop, WP4 provided overall co-ordination. In part, this was achieved by producing Deliverable D4.1 – First workshops organization “Workshops 1 planning and resource document”.

This deliverable, D4.2, provides a summary and synthesis of the workshops that have taken place (Section 2) together with an assessment of the utility of D4.1 in general (Section 3) and the perception questionnaire in particular (Section 4). Section 5 summarises stakeholder engagement to date, while Section 6 considers how this can be continued. Section 7 summarises the ongoing work on ‘translating’ user needs. Finally, the summary and conclusions (Section 8) consider how work during the first key stages could be modified or improved (and thus potential modifications to the emerging CLIM-RUN protocol).

## 2. Summary of the CLIM-RUN workshops

Table 1 lists the 11 CLIM-RUN workshops which were held between May and December 2011, together with the non-CLIM-RUN events used by WP7 as additional opportunities for stakeholder interaction. The numbers attending workshops are indicated and, where known, the numbers invited, together with the language used. The final column indicates the number of completed questionnaires and/or interviews (completed either before, during or following the workshops). All workshops ran for either half-a-day or a full-day. No more workshops are planned for this first stage of the project.

Individual reports have been produced for each workshop/event by the relevant WP (*only those for the two Cyprus workshops are not yet available*). All reports are in English, with the exception of those for Savoie and Tunisia which were originally produced in French and then translated into English. All these reports, together with powerpoint presentations, programmes and other workshop-related material, are available from the CLIM-RUN wiki and/or internal file manager system.

All workshop reports will eventually be available as WP deliverable reports (with any personal stakeholder details removed before distribution outside the consortium).

Table 1: Summary of CLIM-RUN workshops and other stakeholder events.

WP/Sector	Location	Date – all 2011	Number attending (& invited)	Language	Questionnaires (Q) and Interviews (I)
WP5/Tourism	Hammamet, Tunisia	4 June	15	French	
	Savoie, France	19 Sept.	15	French	38 Is done prior to workshop and subsequently
	Zagreb, Croatia	21 Sept.	15 (60) Includes 8 DHMZ/UNDP	Croatian	7 Qs completed during workshop
	Nicosia, Cyprus	31 Oct.	2 (6) organisations	English	7 Qs from 4 organisations completed after workshop
	Hammamet, Tunisia	18 Dec.	18	French	18 Is done during and after workshop
WP6/Fires	Athens, Greece	28 Sept.	15 (18)	Greek	13 Qs completed during workshop (5 research/academic)
WP7/Energy	El Jadida, Morocco	3-5 May		English	8 Is done
	Casablanca, Morocco	6 May	12	English	Basic Q circulated during workshop
	Barcelona, Spain	27 May	4	English	Basic Q circulated during workshop
	Milan, Italy	8 June		English	Basic Q & 10 conversations with exhibitors
	Zagreb, Croatia	15 June	29 (60). Includes 13 DHMZ/UNDP	Croatian	12 Qs completed during workshop
	Berlin, Germany	15 June		English/German	Informal discussions with 40 participants. 4 Qs afterwards.
	London, UK	4 July		English	Conversations with some of 60 network event participants
	Nicosia, Cyprus	7 Nov.	3 (6) organisations	English	3 Qs from 1 organisation completed after workshop
WP8/Integrated	Zagreb, Croatia	15 June – Energy, see WP7 above			
	Venice, Italy	13	20 (40)	Italian	13 online Qs

		September			completed after workshop
	Zagreb, Croatia	21 Sept. – Tourism, see WP5 above			

### 3. Assessment of the use and utility of the D4.1 material

According to D4.1, the project-wide objectives (written from the stakeholder perspective and consistent with the emerging CLIM-RUN protocol) for the first workshops were:

- To present the CLIM-RUN project and the concept of climate services
- To provide an overview of state-of-the-art in climate modelling, observations and impacts analysis on seasonal/decadal/centennial timescales
- To better understand who are the climate services stakeholders
- To begin to define what you need/want from climate services
- To agree mechanisms for maintaining ongoing collaboration and interaction throughout CLIM-RUN

These have generally been achieved, together with the more specific case study/WP objectives identified for some of the workshops (e.g., Savoie and Tunisia). With the exception of the WP7 workshops, the emphasis in material presented during the workshops has been more on centennial than seasonal to decadal timescales (see Section 7).

D4.1 also includes some suggestions for material to send out to potential participants and participants in advance of the workshop. These are the ones most commonly used:

- Invitation letter (usually with a brief introduction to/overview of CLIM-RUN and web-site link)
- Workshop programme

In a number of cases, a modified and shortened version of the perception questionnaire (see Section 4) was also circulated. More often, however, the questionnaire was circulated during the workshop either for completion then or for later completion and return. In addition, IC3 circulated a brochure on the WP7 case studies.

While noting that the appropriate workshop approach(es) depend on local circumstances including the number of participants and time available, D4.1 identifies a number of potentially useful approaches. Of these, all workshops included presentations by researchers and, in the majority of cases, presentations by stakeholders. All workshops included time for 'roundtable' discussion – and in one case the programme was modified on the day to increase discussion time, which was

welcomed by participants. No workshops used break-out groups or the World Café approach – perhaps reflecting the relatively small size of the workshops. Where questionnaires had been circulated prior to the workshop, preliminary findings were presented, and in a few cases (see Table 1) time was allowed during the workshops for completing questionnaires. Most workshops included specific discussion of ‘next steps’. Although WP4 provided an example workshop feedback/evaluation form, this was not used.

D4.1 includes a list of presentations referred to as ‘The CLIM-RUN Powerpoint Tool Box’. These include some general presentations produced by WP1 to WP4 on CLIM-RUN and climate services, and on climate modelling and observations (the latter intended as ‘building blocks’), together with a few tailored presentations used in some of the earlier workshops. While workshop organisers and Climate Expert Team (CET) members have drawn on this centrally produced and available material, more locally-sourced material has been a major component of many of the later workshops. CET members in Croatia, Cyprus and Greece, for example, presented relevant material from other projects and programmes.

## 4. Use of the perception questionnaire

The CLIM-RUN perception and data needs questionnaire produced by WP4 was designed, in part, to provide the ‘who’ information for WP1 (see draft document on protocol development methodology, Section 2 – stakeholder and institutional analysis), i.e., the basic information for (i) “identification and classification and preliminary information” for (ii) “categorising” and (iii) “characteristics”.

The second and crucial aim of the questionnaire was to provide the ‘what’ information for WP2 and WP3, i.e., what data and related information do stakeholders need?

Thus the questionnaire was developed as an important tool for the ‘Mapping the issues’ CLIM-RUN key stage (see Section 1). It was also intended to provide contextual and background information for the ‘what’ questions – so allowing checking of understanding and whether responses to more technical questions are consistent and meaningful.

The full questionnaire is divided into the following sections:

- Your institution/organisation
- Risk perception and current use
- Your perspective on climate services
- Data requirements
- Handling uncertainties
- Glossary

It was designed to be flexible. While aimed at the institutional/organisational level, rather than at the individual stakeholder, this does not preclude it being used in interviews with individual stakeholders. It can be self-completed by stakeholders or used by researchers as part of structured (possibly more detailed) interviews. It was envisaged that the data requirements section could be completed during or after the first workshop, with further guidance and help from researchers if needed. Part numbers were removed from the final WP4 version to increase flexibility – allowing groups to collect institutional information last, for example. A few questions (for example, on the current use of weather/climate information) were intended to be tailored to the specific case-study sector).

One reason for clearly separating the questionnaire into different parts was to allow particular parts to be completed at different times (and/or in different ways – see above). It was anticipated, for example, that the first parts could be sent out prior to the first workshops to get people thinking and to provide a starting point for workshop discussions, with other parts being completed during or after the workshop (with further help and guidance from researchers if needed).

In practice, the questionnaire was indeed used very flexibly. It was circulated to and completed by stakeholders before, during and after the workshops (Table 1). D4.1 lists some of the tailored versions of the questionnaire used in different case studies (additional versions were produced later on) and indeed no case study used the entire, un-modified questionnaire. This is perhaps not surprising since the full questionnaire is rather long and detailed (in part because of additional questions suggested during the internal review process).

The longest version used is the Italian on-line version (<http://www.climrun.eu/questionario>) produced by Sandro Calmanti using GoogleDocuments for the WP8 Venice workshop participants. All other case studies circulated electronic and/or hard copies of the questionnaire. Various versions of the questionnaire have also been translated into French and Croatian. In a number of case studies, the questionnaire was used in structured interviews with stakeholders (see Table 1).

In all cases, the data requirements section of the questionnaire was shortened and/or simplified. In some cases where questions were asked about parameters/variables required, questions were not asked about spatial scale, temporal resolution or timescale. The most technical questions, about data formats required and representing uncertainty, were rarely asked.

The relatively small number of completed questionnaires and the number of differing versions, make quantitative analysis and inter-comparison rather difficult. Nonetheless some of the workshop reports (e.g., for Athens WP6 and Venice WP8) include some useful summary graphics. D4.1 made a proposal for archiving the questionnaire responses in the QUESTIONNAIRES directory in the egroupware File Manager home directory. This has not been done – but would be useful to facilitate access. WP1, for example, needs information for the proposed institutional analysis.

Care is clearly needed in interpreting the questionnaire responses. It is concluded that personal contact and context is crucial, both in encouraging and helping stakeholders to complete the questionnaires and in interpretation of results. Without this, there is a potential danger of misinterpretation of results and failure to identify cases where a question has been misinterpreted or was ill-posed in the questionnaire.

Ideally, more time would have been spent piloting the questionnaire, particularly to improve the wording/presentation of the more technical questions and to assess appropriate length and complexity. While the questionnaire in its' various formats and implementations has gathered a lot of useful information, it has not been wholly successful in two respects:

- Some stakeholders found it too technical and difficult to complete (see discussion in the Savoie workshop report, for example), yet at the same time,
- It has not provided all the details (particularly with respect to scales and resolutions) of needs that the CET would have liked (see Section 7).

## 5. Engaging stakeholders

Engaging stakeholders and getting them to participate was clearly central to the success of the CLIM-RUN workshops.

D4.1 notes two documents as being potentially useful: the draft CLIM-RUN protocol produced by WP1 and the 'Good practice checklist for facilitating stakeholder involvement in research projects' based on the experience of the CIRCE case studies (see Appendix 1 of D4.1).

The WP1 protocol was used to identify stakeholders for the WP8 Venice workshop – details on the criteria and method used for the selection of the participants (ranging from local to international actors) are described in Deliverable D1.1. The workshop reports for the WP5 Savoie and Tunisia workshops provide a detailed discussion of how stakeholders were characterised and selected. Figure 9 in the Tunisian workshop report, for example, provides a good overview of the principal actors in the Tunisian tourism sector.

It is not clear whether such a systematic process was used to identify and select stakeholders in all case studies. In some cases, such as Athens, contacts previously established in earlier projects provided a valuable starting point, with additional organisations (such as the Hunting Federation of Sterea Hellas in the Athens case study) invited to the CLIM-RUN workshop. For Athens, as in a number of other case studies, stakeholders range from local 'operators' (e.g., involved in fire fighting) to those with a broader national and strategic interest (e.g., WWF).

Table 1 indicates the number of stakeholders involved in each workshop and completing/returning questionnaires. It is evident that for some case studies, most notably Cyprus, stakeholder involvement was very low. Even where the numbers attending were relatively high, some gaps in



stakeholder participation have been identified (e.g., from some of the major tourism centres in other parts of Tunisia).

For all case studies, first contact with stakeholders was made by email, generally followed up by phone calls. All participants in the Venice workshop were, for example, rung-up the previous week. The material circulated to participants is discussed in Section 3.

Some of the workshop reports (most notably those for Tunisia and Savoie) discuss the perceived reasons for difficulties in stakeholder engagement (and reasons for success). The most 'engaged' stakeholders seem to be those who have personal experience of observing changes in climate and its impacts (particularly those involved in outdoor activities in Savoie and non-coastal parts of Tunisia). Though this raises a question as to their representativeness with respect to the rest of the sector, and the potential danger of 'self-selection'.

As well as providing details of how stakeholders were contacted and engaged, the Savoie report discusses issues relating to their perception of climate change. The Tunisian report considers two groups of stakeholders – those 'interested' and 'non-interested' and why this appears to be the case.

Many of the issues relate to the perceived importance or relevance of climate change for the sector. This explains, in part, the very low participation of Cyprus tourism stakeholders who generally do not see climate change as a major issue for them. This is evident in both the very low response rate and the nature of the responses to an earlier non-CLIM-RUN questionnaire on water use and water saving measures in the tourism sector in Cyprus (see meeting presentation by Katerina Charalambous).

As well as issues relating to perception and attitude, workshop attendance is sensitive to more practical considerations, such as political events in Tunisia and Greece. The choice of day and date may also be important. The constraints of the project timetable meant that workshops had to be held during a very busy time of the year for tourism stakeholders in Savoie and Tunisia, for example. It is, however, likely that there is never going to be an ideal time for both researchers and stakeholders. Workshop location may also affect participation. Both WP5 Tunisian workshops were held in Hammamet on the northern peninsula of Cap Bon, but it is proposed to hold later workshops in other locations in order to reach other tourism actors.

## 6. Continuing the stakeholder engagement

Through workshop discussions and the questionnaire, stakeholders were asked about their willingness to be involved in follow-on activities. The WP4 questionnaire suggests the following areas:

- Further workshops
- Training workshops
- More in-depth interviews with the research team
- Testing of data sets

- Testing of data analysis/presentation tools
- Data provision
- Review of project material (guidelines, presentations etc)

D4.1 also lists some suggested next steps for stakeholder involvement (drawing heavily on the reports from the WP7 workshops held in the spring/summer):

- More detailed/technical interviews
- Completion of the more technical parts of the perception and data needs questionnaire
- Email newsletter (first issue is being prepared, March 2012)
- Following up contacts for additional stakeholders (names suggested by existing contacts, and making use of stakeholder networks)
- Identification of contact people for key organisations/institutions
- Continued contact with stakeholders unable to attend the workshop
- Development of contacts with any 'missing' groups of stakeholders
- Continue to build contacts (events, conversations, conferences)
- Mechanisms for reporting back on progress (based on work and discussions with WP2 and WP3 – see Section 7)
- Exchange of data/metadata
- Production of a stakeholder 'communication' pack (a new objective identified by WP7)
- Stakeholder wikis to allow selected stakeholders password-controlled access to material. (Already set up for the WP5 Savoie case study).

Stakeholder willingness for continuing participation in CLIM-RUN varied both across and within case studies. Cyprus stakeholders generally did not appear very enthusiastic about future involvement (though were few in number). In general, Savoie tourism stakeholders appear keen for ongoing involvement – and a case-study wiki was set up for them shortly after the workshop. Stakeholders from the Venice workshop also appear enthusiastic and were proactive in suggesting ways and methods to enable collaboration. In particular, it is proposed to set up a network based on three thematic working groups: (i) hydroclimatic regime; (ii) management of coastal and marine environment; and (iii) agriculture.

Some of the follow-up mechanisms, such as production of the first CLIM-RUN newsletter, are only just being implemented. Some follow-on activities (most notably the translation and implementation of user needs – see Section 7) are contingent on having information and feedback from all workshops and case studies. In this respect, it has been somewhat problematic that the workshops have been held over a rather long period (May to December 2011). Participants in the earlier workshops and other events, in particular those related to WP7, have therefore had to wait rather too long for further information and outputs. Similarly some of the important project infrastructure (most notably the CLIM-RUN web portal – deliverable D1.2, due March 2013) is not yet in place.

Some follow-on actions have, however, already been implemented. In addition to setting up the Savoie case-study wiki, the initial reports from both the Savoie and Tunisia workshops were produced in French to make them more accessible to stakeholders. Other groups have also circulated workshop reports or summaries to participants, and made workshop presentations available.

## 7. Translating user needs

In order to move to the next key stage of CLIM-RUN (Iterative consultation and collaboration, ongoing until the planned second round of stakeholder workshops in February 2013), it is first necessary to 'translate' the expressed user needs into specific products, information and tools. In particular to allow:

- Production of new examples of products and outputs (maps, figures, datasets etc)
- Identification of key data/output gaps and strategies for tackling them
- Identification of priorities
- Identification of requests which are 'out of scope' of CLIM-RUN or impossible to meet
- Definition of new modelling tools required

This process is being undertaken by the CET members assigned to each case study. Initially, a summary of user needs and how these can be met has been produced for each case study. These documents take a number of different formats, reflecting the different issues and level of technical detail that have emerged from each case study. In the case of WP7, a single summary spreadsheet encompassing all workshops and other events has been produced. Several of the documents include background and contextual information, commenting on the particular stakeholder perspectives and noting, for example, the number and type of stakeholders who have contributed to defining needs. CET members were asked to define each particular request according to the following categories:

- 0 – not possible to provide
- 1 – already available
- 2 – easy to provide
- 3 – able to provide, but with a lot of work.

CET members were also asked to, where possible, identify suitable sources of information/data (either already available or with further processing). In this latter context, quite a detailed and lengthy document has been produced for the WP5 Savoie case study. Other 'translation documents' include a shorter summary table.

It is evident, and not surprising, that user needs vary both between and within sectors, depending on the particular focus and responsibilities of the particular stakeholder/actor (e.g., whether they are more involved in operational issues or longer term strategic issues relating to policy and/or infrastructure).

It is beyond the scope of this deliverable to evaluate or summarise all user needs, but we note that the most common requests are for temperature and precipitation and indices calculated from these variables, together with other meteorological variables such as wind (speed, direction and 'consistency'), snow, humidity and cloud cover. Radiation (in particular, DNI – direct normal irradiance) is important for the energy (solar – PV and CSP) sector. Extremes of temperature, rainfall and wind are also requested for all case studies, though the particular indices/types of extreme are not always specified in detail. For the coastal tourism case studies of Tunisia and

Croatia, information about sea bathing water temperature is requested, and for the Tunisian and Venice case studies, information about sea level rise, storm surge and wave heights. Information about local winds (Bora and Scirocco) is requested for Croatia (tourism and energy) and there is an interest in dust storms for the energy case studies and the Tunisia tourism case study. The tourism case studies have expressed an interest in biometeorological comfort indices (based on temperature and/or humidity), as have some of the energy case studies (in the context of electricity demand for cooling). In general, the requests and needs are related to climate information, rather than to wider environmental or socio-economic data (though the importance of non-climate issues in decision making was raised in all workshops). This may, however, reflect the 'steer' given by the workshops and questionnaires (see Section 8 for further discussion).

In general, there is more interest in the near-term future (the next 20-30 years and the next 50 years at most) rather than the longer-term (end of century). Thus there appears to be strong interest in decadal timescales (though in general, the workshop presentations did not generally discuss the difference between 'decadal prediction' and 'climate projection') and in many cases, also an interest in seasonal forecasting (though with some questions concerning current reliability).

## 8. Summary and concluding remarks