Deliverable 10.4: First assessment report of the services offered by the ACTRIS Data Centre

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Based on contributions from members of the external board

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Contents

1 Introduction

1.1 Purpose of external assessment

The overall goal of the ACTRIS Data Centre is to provide scientists and other user groups with free and open access to all ACTRIS infrastructure data, complemented with access to innovative and mature data products and tools for QA, data analysis and research.

The ACTRIS Data Centre is offering data and service for both internal and external users groups, and the purpose of the *Data Centre External Board* (DC-EB) of ACTRIS-2 is to assess the development and use of the data centre facility and that this is complying with the main plans and goals. The aim is to strengthen the ACTRIS Data Centre in accordance with the needs and goals of ACTRIS, for both internal and external users.

After the start of ACTRIS-2, a new project was initiated, ACTRIS Preparatory Phase Project (PPP). This has been central and highly beneficial for the external assessment of the ACTRIS Data Centre, and the description of needs and adjustments. ACTRIS PPP is an EU Horizon 2020 Coordination and Support Action (grant agreement No 739530) and started 1 January 2017 for a period of 3 years. The main objectives of ACTRIS PPP are to develop the organizational, operational and strategic frameworks of the RI. As a part of this, the concept of the ACTRIS data centre in the future will be developed from a detailed analysis of the current and near-future needs of the internal (ACTRIS national services providers) and external users. The assessment will be using the Delphi method[1] and address: (a) the nature of the services to be provided by the Data Center; (b) the principles, methodologies and procedures to be used; (c) requirements in terms of infrastructure and human resources.

This was very beneficial for the assessment of the data centre, and important support covering processes assessing the data centre and future needs in detail. This has been used actively in the assessment of the services offered by the ACTRIS Data Centre and deliverable 10.4.

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[1] Delphi method https://en.wikipedia.org/wiki/Delphi_method

1.2 Mandate

The external user feedback and DC-EB reviews at least two time during the project the data centre activities towards the ACTRIS-2 plans and points out the needs in order to contribute to further development of the ACTRIS Data Centre and advice the ESB and GA on further improving their actions.

The following reports were produced to document the ACTRIS data management, data provision and use, and serve as the central input to the DC-EB in addition to (web)meetings and discussions;

	Title	Due
D10.1	Definition of the ACTRIS Data Management Plan	Nov. 2015
D10.2	First summary of the ACTRIS data offered by the ACTRIS Data Centre	Sep. 2016
D10.3	First summary of the monitoring of access to ACTRIS data and user statistics	Sep. 2016
D10.7	Second summary of the ACTRIS data offered by the ACTRIS Data Centre	Sep. 2017
D10.8	Second summary of the monitoring of access to ACTRIS data and user statistics	Sep. 2017

Additionally, meetings and feedback from external board members and others, relevant deliverables, and assessments performed within the frame of ACTRIS-PPP will be used.

1.3 Composition

The expert members of the external board will consist of at least 2 independent scientists outside the project (e.g. external data users), who will collaborate with at least 3 scientists from the project whom are not partners of ACTRIS Data Centre.

1.4 Appointment and Term of Members

The members of the external board reflect the anticipated user community and was appointed at the first ACTRIS-2 GA. The composition of the DC-EB may be reviewed by the GA on request. Members serve in the DE-EB for the duration of ACTRIS-2 (4 years).

The ACTRIS Data Centre External Board (ACTRIS DC-EB) is set up and elected at the first ACTRIS-2 General Assembly meeting, in Rome, June 2015 with the following members
External members:

- Dr. Martijn Schaap, Netherlands Organisation for Applied Scientific Research (TNO), Netherlands

- Allison McComiskey, National Oceanic and Atmospheric Administration (NOAA), USA (supported by Betsy Andrews, NOAA)

- Dave Turner, NOAA-National Severe Storms Laboratory, USA

Internal members:

- Michael Schultz, Norwegian Meteorological Institute, Norway

- Martial Haeffelin, CNRS-IPSL / SIRTA, France

In particular, Dave Turner (NOAA), Betsy Andrews (NOAA, representing Allison McComiskey also NOAA), Michael Schultz (MetNo), Martial Haeffelin, (CNRS-IPSL / SIRTA), have been active.

2   First assessment of the services offered by the ACTRIS Data Centre

There was one web meeting with the DC-EB in July 2016 to answer questions and facilitate the work. DC-EB members and topic data centre leaders (Lucia Mona, (CNR), Ewan O'Conner, (FMI), Jacques Descloitres (CNRS) Markus Fiebig (NILU), Cathrine Lund Myhre (NILU)) were participating. Relevant presentations and documents were sent to the board by the WP10 leader, see the table in section 1.2. In addition the following was provided by the data centre leader (7 July 2016):

I. The "Terms of Reference" describe the activity and mandate of the panel. Your main aim are to

- assess "whether the data centre complies with the main plans and goals of ACTRIS." and

- "give advice to strengthen the ACTRIS Data Centre in accordance with the needs and goals of ACTRIS"

II. ACTRIS Description of work. WP10 (ACTRIS Data Centre) is starting at page 77 and describes the tasks, activities and list the deliverables of the ACTRIS Data Centre.

III. Presentation of the ACTRIS Data Centre from the ACTRIS Science meeting in Frascati, early March 2016. Dropbox link: https://www.dropbox.com/s/9z0bdqa3ermt7o7/ACTRIS-2_Data_Centre_2ndGA_LundMyhre.pptx?dl=0

IV. ACTRIS Data Management plan, including a list of all ACTRIS variables (also available at web)

V. ACRTIS Data Policy (also available at web)

VI. Web resources:

http://www.actris.eu -> ACTRIS Data Centre:

http://www.actris.eu/DataServices/Data/DataCentre.aspx

- ACTRIS Data Portal: http://actris.nilu.no (note that we will use the summer period to implement access to more tools and products through the portal, recently developed within ACTRIS)

- Topical data base repositories for ACTRIS data: Near surface data: http://ebas.nilu.no Aerosol profiles: http://access.earlinet.org/EARLINET/ Cloudnet data: http://www.cloud-net.org/data/

3   Recommendations from first assessment

The ACTRIS Data Centre is offering data and service for both internal and external users groups, and the purpose of the *Data Centre External Board* (DC-EB) of ACTRIS-2 is to assess the development and use of the data centre facility and that this is complying with the main plans and goals. The aim is to strengthen the ACTRIS Data Centre in accordance with the needs and goals of ACTRIS, for both internal and external users. Based on this the following questions were formulated and brought forward by board member Michael Schultz to the board (10. mars 2017)

1) whether the data centre complies with the main plans and goals of ACTRIS.
2) advice to strengthen the ACTRIS Data Centre in accordance with the needs and goals of ACTRIS"

These were further elaborated and detailed within the board and the following list of questions was sent to the topic data centre leaders 23 August 2017 as guidance for further work in period 2 of the project.

1. What are the most important goals for the ACTRIS data centre***** in your view?

2a. What has been achieved up to July 2017 in ACTRIS 2 wrt to the progress in the ACTRIS data center?

2b Which goals have not yet been achieved, why and what is planned to be done to achieve them?

3. Can achieving the goals be quantified? By which metric, and can you provide information on how this has been done?

3a. Do you have an overview of the users of the data centre? How many, which sector, for what purpose download users data?

3b Have you gathered feedback from users? Which feedback has been given most often? Do you have an overview of user requests?

4a. How have you been organising the entering of new data into the database?

4b How many data are still missing, are expected to come shortly, should become available in the remainder of the project?

4c How do you judge the quality of the database?

4d How do you organise quality control of the database?

4e How is data security handled?

5a. How is the web presence organised for the data centre?

5b Are there plans to develop the web portal further?

These questions with answers will be discussed in detail within the data centre and used as input, themes, and topics for discussions during in the last 2 years of the project, and in the planning of ACTRIS Data Centre in the future.