

Deliverable 9.3: ACTRIS PPP data management plan

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1 Abstract

This document defines the data policy and data management procedures in Horizon-2020 INFRADEV-2 project #739530 Aerosols, Clouds and Trace gases Research Infrastructure – Preparatory Phase Project (ACTRIS PPP). This is a living document, expected to be updated during ACTRIS PPP. This document will also be submitted to European Commission as ACTRIS PPP deliverable 9.3. The later updated versions will be for the use of ACTRIS PPP partners.

2 ACTRIS and ACTRIS PPP

Aerosols, Clouds and Trace gases Research Infrastructure (ACTRIS) is a pan-European research infrastructure, identified as a new Research Infrastructure in ESFRI Roadmap 2016. ACTRIS will provide a four-dimensional picture of short-lived atmospheric components (aerosols, reactive trace gases and cloud microphysics) that affect air quality, climate and meteorology. ACTRIS will consist of numerous observatory stations and atmospheric research chambers in various European countries, and coordinated Central Facilities assuring data quality, data storage and access to ACTRIS data and services.

ACTRIS Preparatory Phase Project (ACTRIS PPP) is a coordination and support project for the implementation of ACTRIS. It lasts from 1/2017 till 12/2019, and is funded by European Commission under INFRADEV-2 tool (Grant #739530). ACTRIS PPP aims to set up the organizational and operational frameworks of ACTRIS, making it ready to be founded as an independent legal entity.

2.1 Definitions and key terminology

In this document the key terminology is used with the following definitions:

- Raw data: Raw and cleaned data produced by measurements, surveys, or similar methods.
- Information: Raw data that has been processed, interpreted, and put to context to make it more understandable. This includes also contact lists.
- Knowledge: Conclusions and reports based on information. This includes ACTRIS PPP deliverables and other documents produced or obtained during the project.

All these are discussed in this document as data, unless specified otherwise.

• Personal data: Any data or information linked to an identifiable individual person. This includes names, personal contact information etc.

For clarity, the key terminology for ACTRIS is used in this document as follows:

- ACTRIS PPP refers to the ACTRIS Preparatory Phase Project (H2020-INFRADEV-2016-2017 GA 739530).
- ACTRIS refers to the infrastructure to be implemented.
- ACTRIS community refers to all research institutions providing data or services within ACTRIS.

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 Interim ACTRIS Council (IAC) is the council of ministry representatives and funding agency representatives nominated by ministries. This is the highest decision making body in ACTRIS for the implementation of the infrastructure.

3 Scope of ACTRIS PPP data management plan

The scope of this data management plan is to describe the data sets produced in ACTRIS PPP, and the methods and policies used for managing them. ACTRIS PPP participates in Open Research Data Pilot (ORPD), which is also taken into account in the data management plan. This data management plan is a living document, and will be updated during ACTRIS PPP.

The research data collected within H-2020 INFRAIA-project ACTRIS-2 or in other ACTRIS-related projects is not within the scope of this data management plan, nor is the research data which is to be collected within the research infrastructure ACTRIS once it is operational.

During ACTRIS PPP the main party responsible for ACTRIS PPP data management is the ACTRIS PPP office at Finnish Meteorological Institute, the party coordinating ACTRIS PPP. At the end of ACTRIS PPP the responsibilities of storing and disseminating ACTRIS PPP data will be transferred to the party coordinating the implementation of ACTRIS at that time. When an ACTRIS legal entity is established, the rights and responsibilities will be transferred to the ACTRIS legal entity.

3.1 ACTRIS PPP data

The data collected in ACTRIS PPP is not typical atmospheric research data, but rather data on the ACTRIS users and implementers, and their views on the implementation, provision and use of ACTRIS services. This data originates from surveys made during ACTRIS PPP and from the institutions participating in the project. ACTRIS PPP data also includes a lot of contact information to different organizations and individuals.

As ACTRIS PPP collects no research data, the total amount of data is estimated to be small, less than 1 Gb. For this reason there are no resources allocated specifically for ACTRIS PPP data management, but the data management tasks are included in work packages collecting the data, and in the general project management in WP9.

3.2 Types of data collected or produced within ACTRIS PPP

There are three types of data collected within ACTRIS PPP. These are:

 Documents, including but not limited to, project documentation, project deliverables, and other documents produced in the project, contracts, and CVs. Also documents prepared for / by the Interim ACTRIS Council (IAC) belong to this category.

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- Contact information of ACTRIS PPP beneficiaries, linked third parties and associated partners, national ACTRIS contact persons and organizations related to ACTRIS. These lists include names, affiliations and e-mail addresses of individual persons working at the institutes.
- Raw and processed data collected through surveys and interviews within ACTRIS PPP. This data contains views how ACTRIS should be organized, and what socio-economic impact ACTRIS services have now and in the future.

The management policies and procedures of these three types of data differ from each other in some aspects, but follow the same general ACTRIS PPP data policy described in next chapter. The three data types are then described in detail one by one.

4 General data policy in ACTRIS PPP

The main principle of ACTRIS, and also ACTRIS PPP, is to have as open data policy as possible, without compromising the protection of personal and confidential data. The data policy described here affects data collected and produced within the framework of ACTRIS PPP. It does not affect other ACTRIS data.

For ACTRIS PPP the data policy is as follows:

- 1. Within ACTRIS PPP data is collected for two reasons:
 - To guide and progress the implementation of ACTRIS.
 - To ensure the smooth implementation of ACTRIS PPP.
- 2. If and when data collected is relative to individual persons, the persons shall be informed about the purpose why the data is collected and how it will be used.
- 3. All data should be anonymized by removing any parameters making the data identifiable to individual persons from the rest of the data in as early stage as possible.
- 4. Retention of data must be carefully considered and if some data are no longer necessary they shall be destroyed.
 - All personal data that is limited to ACTRIS PPP shall be destroyed after the end of the project.
 - If any other data than personal data collected during ACTRIS PPP remains relevant to ACTRIS after the project, it shall be transferred to the party coordinating ACTRIS after ACTRIS PPP, which will store and use it under the same or similar conditions as ACTRIS PPP.
- 5. Data security and storage must be in accordance with the sensitivity of the data.
- 6. Access to data shall be secured, well defined and shall be in accordance with long-term preservation.

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- 7. All project deliverables are public, unless marked confidential in the Grant Agreement. The deliverables will be openly available at ACTRIS web site <u>www.actris.eu</u>.
- 8. Other project documents than deliverables are public, unless they contain sensitive data or are declared confidential by European Commission or by Interim ACTRIS Council. As default the project documentation shall be available at ACTRIS web site <u>www.actris.eu</u>.
- 9. All data sets containing personal data shall be characterized in a form stating the type, collection method and purpose of the data, and where and for how long the data will be stored. This form shall also identify who is in charge of keeping the data set and who has access to it.
- 10. This data policy comes into force at the time the ACTRIS PPP data management plan is submitted and distributed to ACTRIS PPP beneficiaries. It does not affect actions taken before that time, but does affect later actions for the data collected before that time.

4.1 FAIR data

ACTRIS PPP participates in Open Research Data Pilot, which requires the policy of FAIR data (findable, accessible, interoperable and re-usable research data). As most of ACTRIS PPP data is not research data, the concept of FAIR data is not applicable as such for most of ACTRIS PPP data. The only ACTRIS PPP data that can be considered research data are the answers to different questionnaires conducted within ACTRIS PPP. This data contains personal data when collected, but shall be anonymized in as early stage as possible. The following sub-chapters address only this data.

4.1.1 Making the data findable

The data will be accompanied with metadata clarifying the meaning of the data and how the data has been collected. The metadata can be provided without the actual data, if requested. Data set naming should clearly describe the content of the data.

4.1.2 Making the data accessible

As the estimated interest to the survey data outside ACTRIS community is very limited, these data will be available for use outside ACTRIS PPP or ACTRIS only upon request made to ACTRIS PPP office or later to other party coordinating ACTRIS. This data is very different than the observational data produced by ACTRIS, and does not fit into the concept of ACTRIS Data Centre.

4.1.3 Making the data interoperable

The data will be stored in a format readable by commonly used data management tools or office software. The data sets are small and specified, so direct automatic interoperability of the data with other external data sets is not sought for.

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4.1.4 Increase data re-use

As the processed data will be public, no licences are needed for re-use of the data, as long as the data source is acknowledged.

4.1.5 Allocation of resources

The amount of data produced by ACTRIS PPP is rather small, and therefore there are no resources specifically allocated for making the data FAIR. The resources for data collection are allocated in the work packages and tasks collecting the data. Making the data available is under the responsibility of work package 9 (ACTRIS PPP management).

4.2 GDPR compliancy

The ACTRIS PPP data management plan aims to fulfil the requirements of EU regulation 2016/679 General data Protection Regulation (GDPR), taking effect in 25.5.2018. This chapter describes the ACTRIS PPP data management procedures from GDPR point-of-view. As GDPR applies only to personal data, the following protocols are not required for non-personal or anonymized data. It is worth noting, that most of the personal data collected during ACTRIS PPP include only names, work positions and contact details. CVs of individual persons include more personal data. The position of data protection officer will be established at FMI in autumn 2017, after which his/her approval for this data management plan will be sought for.

4.2.1 Single set of rules and one-stop shop

As FMI is coordinating ACTRIS PPP, the project data management is under the supervision of Finnish GDPR Supervisory Authority (SA). For individual tasks collecting and using personal data in other countries, the data management is under the national SAs of those countries.

4.2.2 Responsibility and accountability

The responsibility of protection and use of personal data is on the party collecting the data. For surveys and questionnaires it is the leader of the work package conducting the survey. The survey and questionnaire answers shall be anonymized in as early stage of the process, and data making it possible to connect the answers to individual persons shall be destroyed. The party responsible for e-mail lists etc. is ACTRIS PPP office at FMI.

4.2.3 Consent

The consent of the survey participant will be asked in all surveys conducted within ACTRIS PPP. This will include a description how and why the data is to be used. The survey participants will not include children or other groups needing a supervisor. More information on the survey and consent procedures is provided in ACTRIS PPP deliverables 10.1 and 10.2. Also, when asking for someone's contact information, the party asking shall explain why this information is asked.

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4.2.4 Data Protection Officer

ACTRIS PPP will not have its own data protection officer, but will use the services and expertise of FMI data protection officer, to be appointed in autumn 2017.

4.2.5 Pseudonymisation

Due to the limited amount and less harmful nature of the personal data that is collected within ACTRIS PPP, no pseudonymisation will be used. Data will be protected by other means of data security.

4.2.6 Data breaches

In case of data breaches, the person responsible for the breached data shall notify the both the national SA and ACTRIS PPP office as soon as possible, but at maximum during 72 hours. The individuals whose personal data were breached shall also be notified without undue delay. It is worth noting, that due to the nature of personal data collected during ACTRIS PPP the damage that can be caused by a data breach is expected to be limited.

4.2.7 Right to erasure

If a person wishes his/her personal data to be erased, that can and shall be done. It is easy to do from the contact lists controlled by ACTRIS PPP office or WP leaders conducting surveys. If a person wants his/her personal data to be removed from a survey, the non-personal data shall remain in the analysis of the survey.

4.2.8 Data portability

By default the personal data collected within ACTRIS PPP will be in in electronic form, mostly in Microsoft Excel file forms .xls or .xlsx. These files can be read by Microsoft Excel, which is commonly used worldwide. If a user requests to have his/her personal data for another outside ACTRIS PPP, there should be no technical limitations for providing them.

4.2.9 Privacy by design and by default

Personal data collected during ACTRIS PPP will be used only by project partners, including beneficiaries, linked third parties and Interim ACTRIS Council, and only for purposes needed for the implementation of ACTRIS. Even within the project, if someone of the project consortium asks for personal data, the person holding the data should consider whether that data is needed for the implementation of the project. If personal data is provided, the data shall not be distributed further within or outside the project.

4.2.10 Records of processing activities

Records of data processing and plans for the use of data will be kept by ACTRIS PPP office and work package leaders of those work packages that collect personal data.

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5 Data type descriptions and management

5.1 Project documentation

5.1.1 Data collected

The data consists of ACTRIS PPP deliverables and other project documents, including documents provided for / by IAC.

5.1.2 Collection method

These documents are created by ACTRIS PPP beneficiaries within the project, using their knowledge, raw data collected during the project, and other sources of information.

5.1.3 Ethical issues

Some deliverables are marked confidential by the European Commission, and IAC is expected to classify some documents confidential. Some documents (contracts, CVs) include personal information. Some of the work is also performed outside EU, but not parts collecting or using personal information. These ethical issues are described in ethics deliverables 10.5. and 10.6.

5.1.4 Access management

Public project documentation will be available via ACTRIS web site <u>www.actris.eu</u>. Confidential documentation, if relevant to ACTRIS PPP partners or IAC, will be made available via <u>www.actris.eu</u> only to those who need access to the documents. Different levels of access rights can be used.

5.1.5 Storage and back-up during ACTRIS PPP

During ACTRIS PPP the documents will be stored and backed up at ACTRIS server hosting the ACTRIS web site. A back-up copy will also be kept at ACTRIS PPP office at Finnish Meteorological Institute (FMI). Those documents that are available only in paper form will be stored at FMI register and a copy at ACTRIS PPP office in a locked cabinet.

5.1.6 Long-term preservation

After the end of ACTRIS PPP the documents will be transferred to the party coordinating ACTRIS after the end of ACTRIS PPP.

5.1.7 Retention

All ACTRIS PPP documentation will be kept for later use after the end of the project, unless specified otherwise.

5.1.8 Sharing policy

All project deliverables are by default public, except those marked confidential in the Grant Agreement. Other project documentation is public except for those documents containing personal or sensitive data, and those documents declared confidential by IAC.

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5.1.9 Data security

ACTRIS server is maintained by University of Clermont-Ferrand in France, who are also responsible for keeping the server data security up to date. The backups at FMI will be protected by FMI data security measures. Non-electronic data will be stored in a locked cabinet at ACTRIS PPP office, and later at the party coordinating ACTRIS after the end of ACTRIS PPP.

5.1.10 Responsible party

The party responsible for storage, access, and availability of ACTRIS PPP documentation is ACTRIS PPP office, and later the party coordinating ACTRIS after the end of ACTRIS PPP.

5.2 Personal and institutional contact information

5.2.1 Data collected

The data consists of lists of ACTRIS PPP beneficiaries, linked third parties and associated partners, ACTRIS national contact persons and IAC member contact information. The lists contain names, affiliations, roles and contact information of individual persons contributing to ACTRIS PPP, ACTRIS and IAC. Also Work Package specific contact lists are expected to be set up during the project.

5.2.2 Collection method

The contact information has been / will be asked by ACTRIS PPP office from ACTRIS PPP beneficiaries, from national ACTRIS contact persons, from ministry representatives or ESFRI delegates of potential ACTRIS member countries and from known or potential users of ACTRIS data or services identified within ACTRIS PPP or in the past projects. Contact information is also collected from new associated partners to the project.

5.2.3 Ethical issues

These data contain personal information, making it subject to ethical issues. More details on the ethical aspect of these data are provided in deliverable 10.6.

5.2.4 Access management

These data will not be publicly available as such. The lists of different institutions participating in ACTRIS PPP can be published in ACTRIS web site <u>www.actris.eu</u> without the contact details. The lists including contact information might be distributed to ACTRIS PPP beneficiaries or to national ACTRIS contact persons if that is needed for the implementation of ACTRIS PPP. ACTRIS PPP office will manage the access rights to these data.

5.2.5 Storage and back-up during ACTRIS PPP

These data will be stored and backed up by ACTRIS PPP office. Work Package specific contact lists will be stored and backed up by the respective Work Package leaders.

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5.2.6 Long term-preservation

After the end of ACTRIS PPP there is no legal ground for the project partners to keep personal contact information data, and therefore they shall be destroyed.

5.2.7 Retention

At the end of ACTRIS PPP the contact information collected during ACTRIS PPP will be destroyed.

5.2.8 Sharing policy

The contact information data will not be made publicly available. They can be shared between ACTRIS PPP participants for purposes relevant to the implementation of ACTRIS.

5.2.9 Data security

Contact information stored at ACTRIS PPP office will be secured by FMI data security and firewall. Work Package specific contact information collected in the work packages are secured by the security protocols of the respective work packages.

5.2.10 Responsible party

The party responsible for storage, access and availability of general contact information data within ACTRIS PPP is ACTRIS PPP office. Work Package specific contact information is in the responsibility of the respective work package leader.

5.3 Surveys and questionnaires

5.3.1 Data collected

The data consists of cost estimates and opinions of individual persons on various aspects of ACTRIS, mainly attributed to implementation of the research infrastructure and to added value created by it.

5.3.2 Collection method

These data are collected via surveys, questionnaires and interviews of ACTRIS PPP beneficiaries, national ACTRIS contact persons, and known or potential users of ACTRIS data or services identified within ACTRIS PPP or in the past projects.

5.3.3 Ethical issues

As raw data these data often include personal data, typically name and contact information of the person answering to the questions. In processing the data the personal and personally identifiable data shall be separated from the other data in as early stage as possible, making the rest of the data anonymous and thus publishable. Only the anonymized data shall be used for analysis. The ethical issues linked to collection and use of these data are explained in ACTRIS PPP deliverables 10.1, 10.2 and 10.6.

5.3.4 Access management

As the survey data is not expected to be in interest of a large public, it will be available for use outside ACTRIS PPP or ACTRIS only upon request made to ACTRIS PPP office or later to the party coordinating ACTRIS after the end of ACTRIS PPP.

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5.3.5 Storage and back-up during ACTRIS PPP

During ACTRIS PPP the raw and processed data and the informed consent forms will be stored at the institute that is leading the Work Package in charge of collecting and analysing the data. A back-up copy will also be kept at ACTRIS PPP office or at ACTRIS server.

5.3.6 Long-term preservation

After the end of ACTRIS PPP the data will be transferred to the party coordinating ACTRIS after the end of ACTRIS PPP. No personal data will be transferred.

5.3.7 Retention

Personal data may be stored during the project only for keeping track who has answered to the questionnaire. After the end of ACTRIS PPP this personal data shall be destroyed. The data without personal information will be stored at the party coordinating ACTRIS after the end of ACTRIS PPP.

5.3.8 Sharing policy

When personal data have been removed, the rest of the data are public and can be shared to anyone, as long as ACTRIS PPP is acknowledged as the data source.

5.3.9 Data security

The data are secured by the data security measures and protocols of those institutes where it is stored. The back-up data sets at FMI will be secured by FMI data security measures and protocols.

5.3.10 Responsible party

The party responsible for storage and analysis the survey data collected in ACTRIS PPP is the work package leader of the work package collecting and analysing the data. The back-up data and access to the data are under the responsibility of ACTRIS PPP office, and later the party coordinating ACTRIS after the end of ACTRIS PPP.