

Deliverable 2.3: ACTRIS data policy

Authors:

Pirjo Kontkanen, Sabine Philippin, Cathrine Lund Myhre, Markus Fiebig, Richard Rud, Ulla Wandinger

Work package no	WP2
Deliverable no.	D2.3
Lead beneficiary	UHEL
Deliverable type	X R (Document, report)
	DEC (Websites, patent fillings, videos, etc.)
	OTHER: please specify
Dissemination level	X PU (public)
	CO (confidential, only for members of the Consortium, incl. Commission)
Estimated delivery date	30.6.2019 (M30)
Actual delivery date	29.10.2018
Version	Final
Reviewed by	National ACTRIS consortia and ACTRIS community
Accepted by	Sanna Sorvari
Comments	The document has been approved by IAC 25.10.2018.

ACTRIS PPP (www.actris.eu) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

Contents

1. Purpose	2
2. Definitions	2
3. Guiding principles	3
4. Existing European legal frameworks and data policies	4
5. Data lifecycle and management	4
6. Access and use of ACTRIS data and digital tools	5
7. Intellectual property rights	6
7.1. Ownership	6
7.2. Third party rights	6
7.3. Access rights for the ACTRIS ERIC	6
8. Data policy management and review	6
9. References	7

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

ACTRIS PPP WP2 / Deliverable 2.3

1. Purpose

The purpose of this data policy document is to provide guidelines and describe the general principles for the use, sharing, and exploitation of and the access to ACTRIS data and digital tools.

2. Definitions

"ACTRIS data" means ACTRIS data from observational National Facilities and exploratory National Facilities complying with the procedures established within ACTRIS.

ACTRIS data levels are:

- ACTRIS level 0 data: Raw sensor output. Native resolution, metadata necessary for next level.
- ACTRIS level 1 data: Calibrated and quality assured data with minimum level of quality control.
- ACTRIS level 2 data: Approved and fully quality controlled ACTRIS data product or geophysical variable.
- ACTRIS level 3 data: Elaborated ACTRIS data products derived by post-processing of ACTRIS Level 0 -1 -2 data, and data from other sources. The data can be gridded or not.

"ACTRIS data from observational National Facilities" means the ACTRIS variables resulting from measurements that fully comply with the standard operating procedures (SOP), measurement recommendations, and quality guidelines established within ACTRIS.

"ACTRIS data from exploratory National Facilities" - means datasets that fully comply with recommended experimental procedures and quality guidelines established within ACTRIS, produced at/by ACTRIS exploratory platforms.

"ACTRIS synthesis product": Data products not under direct ACTRIS responsibility from e.g. research activities, citizen science, for which ACTRIS offers repository and access.

"ACTRIS digital tools" means tailored codes and software for processing and visualization of ACTRIS data, production of ACTRIS data products, and for data analysis and research.

"Background" means data, databases, data products, data related tools and software or any other intellectual property rights generated before the implementation of the ACTRIS ERIC.

"FAIR principles" means guiding principles to make data Findable, Accessible, Interoperable and Reusable.

"Side-ground" means data, databases, data products, data related tools and software or any other intellectual property rights which are not generated for ACTRIS by the Central Facilities and National Facilities but are created in parallel to it.

"Machine to machine interface (M2M)" means a network of two or more machines (software) that communicates without the need of human interaction, usually using well-defined protocols for information exchange.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

"User" means a person, a team, or an institution from any sector, including public and private sector, making use of ACTRIS data or other ACTRIS services, including access to ACTRIS facilities.

For other definitions see ACTRIS glossary (reference in section 9).

3. Guiding principles

ACTRIS shall provide effective access for a wide user community to its resources and services, including high-quality data and digital tools, to foster innovation and to apply FAIR principles to the data and metadata.

ACTRIS ERIC supports the European Commission's approach: "As open as possible, as closed as necessary". It is expected that access to ACTRIS data is free-of-charge and that ACTRIS data should be fully available for others to use with as few restrictions as possible.

However, reasonable restrictions that are still in line with open access principles may be implemented for specific data sets, especially when access to them could jeopardize a potential industrial/commercial use, violate the rules on personal data protection or on confidentiality for security reasons. Potential restrictions will be proposed by the Data Centre Management board and more detailed rules of managing the process shall be provided in the ACTRIS ERIC internal rules.

For technical reasons, access to ACTRIS data through machine to machine (M2M) interfaces may be constrained for a certain period of time when specific machines acquire large amounts of data at the expense of the general User. In case of any limitations over time, consideration should be given to whether the current system is to be upgraded.

Users of ACTRIS data and digital tools are normally expected to make resulting publications available through open access repositories. Open source for software is encouraged and recommended, when possible. Users are also expected to cite ACTRIS when using ACTRIS data in publications.

ACTRIS ERIC shall respect and comply with any European and national legislation as applicable regarding the protection of personal data and privacy as well as environmental science data.

Ethical guidelines approved by the ACTRIS ERIC General Assembly for ACTRIS shall be applied to this data policy.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

4. Existing European legal frameworks and data policies

This data policy takes into account the overall European legal framework related to environmental data, information and databases, in particular the

- Aarhus Convention (access to environmental data),
- Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 on establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (sharing of the spatial information among public sector organisations and access to the spatial data),
- Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases,
- Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs,
- Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information and amendments to it,
- European Charter for Access to Research Infrastructures (principles and guidelines for access policies), and
- OECD Principles and Guidelines for Access to Research Data from Public Funding.

This data policy acknowledges the ongoing work of the European Commission to foster the FAIR principles for data access, sharing and use. This data policy also acknowledges the relevant international initiatives for the observation of the Earth System (e.g. GEOSS) and national policies and legislations with the aim of full and open exchange of data and metadata and of providing access to elaborated data products with minimum time delay and at possible no costs.

5. Data lifecycle and management

The ACTRIS Data Centre shall provide ACTRIS data from National Facilities and Topical Centres. ACTRIS data from the National Facilities and the Topical Centres shall be submitted to the Data Centre within a specified deadline after the measurements are performed. The ACTRIS Data Centre shall make the data available to the Users as soon as quality control procedures are done and potential issues are solved. ACTRIS data shall be available through the Data Centre.

ACTRIS is only given a right to use the data provided by the National Facilities, the National Facilities being entitled to license their data to others as well. However, the ACTRIS label on the data is uniquely defined and can only be given by the ACTRIS ERIC to data provided through the Data Centre, unless otherwise agreed.

ACTRIS data is preserved for long-term archiving. As a part of the archival process and in order to ensure good data management, ACTRIS is documenting each step of the data lifecycle, including collection, curation, data production, preservation, publishing and use of data. Details of the data lifecycle and data management are provided in the ACTRIS Data Management Plan.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

6. Access and use of ACTRIS data and digital tools

ACTRIS data and digital tools shall be available according to license conditions for both non-commercial and commercial purposes. The aim is to use a small defined suite of licenses with similar kind of principles for both ACTRIS data and the digital tools. It is intended to use licenses like Creative Commons license CC BY 4.0 for data and metadata and open source licenses for software. Data provided through access to ACTRIS facilities shall be handled in accordance with the ACTRIS Access and services policy. These data may be regarded as ACTRIS data if the requirements for ACTRIS data are fulfilled. Data that has been collected before the establishment of the ACTRIS ERIC and not considered as ACTRIS data may also be made available for Users. The aim is to apply the same principles of licensing to this data whenever feasible.

The data policy shall be implemented in compliance with the ACTRIS access and service policy.

Open, free, and easy access is the guiding principle, but in case of specific agreements or for other justified reasons agreed upon with the data originators, restrictions may be allowed so that access to some ACTRIS data, digital tools and services may be available only after a certain period of time or require authentication and separate permission.

ACTRIS ERIC may also apply a registration process if seen feasible. Furthermore, access to specific services offered by the Data Centre (e.g. in case of limited capacity) may require a selection process that is then implemented following the principles described in the ACTRIS access and service policy.

The persons and organisations, that have originally generated ACTRIS data or digital tools or produced different levels of ACTRIS data, must be attributed. For this purpose, the ACTRIS ERIC will have the responsibility that the most feasible technical solution for attaching identifiers to the ACTRIS data and digital tools is implemented. Clear information about the procedure to acknowledge ACTRIS and attribute the contributors in the future use of the ACTRIS data and digital tools, will also be established.

The data originators are responsible for clarifying and identifying who should receive attribution.

Attribution should be given to ACTRIS in case substantial amount of metadata is harvested by external metadata services.

No warranties are given by the ACTRIS ERIC, the National Facilities, Data Centre or Topical Centres and they disclaim any express and implied warranties of non-infringement of third party intellectual property rights, patentability, safety, industrial or commercial suitability or fitness for a particular purpose of the data or digital tools provided in accordance with this policy.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

7. Intellectual property rights

7.1. Ownership

Ownership and intellectual property rights to any data or data related tools, databases or software or any other products that are generated within ACTRIS shall belong to those who have generated them in accordance with the applicable legislation. Those who have jointly generated data or data related tools, databases or software or any other products shall have joint ownership and they shall agree separately upon the conditions of the joint ownership.

Those who have generated Background or Side-ground shall own all rights to the Background and Sideground.

7.2. Third party rights

Third party rights are intellectual property rights which the ACTRIS ERIC, the National Facilities and/or the Central Facilities have not generated themselves and do not own. If ACTRIS ERIC, the National Facilities, or the Central Facilities use such third party rights as part of their own intellectual property, they have to ensure that the intellectual property rights of the third parties are respected and that they have the authorisation of the right holders to grant access rights in accordance with this policy.

7.3. Access rights for the ACTRIS ERIC

Access rights to Background and Side-ground are agreed upon separately in writing. Access rights to the data that has been collected before the establishment of the ACTRIS ERIC (and that is not considered as ACTRIS data) should be given on similar conditions as access rights to any other Background.

The National Facilities and Central Facilities give to the ACTRIS ERIC a worldwide, free of charge, perpetual, transferable, non-exclusive right to use for any purpose the ACTRIS data, digital tools and related documents generated by them for ACTRIS. This right includes, but is not restricted to, the right to modify, reproduce, sublicense, incorporate to other data, other databases or other tools as well as produce new developments. The right to modify does not include the right to falsify data but scientific integrity must always be followed and respected and the use must be in line with the ACTRIS ethical guidelines.

If ACTRIS ERIC generates new developments they belong to the ACTRIS ERIC.

8. Data policy management and review

The Head Office shall administer the ACTRIS data policy and ensure that it is respected and adopted within ACTRIS by monitoring its implementation.

ACTRIS ERIC shall review and, when needed, update this data policy as a part of the regular reviews of ACTRIS and its operations. Amendments to this policy shall be approved by the ACTRIS ERIC General Assembly.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530

9. References

Aarhus Convention http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf.

ACTRIS Data Management Plan

ACTRIS Ethical guidelines

ACTRIS glossary https://www.actris.eu/About/ACTRIS/ACTRISglossary.aspx.

Commission working group on FAIR principles <u>http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3464</u>.

Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases <u>http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:31996L0009</u>.

Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information and amendments to it <u>http://eur-lex.europa.eu/legal-</u> content/en/ALL/?uri=CELEX:32003L0098, <u>http://eur-lex.europa.eu/leji/dir/2013/37/oj</u>.

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) <u>http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32007L0002</u>.

Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs <u>http://eur-lex.europa.eu/legal-</u>content/EN/ALL/?uri=CELEX%3A32009L0024.

European Charter for Access to Research Infrastructures https://ec.europa.eu/research/infrastructures/pdf/2016_charterforaccessto-ris.pdf.

Force 11 The Fair Data Principles <u>https://www.force11.org/group/fairgroup/fairprinciples.</u>

Guidelines on Fair Data Management in H2020

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oadata-mgt_en.pdf.

OECD Principles and Guidelines for Access to Research Data from Public Funding https://www.oecd.org/sti/sci-tech/38500813.pdf.

The Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities of 22 October 2003 <u>https://openaccess.mpg.de/Berlin-Declaration</u>.

The FAIR Guiding Principles for scientific data management and stewardship <u>https://www.nature.com/articles/sdata201618</u>.

ACTRIS PPP (<u>www.actris.eu</u>) is supported by the European Commission under the Horizon 2020 – Research and Innovation Framework Programme, H2020-INFRADEV-2016-2017, Grant Agreement number: 739530