

## Deliverable D9.4: Meeting minutes of the first ACTRIS PPP annual meeting

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# 1 ACTRIS Community meeting and ACTRIS PPP meeting in Bucharest

## 1.1 Purpose of the meetings

The purpose of this combined meeting was to get the wider ACTRIS community (including beneficiaries, linked third parties and associated partners of the H-2020 projects EUROCHAMP 2020, ACTRIS-2 AND ACTRIS PPP) informed and involved in discussion about the implementation ACTRIS as a research infrastructure, and the work required for it. As these communities are the originators of ACTRIS data and services, it is important to hear and take into account their point-of-view in the process.

## 1.2 Meeting agenda

The original meeting agenda is presented below. There were some modifications to this original agenda, the main ones being:

- The first two sessions of ACTRIS PPP meeting on Wednesday were moved to Thursday morning.
- There was an additional session on WP3-WP4-WP5 interlinkages on Friday morning.
- There was an additional session on WP8 update on Friday.
- The session took more time than scheduled, to allow the necessary discussion. This postponed the agenda toward evening of each day.

The sessions were also divided further, and the meeting minutes follow the detailed agenda where it differs from the general agenda presented below.

		Monday September 11, 2017	Tuesday September 12, 2017	Wednesday September 13, 2017	Thursday September 14, 2017	Friday September 15, 2017	
09:00	09:30		ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger	ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae	ACTRIS-PPP WP1 Moderator: Sanna Sorvari	ACTRIS-PPP WP4 Moderator: Doina Nicolae	
09:30	10:00			Introduction to ACTRIS financial concept Moderator: Carmela Cornacchia	ACTRIS-PPP WP2 Moderator: Pirjo Kontkanen	ACTRIS-PPP WP5 Moderator: Ulla Wandinger	
10:00	10:30		Coffee break				Coffee break
10:30	11:00			Access to ACTRIS-RI services and data Moderator: Sabine Philippin	Interlinks between ACTRIS NFs and CFs Moderator: Markus Hermann	ACTRIS-PPP WP3 Moderator: Carmela Cornacchia	
11:00	11:30		Lunch break			Lunch break	Lunch break
11:30	12:00			Welcome and objectives of the meeting Moderator: Doina Nicolae	ACTRIS-RI Central Facilities Moderator: Doina Nicolae		
12:00	12:30		ACTRIS National Facilities Moderator: Ulla Wandinger			ACTRIS-PPP introduction, project progress Moderator: Sanna Sorvari	ACTRIS-PPP WP8 Moderator: Nikos Mihalopoulos
12:30	13:00			Coffee break	Coffee break		
13:00	13:30		ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger			ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae	Trip and dinner
13:30	14:00			Coffee break	Coffee break		
14:00	14:30	ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger	ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae			Trip and dinner	Splinter meetings
14:30	15:00			Coffee break	Coffee break		
15:00	15:30	ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger	ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae			Trip and dinner	Splinter meetings
15:30	16:00			Coffee break	Coffee break		
16:00	16:30	ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger	ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae			Trip and dinner	Splinter meetings
16:30	17:00			Coffee break	Coffee break		
17:00	17:30	ACTRIS National Facilities (cont.) Moderator: Ulla Wandinger	ACTRIS-RI Central Facilities (cont.) Moderator: Doina Nicolae			Trip and dinner	Splinter meetings
17:30	18:00			Coffee break	Coffee break		

Workshop on ACTRIS National Facilities, Central Facilities and access to ACTRIS services and data  
 ACTRIS-PPP meeting

## 2 Meeting minutes session by session

Below are the meeting minutes from each session, consisting of main discussion points and agreed action items. We do not present the discussion minutes in detail. The presentations mentioned in the minutes (as unique identification numbers appearing also in the file names) have been distributed to meeting participants and national ACTRIS contact persons as .pdf files, and these files will also be made available to registered users at ACTRIS web site.

These meeting minutes have been collected by the listed authors of this document, and combined by ACTRIS PPP project manager Niku Kivekäs.

## 2.1 Monday

### 2.1.1 Welcome and objectives of the meeting

**Presentation 20170911 01 by Doina Nicolae**

### 2.1.2 Introduction to ACTRIS RI

**Presentation 20170911 02 by Niku Kivekäs**

Discussion points:

- If ACTRIS is to be seen as a closed system with a single entry point, how to deal with the numerous scientific activities the ACTRIS data and service originators have outside the ACTRIS framework? This remains to be defined.
- The term “user” is reserved to users of ACTRIS, those who come from outside the ACTRIS data and service production system. Note that ACTRIS data or service originators can also be users when they use the ACTRIS data.
- The CFs are not expected to be fully implemented by the time they answer to the CF call. Some CF calls can also be made later (even beyond 2025) if the concept and needs are not mature enough at this point.
- ACTRIS can only set the NF requirements, and countries will propose the NFs where they want to invest to meet these requirements. The official approval process will be done once the legal entity is in place, but upgrading the sites should start as soon as the requirements are defined.
- As countries commit to funding ACTRIS for defined times, ACTRIS cannot claim to exist forever.

### 2.1.3 National Facilities – Observational platforms

**Presentation 20170911 03 by Ewan O’Connor and Gelsomina Pappalardo on behalf of Ulla Wandinger**

Discussion points:

- Parts of the community were not happy with the presented NF requirement framework. The main disagreement was whether the NFs should be divided in different categories depending on the type of data they produce, with each category having its own minimum threshold of data parameters measured. This was seen as an obstacle for bringing in new sites and for enhancing interdisciplinary research. The issue was left open at this point.
- Minimum requirements and optimum setup require realistic cost book estimates for stakeholders. The requirements should not go too deeply in technical details.
- Complementary observations (measurements that are needed but are not ACTRIS variables, such as basic meteorology) should be defined according to respective outside standards (WMO, ICOS...).

- The calibration of sun photometers in US should not become a problem. AERONET 200 km radius limit between sites will not apply in ACTRIS.
- Cloud and aerosol remote sensing measurements have a lot of synergy, and an optimum site would measure both. Instruments are to be calibrated according to the categorization of the instrument, not the station.
- ACTRIS should only include data where ACTRIS controls the entire value chain and has the capacity, the data has significant users, and the activity is not conflicting with other RIs.  
NDACC ok (raw data -> ACTRIS DC -> NDACC database)  
Remote sensing of ozone, NO<sub>x</sub>, VOCs, Ammonia: The conditions are met, and the NDACC community is working with ACTRIS DC and TC candidates to design the needed procedures within ACTRIS.  
Remote sensing of water vapour is not to be included in this stage. This might be included in the future.
- In aerosol in situ observations everything should be at least NRT, except at those sites where concentrations are too low for NRT measurements.
- Cloud in situ observations, who to take the lead in writing this part of the NF requirements? This was left open.
- In trace gas in situ NRT is difficult for instrumental reasons. Future development of instruments might solve this problem.
- Minimum requirements for all NFs:  
Long term funding with commitment,  
skilled personnel,  
delivery of data to DC,  
instruments that are quality assured at TCs.
- Only the measurements meeting ACTRIS requirements get an ACTRIS label
- Optimally the NF definitions should eliminate the possibility that stations produce ACTRIS data without being ACTRIS NFs.

## 2.2 Tuesday

### 2.2.1 National Facilities – Simulation chambers and laboratories

#### **Presentation 20170912 01 by Jean-Francois Doussin**

Discussion points:

- For simulation chambers the approach of minimum and optimum requirements is difficult, as the chambers are so diverse, and are not designed to create a network. The chamber characterization is more important than the number of instruments. Chambers also have a different data flow, as they typically don't produce data on ambient atmosphere, but data on user experiments. This creates a need

for embargo periods. The EUROCHAMP community asks for clear questions from ACTRIS PPP WP5, but such are not currently available.

- EUROCHAMP data will be available via ACTRIS Data Centre. The details of this will be defined at later stage.

## 2.2.2 National Facilities – General discussion

### **Presentation 20170912 02 by Ulla Wandinger**

Discussion points:

- Some parties support strongly the inclusion of airborne platforms in ACTRIS. The boundaries with other RIs and networks (IAGOS, EUFAR) need to be well defined. Ship-based platforms have the same issue. It is also question of how much can ACTRIS control the access and use of these platforms (Participation or design of a campaign). Some platforms have fixed ACTRIS instruments that will be present in all campaigns.

- Mobile platforms can be very expensive to use.

## 2.2.3 Access to ACTRIS RI services and data

### **Presentation 20170912 03 on access types by Sabine Philippin**

### **Presentation 20170912 04 on data access by Markus Fiebig**

Discussion points:

- Access terminology, different types of access

Virtual access – DC – free access

Physical access – TC, NF – competitive access

Remote access – DC, TC – competitive access

Users: categories from ESFRI: location information (EU or non-EU) is important

Access units: quantitative units for services to be able to track a cost for the service. No need for a common unit for all the TC, etc.

- Access modes:

wide access

excellence-driven access

market-driven access

- The terminology must be clear between services and operational support. Operational support is for NFs for producing ACTRIS data, services are for users and are going through SAMU.

- There might be capacity issues. Will operation support be prioritized? A good estimate of the need for operation support (affecting capacity need and financing) will come through the NF process.

- Provision of physical access to NF is expected to be i) optional to selected observational platforms only (financial and technical capacity) and ii) mandatory to the exploratory platforms. Minimal requirements of NF for physical access provision will have to be defined.
- ACTRIS data levels:
  - 0: raw sensor outputs, native resolution, metadata necessary
  - 1: calibrated and qualified
  - 2: approved and fully quality controlled
  - 3: post-processing from 0, 1, 2 and data from other sources
  - 4: ACTRIS synthesised products
- Near real time (NRT) = 3 days
- Real real time (RRT) = 3 hours
- The exact definitions of NRT and RRT will be checked so that they will be in line with other RIs and research communities.
- Data originator = The NF (or CF) producing the data
- Data provider = ACTRIS Data Centre providing the data to data users
- ACTRIS data and products must be licenced. This should be addressed in the ACTRIS data policy.

## 2.2.4 Central Facility baseline document

### **Presentation 20170912 05 by Markus Hermann**

Discussion points:

- Contributing stations will not be mentioned in the baseline document, but will be defined at a later stage.
- CFs do not offer scientific research services. Technical development yes. How to keep excellent scientific quality in ACTRIS needs to be considered.
- WP7 will provide the procedures for updating / adding / removing CFs or parts of them.
- No constrains for the NF definition are needed in the baseline document.
- The concept papers should include an assessment of the current and future potential users. Each country should estimate the number of NFs they would be bringing in, and thereby the need of operation support.
- CF baseline and CF concepts should not define things at unit level. That is CF internal structures and will be proposed in the answers to the call. CF concept 5.1 (internal structure) cannot be removed altogether from the documents.
- Parameter first, technique second.
- The CF application needs to be state of the art, and valid for the next 8 years (2025)
- In baseline 5.2 address the needs. Minimum requirements (KPI or similar) based on identified needs.

## 2.2.5 ACTRIS Central Facilities

**Presentation 20170912 06 on ACTRIS Head Office by Sanna Sorvari**

**Presentation 20170912 07 on ACTRIS Data Centre by Cathrine Lund Myhre**

**Presentation 20170912 08 on Aerosol in-situ Centre by Markus Hermann**

**Presentation 20170912 09 on Cloud in-situ Centre by Ottmar Moehler**

**Presentation 20170912 10 on Reactive Trace Gases in-situ Centre by Reiner Steinbrecher**

Discussion points:

- HO will initially employ 8-10 persons even though the number of operations is larger.
- Data Centre units should be mentioned as a part of the data flow. Trace gas remote sensing component at DC missing. Up to the community to find out where this component could be added.
- CF concepts should identify the service capacity required and estimate the needed amount of resources and personnel. Also scaling capacity can be asked. The internal structure (units) of the CFs is not to be mentioned in the concept papers, as this is up to the consortium answering the call.

## 2.3 Wednesday

### 2.3.1 ACTRIS Central Facilities continues

**Presentation 20170913 01 on Aerosol remote sensing Centre by Doina Nicolae**

**Presentation 20170913 02 on Cloud remote sensing Centre by Martial Haeffelin**

**Presentation 20170913 03 on Reactive Trace Gases remote sensing Centre by Martine deMaziere**

Discussion points:

- Agreed on the following terminology:  
CF unit (instead of node). There might be more than one unit at the same location.  
CF director  
CF unit head.
- Contributing stations (measurements not within ACTRIS NF) are to be seen and treated as users.

### 2.3.2 ACTRIS Cost Book

**Presentation 20170913 04 by Carmela Cornacchia**

Discussion points:

- Design of the financial framework depends on the legal framework, number, type and capacities of the facilities, user strategy and stakeholders' commitment. The design begins with preparation of the Cost Book.

- Also existing resources need to be included in the cost book. The cost book needs to have the total costs of ACTRIS, as it is needed in the funding model. In case of collocation the ACTRIS-fraction of the costs is to be reported.
- The costs to implement and operate contributing stations are currently out of the scope of the Cost Book, because they are not included in the technical concepts. Should this change they will be included accordingly. The costs of activities provided by CFs to the contributing stations are to be considered when estimating CF costs.
- The cost book should include all costs needed to build up, operate and dismantle those functions of ACTRIS that are mentioned in the CF and NF concepts. Functions not planned in the concepts are not to be included in the cost book.
- A specific tool was designed to collect the cost information about a list of broad items selected to accommodate the needs in terms of resources of the Central and National Facilities.
- Description of cost items are provided in the document “Cost Estimate Guide”
- As the costs need to be clearly identified, no category “indirect costs” is included in the cost item list.
- WP3 will offer an email help desk for issues with the cost book.

### 2.3.3 Workflow between DC, TCs/NFs

**Presentation 20170913 05 by Cathrine Lund Myhre**

**Presentation 20170913 06 by Markus Hermann**

Discussion points:

- Distinction between QA and QC, which both need to be applied to both instruments/measurements and to data:
  - NFs are responsible for implementing the measurement quality assurance procedures and guidelines provided by the TCs,
  - NFs are responsible for the quality control of their measurements, the TCs will assist this measurement quality control,
  - NFs are responsible for implementing the data quality assurance procedures and guidelines provided by the DC,
  - NFs are responsible for the quality control of their data, the ACTRIS DC and the TCs will assist in the data quality control.

## 2.4 Thursday

### 2.4.1 Introduction and management of ACTRIS PPP

**Presentation 20170914 01 on ACTRIS PPP and project progress by Sanna Sorvari**

**Presentation 20170914 02 on ACTRIS PPP management (WP9) by Niku Kivekäs**

Discussion points:

- Updates were given for the status of ACTRIS in different countries. Updated table is below.

Country	Partner in ACTRIS-2	Partner in EUROCHAMP 2020	Partner in ACTRIS PPP	Included in ESFRI roadmap	ACTRIS on national roadmap	IAC status
Austria	Associated	No	Associated	No	No	
Belarus	Yes	No	No	No	No	
Belgium	Associated	No	Yes	Yes	No official roadmap Applying for ministry funding	
Bulgaria	Yes	No	Yes	Yes	Yes	
Cyprus	Yes	No	Yes	Yes	Yes (Roadmap has another name)	<b>Member</b>
Czech Republic	Yes	No	Yes	Yes	Yes	<b>Member</b>
Denmark	Associated	No	Yes	Yes	No	<b>Observer</b>
Estonia	Associated	No	Yes	Yes	No	
Finland	Yes	Yes	Yes	Yes	Yes	<b>Member</b>
France	Yes	Yes	Yes	Yes	Yes	<b>Member</b>
Germany	Yes	Yes	Yes	Yes	In evaluation	<b>Observer</b>
Greece	Yes	Yes	Yes	Yes	Yes	<b>Member</b>
Hungary	Yes	No		Yes	No	
Ireland	Yes	Yes	Yes	Yes	No	
Italy	Yes	Yes	Yes	Yes	Yes	<b>Member</b>
Netherlands	Yes	No	Yes	Yes	Yes	<b>Member</b>
Norway	Yes	No	Yes	Yes	No	<b>Observer</b>
Poland	Yes	No	Yes	Yes	No	<b>Member</b>
Portugal	Associated	No	Associated	No	No	
Romania	Yes	Yes	Yes	Yes	Yes (officially in October 2017)	<b>Member</b>
Spain	Yes	Yes	Yes	Yes	Complicated	<b>Member</b>
Sweden	Yes	No	Yes	Yes	No	
Switzerland	Yes	Yes	Yes	Yes	Will be evaluated in 2018	<b>Member</b>
UK	Yes	Yes	Yes	Yes	No official roadmap Applying for ministry funding	<b>Member</b>

EC	No	No	Yes	No		
<b>TOTAL</b>	20	10	21	21	10	<b>15</b>

- As the countries have different routes for distributing national funding, a roadmap status alone might not be a representative indicator.
- When preparing a national roadmap- and funding applications the applicants are asked to contact ACTRIS PPP office for latest international status updates. The international dimension is important for funding decisions.
- The most important decisions will be made by IAC. ACTRIS community needs to provide them good materials and arguments. This is done via ACTRIS PPP. It is also important to circulate the documents going to IAC in the ACTRIS community.
- WP8 gives argumentation for confirming the national funding authorities that ACTRIS is needed.
- It is important to maintain the unity of ACTRIS instead of dividing it to different networks.
- Good progress in ACTRIS PPP. There will be several deliverables and milestones due in December 2017, so there is still a lot of work to be done this autumn.
- Guidelines and forms for associated partnership in ACTRIS PPP are available at ACTRIS web pages.
- The upcoming Stakeholder’s Handbook should be published in December 2017. A template for national information will be provided to national contact persons in October by ACTRIS PPP office. This first Stakeholders’ Handbook does not need to give fixed numbers.
- The trademarking process for name ACTRIS is ongoing at European level. No need to trademark the national names.

## 2.4.2 ACTRIS PPP WP1

### **Presentation 20170914 03 on ACTRIS governance by Sanna Sorvari**

Discussion points:

- The “level of operation” of ACTRIS will be included in the implementation timeline to highlight that many of the facilities are already operating.
- An ethical working group will be established to guide ACTRIS PPP and IAC in ethical issues.
- Science and user forum will be established, and related events will be organized.
- Interim Science and Implementation Advisory Board (SIAB) is important for the credibility of ACTRIS.

### 2.4.3 ACTRIS PPP WP2

#### **Presentation 20170914 04 on ACTRIS legal entity analysis by Pirjo Kontkanen**

Discussion points:

- Generally parts of ACTRIS that are inside ERIC are VAT free, but for other parts the VAT exception rules differ from country to country.
- RPOs play the major role in decisions what is to be included in ERIC. Information for these discussions needs to be provided to the community.
- HO directors will be selected with an open call, but the appointment procedure of CF directors and unit heads needs to be discussed further. However, if CFs are outside ERIC, ACTRIS has no power in selecting CF personnel.
- ERIC is open to any new country that acknowledges ERIC as a legal form. New member countries can join ACTRIS later on.
- ACTRIS PPP suggests ERIC as the legal form of ACTRIS, and the form where all CFs are within ERIC.
- The RPOs contributing to CFs should start to think where they want to be in respect to the ERIC.
- Help desk for the CF/NF applications is not available as such, but questions can be pointed to PPP office, to the coordination team and to national contact persons.

### 2.4.4 ACTRIS PPP WP3

#### **Presentation 20170914 05 on ACTRIS cost book and WP3 by Carmela Cornacchia**

Discussion points:

##### **COST BOOK**

- Only cost analysis will be done now. Financial plan activities (examination of sources of revenues, gap analysis, committed funds, etc.) will start in 2018.
- The cost estimates need to be scalable.
- Cost collection must involve CF and NF principal investigators, as the estimates require more technical than administrative knowledge.
- Cost estimates have to be dated and referred to a particular version of the Technical Concepts/Final documentation so to keep trace of the updates.

##### **FUNDING MODEL**

- Different scenarios will be created for funding model to see which one best suits the member countries' needs. General principles used in other ERICs are under analysis and will be used to calculate fees. The final financial model is fixed in ERIC step 2. - Dedicated session for financial model will be organized in next ACTRIS PPP meeting.
- Expert Financial Advisory Group will be made by experts directly involved by WP3.

### 2.4.5 Interim ACTRIS Council

#### **Presentation 20170914 06 on Interim ACTRIS Council by Marjut Kaukolehto**

Discussion points:

- Discussion on the names to be included in the long list of SIAB members, to be proposed to IAC. New SIAB nominations will be collected until 22.9.2017.
- IAC meetings will take place roughly in March and October each year.
- Each country can nominate up to 3 IAC delegates.
- If some new country wants to be an observer in the IAC meeting in Rome 23-24.10, they should inform ACTRIS PPP office.

### 2.4.6 ACTRIS PPP WP7

#### **Presentation 20170914 07 on long term planning and external relationships of ACTRIS by Paolo Laj**

Discussion points:

- ACTRIS PPP and ACTRIS community need to keep in mind the big picture, including risk analysis, and not stick with details.
- ACTRIS in respect to the big networks:  
Contracts: ECMWF, Copernicus  
MoU: EMEP, WMO, AERONET NASA, EUMETNET, NDACC  
Other: ESA, GEO
- Coordination team needs to know whenever someone is representing ACTRIS.
- ACTRIS needs a long-term strategy for the stations.

### 2.4.7 ACTRIS PPP WP8

#### **Presentation 20170914 08 on Socio-economic impact of ACTRIS Council by Sebastian Mirasgedis**

Discussion points:

- For the socio-economic impact analysis include all ACTRIS and EUROCHAMP projects since 2008. Past ACTRIS and EUROCHAMP projects can be used for estimating these numbers.
- Deadline for questionnaire answers extended for a few weeks, because there have been so few answers.
- Total investments = all ACTRIS-related costs so far. HO will provide numbers based on the ESFRI proposal values to the national contact points for checking the order of magnitude of the new numbers.

## 2.4.8 Splinter meetings

There were several separate splinter meetings for ACTRIS Central Facilities and National Facilities. Notes from the splinter meetings are not included in this document, but the outcomes of the meetings are summarized in Friday 15.9. in sessions 2.5.2 and 2.5.3.

## 2.5 Friday

### 2.5.1 Interlinkages of ACTRIS PPP WP3, WP4 and WP5

#### **Presentation 20170915 01 on WP3-WP4-WP5 interlinkages by Sanna Sorvari**

Discussion points:

- Interlinkages between the cost estimation process and the Technical progresses of WP4 and WP5 were presented.
- Cost book tool will be edited such that numbers for each year will be put separately, and can therefore be extracted separately.
- The financial needs to guarantee ACTRIS sustainability (gap between CF costs and committed funds) will be examined in 2018
- CF costs will be collected in 2017 based on the past experience of user needs and the current CF plans.
- HO will provide a simple table for listing the instruments nationally to estimate the operation support needs of the CFs according to the current CF plans. This will be done together with collecting the stakeholders' Handbook information. The table should include both 2017-2020 and 2020-2025.
- NF costs will be collected in November 2017.
- Timeframe:  
January 2018: CF concepts are ready, NF requirements mostly ready > 1<sup>st</sup> cost book estimation  
Beginning of 2018: gap identification, analysis of funding model options  
June 2018: CF Consortiums known, NF requirements fixed, information on the number of NFs and instrument sets available > funding model scenarios > what is the cost of the service  
January 2019: another Cost book round > 2<sup>nd</sup> version of the analysis
- Estimation of external CF users should be included in the budgets in CF application.

### 2.5.2 ACTRIS Central Facility updates

**Presentation 20170915 02 on ACTRIS Central Facility plans overview by Doina Nicolae**

**Presentation 20170915 03 on ACTRIS Data Centre plans by Cathrine Lund Myhre**

**Presentation 20170915 04 on Cloud remote sensing Centre by Martial Haeffelin**

**Presentation 20170915 05 on Reactive Trace Gases remote sensing Centre by Martine deMaziere**

Discussion points:

- Spare instruments should be organized at national rather than CF level
- Handling procedure for external model data not clear yet at DC.
- Several CFs need more time for defining the concept. The Madrid meeting of ACTRIS-2 will be important.
- In 2025 the funders will be looking for minimum cost, minimum risk and maximum output.
- CF templates will be adjusted to the changes made in the baseline document.
- The Data Centre style flow diagrams should be used for all TCs

### 2.5.3 ACTRIS National Facility updates

**Presentation 20170915 06 on ACTRIS National Facilities by Ulla Wandinger**

Discussion points:

- The selection and labelling of sites should enhance synergy rather than follow the past network structures. One NF category should be enough.
- TCs need only the number of instruments at this point.
- Main users of ACTRIS are the data users. Their perspective should be kept in mind.
- Higher level conceptualization work in group should be established for defining the NF concepts. The following persons volunteered for the group:

Ulla Wandinger

Paolo Laj

Urs Baltensperger

Markus Hermann

Doina Nicolae

Martine deMaziere

Herman Russchenberg

#### 2.5.4 Access to ACTRIS services

##### **Presentation 20170915 07 on access for ACTRIS services by Sabine Philippin**

Discussion points:

- ACTRIS user strategy will be evaluated against the 5 ESFRI dimensions.
- User strategy should include academia, private sector and third sector. There will eventually be a service catalogue.
- ACTRIS access policy and user strategy are highly connected.
- CF service costs need to be identified.
- No threshold amount of CF services available to users should be given at this point, but a minimum capacity of service provision is expected.
- CFs may add tailored services if there is a market for them.
- The NFs providing physical access need to have the resources and knowledge for it. Minimum requirements for NFs providing physical access need to be set. Physical access should be mandatory for all simulation chambers.
- Access to mobile platforms will be discussed in ACTRIS-2 meeting in Madrid.
- Working group including representation of each CFs and NFs will be established to define a user requirements template -> Milestone 6.1 will be postponed to 2018, even though a rough estimate of the requirements will be available in M12.
- Access selection panels should consist of more external persons than ACTRIS persons. The evaluators might need to be paid, as the evaluation creates a lot of work.
- Selection criteria for access: scientific excellence, market-driven aspects, training benefits, knowledge transfer.

#### 2.5.5 Socio-economic impact of ACTRIS

##### **Presentation 20170915 08 on updates to the socio-economic impact process by Sebastian Mirasgedis**

Discussion points:

- The desired outcome of the survey is the macro-economic effect of ACTRIS per 1 M€ spent.
- Socio-economic survey should be filled at national level. The cost book information and WP8 information needs are different, so the same numbers cannot be used as such.

## 2.5.6 Wrap-up of the meetings

### Presentation 20170915 09 by Sanna Sorvari

- It is important to widen the participation of the communities. New people should engage in the writing teams.
- Next ACTRIS PPP meeting will be held 5-9.2. in some Central European skiing resort. Exact place will be announced later.

## 2.6 Posters

There were four posters about the data work flow for four different types of data produced within ACTRIS. These posters were available at the coffee break of the meeting from Monday to Friday.

The posters were:

**20170913 poster ACTRIS\_EARLINET\_DataFlow**

**20170913 poster ACTRIS-PPP\_Workflow-simulation chamber**

**20170913 poster flowchart\_Cloudnet**

**20170913 poster ACTRIS-PPP\_Workflow\_in\_situ**

The posters have also been distributed to the meeting participants and national ACTRIS contact persons as .pdf-files. They will also be made available for registered user at the ACTRIS web-sites.

## 3 Summary of decisions

### 3.1 Agreed principles

#### Organizational Framework:

- ACTRIS PPP suggests ERIC as legal form for ACTRIS
- ACTRIS PPP suggests CFs to be inside ERIC.

#### Operational Framework:

Central Facilities:

- CF baseline and CF concepts should not define things at unit level. That is CF internal structures and will be proposed in the answers to the call.
- No threshold amount of CF services available to users should be given at this point.

**National Facilities:**

- Minimum requirements for all NFs:

Long term funding with commitment,  
skilled personnel,

delivery of data to DC,

instruments that are quality assured at TCs.

- Only the measurements meeting ACTRIS requirements get an ACTRIS label.
- The NFs providing physical access need to have the resources and knowledge for it. Minimum requirements for NFs providing physical access need to be set. Physical access should be mandatory for all simulation chambers.

**Access:**

- EUROCHAMP data will be available via ACTRIS Data Centre. The details of this will be defined at later stage.

- CFs may add tailored services if there is a market for them.

## 3.2 Agreed terminology

**ACTRIS services and access****General:**

- User: a person, a team, or an institution making use of ACTRIS data or other ACTRIS services, including access to ACTRIS facilities. All competitive access to users goes via SAMU.
- Operation support: CF functions to help NFs produce ACTRIS quality data

**Access:**

- Wide access: Free and open access to ACTRIS data.
- Excellence-driven access: Access evaluated based on scientific excellence.
- Market-driven access: Access agreed between ACTRIS and the user
- Virtual access – Access through communication networks; simultaneously used by an unlimited number of users.
- Physical access – the users physically visits the infrastructure/ facility.
- Remote access – remotely accessible resources, similar to physical access but without users physically visiting the infrastructure/ facility.
- Access unit: A unit for measuring services, important for estimating access costs. Different services can have different access units.
- The concept of contributing stations will be discussed later when NF requirements are more solid.

## **ACTRIS data**

Data levels:

- 0: raw sensor outputs, native resolution, metadata necessary
- 1: calibrated and qualified
- 2: approved and fully quality controlled
- 3: post-processing from 0, 1, 2 and data from other sources
- 4: ACTRIS synthesised products

Data timing:

- Near real time (NRT) data = available within 3 days
- Real real time (RRT) data = available within 3 hours
- These definitions will be further checked to be in line with other RIs and research communities.

Data terminology:

- Data originator: entity operating instruments at a National Facility or Topical Centre, resulting in ACTRIS data and delivering ACTRIS data to the Data Centre.
- Data provider: the Data Centre offering the ACTRIS data and value-added data products and tools to users.

## **ACTRIS structure**

- CF unit: part of a Central Facility located at, and operated by a research performing organization (RPO) or by ACTRIS ERIC.
- CF director: the person responsible for the coordination and representation of a Central Facility.
- CF unit head: the person responsible for the coordination and representation of a Central Facility unit.

## **3.3 Actions**

The party responsible for the action is given in parenthesis after the action.

- When preparing a national roadmap- and funding applications the applicants are asked to contact ACTRIS PPP office for latest international status updates. (National contact persons and ACTRIS PPP office)
- The upcoming Stakeholder's Handbook should be published in December 2017. A template for national information will be provided for national contact persons in October by ACTRIS PPP office. (ACTRIS PPP office)
- Questions about CF/NF applications can be pointed to PPP office, to the coordination team and to national contact persons. (National contact persons and ACTRIS PPP office)
- The cost book template will be edited such that numbers for each year will be put separately, and can therefore be extracted separately. (ACTRIS PPP WP3)
- CF costs will be collected now based on the past experience of user needs and current CF plans. (National Contact Persons)

- For CF cost estimates the needed capacity (number of instruments) needs to be known. To avoid misinterpretation HO will provide a simple table for listing the instruments nationally. This will be done together with collecting the stakeholders' Handbook information. (ACTRIS PPP office)
  - NF costs will be collected in November 2017. (National Contact Persons)
  - WP7 will provide the procedures for updating / adding / removing CFs or parts of them. (ACTRIS PPP WP7)
  - WP3 will offer a "help desk" for issues with the cost book. (ACTRIS PPP WP3)
  - Dedicated session for financial model will be organized in next ACTRIS PPP meeting. (ACTRIS PPP office)
  - For the socio-economic impact analysis include all ACTRIS and EUROCHAMP projects since 2008. Past ACTRIS and EUROCHAMP projects can be used for estimating these numbers. (National Contact Persons)
  - ACTRIS PPP office will provide first estimates of total cost of ACTRIS based on the ESFRI proposal values to the national contact points for checking the order of magnitude of the new numbers. (ACTRIS PPP office)
- 
- Trace gas remote sensing component at DC missing. Up to the community to find out where this component could be added. (Trace-gas remote sensing community and Data Centre)
  - CF templates will be adjusted to the changes made in the baseline document. (ACTRIS PPP WP4)
  - The Data Centre style flow diagrams should be used for all TCs. (TC concept writers)
  - For NF requirements a higher level conceptualization work in group should be established. The following persons volunteered for the group:
    - Ulla Wandinger
    - Paolo Laj
    - Urs Baltensperger
    - Markus Hermann
    - Doina Nicolae
    - Martine deMaziere
    - Herman Russchenberg
- 
- Access to mobile platforms will be discussed in ACTRIS-2 meeting in Madrid. (ACTRIS PPP W5 and ACTRIS community)
  - Working group including representation of each CFs and NFs will be established to define a user requirements template -> Milestone 6.1 will be postponed to 2018, even though a rough estimate of the requirements will be available in M12. (ACTRIS PPP WP6)

- Next ACTRIS PPP meeting will be held 5-9.2. in some Central European skiing resort. Exact place will be announced later. (ACTRIS PPP office)