# AMOF Access and Costing

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# Revision History

Date	Version	Comments	Revised by	Contact
03/2020	v1.0.0	Initial document generation	B.Brooks & G. Vaughan	barbara.brooks@n cas.ac.uk
05/2021	v1.1.0	Changes made see Change Log	B.Brooks & G. Vaughan	barbara.brooks@n cas.ac.uk
05/2023	v1.1.1	Updated instrument list	G. Forster	grant.forster@ncas .ac.uk
02/04/2 024	v1.2.0	Updated instrument list	D. A. Hooper	david.hooper@nca s.ac.uk

# **Change Log**

05/21:

Section 1b: Clarification for projects requesting deployments longer than 6 months.

Section 2: Rewording to clarify costing

staff time requests < 3 days: no charge

maximum of 14 days of transit time charged

Appendix A introduced

Operational decision flow chart

Used guides for a what applicants should expect from AMOF

**Guidance for Applicants** 

What Happens Next

Guide to Applicants when preparing a grant submission

Guide to Applicants applying for DA

Appendix B introduced

Breakdown of charging bands

31/05/2023:

Replaced AQD High Sensitivity NOx with Airyx ICAD NO2 / NOx / NO Analyser

#### 02/04/2024:

- References to the "NERC JeS form" have to changed to the the "UKRI Funding Service (TFS) form"
- In section 1.2, the number of members of the AMOF steering committee required to carry out a peer review has been changed from 3 to 2

The following changes were made to the instrument list in Appendix B:

- removed entry: "MST Radar"
- removed entry: "Radar Wind Profiler operating at Cardington or CDAO"
- removed entry: "Radar Wind Profiler operating away from Cardington or CDAO"
- renamed entry: "Chilbolton UV Raman Lidar" to "Raymetrics Raman Lidar"
- changed entry: cost band for "94 GHz Galileo Cloud Radar" from "5" to "7"
- added entry: for "Teledyne T300U Trace Level"
- added entry: for "2B Technologies Model 714 NO2/NO/O3"

## **AMOF Access and costing mechanisms**

AMOF welcomes applications from all parts of the scientific community, including commercial users, but priority will be given to Natural Environment Research Council (NERC) funded science and applicants eligible for NERC funding. Prospective users are encouraged to contact the Facility Manager or the relevant AMOF instrument scientist prior to making an application, to discuss the project's requirements. AMOF will always endeavour to support a user's scientific aspirations whenever possible.

#### 1. Accessing the Facility

The following modes of facility use are applicable:

(a) Accessing existing data

Users accessing the facility in this mode will typically do so via the Centre for Environmental Data Analysis (CEDA). In line with the NERC data policy there will be no charge at the point of use for the data. However, there may be staff costs involved in helping users interpret the data. Users requiring such help should apply through Direct Access (Section 6). Where a project is likely to require more than 40 person-days of Facility staff time, funding will need to be provided and the application should follow the procedure in Sections 1.1 – 1.6 below.

#### (b) Mobile instrumentation

Users apply for access to the Facility through one of the routes described in Sections 1.1 - 1.6 below. As AMOF is a community Facility, instrument deployments should be restricted to 6 months duration on site (this does not include shipping time). Longer deployments can be supported if:

- (i) The project is funded through a NERC grant, or
- (ii) The project is funded through a cross-council UK Research and Innovation (UKRI) programme involving NERC: e.g. GCRF, Newton Fund, Grand Challenges, **or**
- (iii) Deployment beyond 6 months can be supported through a NERC Centre-commissioned science programme (e.g. LTSM).

Where a project is currently making use of the Facility (instruments deployed or activities occurring at Laboratories or Observatories) and the project is funded through NERC grant or a cross-council UKRI programme involving NERC, extensions to the active loan period can be supported if:

- (i) The project PI contacts the Facility by email to request an extension to the loan period in the last quarter of the current active loan period,
- (ii) No other funded requests for the instrument(s) have been made in the meantime.

Extensions of up to 6 months can be requested and no more than two extensions may be applied for.

- (c) Access to Laboratories and guest instrument access to Observatories

  Users apply for access to the Facility through one of the routes described in Sections 1.1 1.6 below.
- (d) Access to Observatories: Operation of on-demand instruments and of long-term measuring instruments in a user-defined configuration (provided this does not prejudice the long-term measurement programme)

Users apply for access to the Facility through one of the routes described in Sections 1.1 – 1.6 below.

#### 1.1. Applying for use via NERC grant schemes.

PIs preparing NERC grant proposals (including applications to UKRI cross-cutting schemes where the application comes through the UKRI Funding Service, TFS, form) which plan to use AMOF should apply to

the Facility (via the online application form) to obtain a 'technical assessment' and cost estimates for submission with their proposal. This should be at least one month before the grant submission deadline.

The Facility Manager will provide a Facility Charge for the project (see section 2.2 for full details). These are included in the Facility cost section on the UKRI TFS form and recovered by NERC at source. The Facility charge has two components, equipment rental and staff time.

Additional Facility costs required to carry out the project, e.g. consumables, shipping or travel and subsistence, will also be provided by the Facility Manager and should be included as Directly Incurred costs on the UKRI TFS form.

A separate Science case is not needed as the relevant Research Council Peer Review outcome will be used to determine access to AMOF.

# 1.2. Applying for use via other grant schemes from national and international funding agencies, and applications from public sector not-for-profit organisations.

All public not-for-profit organisations that do not directly involve NERC fall into this category.

To comply with NERC reporting requirements, ensure transparency of access, and to ensure science quality, PIs will be required to submit a 2-page Science Proposal alongside the AMOF application. This document will be peer reviewed by 2 independent members of the AMOF Steering Committee (AMOFSC) and scored following the NERC grant scoring scheme. Applications receiving a score of 7 or over will be considered eligible for Facility support, subject to prioritisation (section 2.1).

EU projects will be expected to recover costs as allowed by EU rules.

Projects led by public sector not-for-profit organisations will be granted access at marginal cost (including staff costs), subject to the Facility having available capacity.

Pls preparing grant proposals which plan to use AMOF should apply to the Facility (via the online application form) to obtain a "technical assessment" and cost estimate for submission with their proposal. This should be at least one month before the grant submission deadline.

#### 1.3. Applying for use in support of commercial contracts.

AMOF does not normally have the capacity to undertake commercial work, but if there is spare capacity commercial work will be costed according to the procedures of the institution that employs the relevant staff member (and owns the equipment). Prospective users should contact the Facility manager for further details.

#### 1.4. Direct Access

This scheme is open to academic and research staff employed at UK Universities and NERC research centres. NERC-funded PhD students may also apply through this scheme.

Direct access allows for small projects which require 20 working days (1 month) or less of Facility staff time. The majority of applicants will be required to submit a Science Proposal of up to 2 pages which will be peer-reviewed by AMOFSC: the exceptions are discussed in the section 1.5 - 1.6.

Minor additional support may be awarded to projects already supported by AMOF at the Facility Manager's discretion. No additional peer review will be needed in such a case.

NERC-funded PhD students and those funded through UKRI cross-council schemes involving NERC may apply in their own right for AMOF, and in this case may request up to 40 working days (2 months) Facility staff support.

PhD students not funded by NERC are not eligible to apply directly to AMOF, but eligible supervisors may apply on their behalf through Direct Access as above (and are restricted to 20 working days of instrument scientist support).

NERC Grant holders cannot apply through DA to use NERC facilities in support of existing grant-funded projects - this must be requested through the original proposal. AMOF is required by NERC to refer such requests to NERC Head Office.

Not-for-profit organisations can apply through the DA access and will be charged for staff time and equipment rental. There is no cap on staff time.

#### 1.5. National Capability Access

NERC research centres may use the Facility as part of their commissioned National Capability Underpinning or Long-Term Science programmes. Such usage will not be subject to further peer review, but an application to the Facility will be needed through the Direct Access route to allow AMOF to meet NERC reporting requirements. Such applications are restricted to 40 working days staff support, and must provide the necessary non-staff costs.

A Science Proposal is not required.

#### 1.6. Usage of Facility by AMOF staff

The Facility staff may utilise up to 10% of the NERC-funded capacity for Facility research and development purposes. This will be by agreement with the Facility Manager. If a particular project requires an abnormally large amount of the capacity of the facility (>10% of that available annually), the cost of the work should normally be funded externally (e.g. via a grant or National Capability science programme).

An application to the Facility will be needed through the Direct Access route to allow AMOF to meet NERC reporting requirements.

Where the request is in support of commissioned National Capability Underpinning or Long-Term Science programmes no 2-page Science Proposal is required and no external peer review by the AMOFSC occurs.

Where the request is in support of facility development no 2-page Science Proposal is required and no external peer review by the AMOFSC occurs.

#### 2. Application process

All potential users applying through Mode (b), (c) or (d), other than commercial users, are required to submit an application through the AMOF website. The Facility Manager, through his/her support staff, will be responsible for monitoring the progress of each application and will ensure that adequate communication is maintained with the user. Appendix A shows the decision making flow diagram.

#### 2.1. Prioritisation

When allocating resources the Facility Manager will prioritise as follows:

- a) NERC grant applications
- b) UKRI cross-council schemes involving NERC
- c) NERC National Capability

- d) Direct Access
- e) UKRI Non-NERC Research Council grant applications
- f) EU grants, public not-for-profit organisations and recognised national\international funding bodies
- g) Commercial organisations

The score obtained by a NERC grant and the score resulting from AMOF peer review (based on the NERC grant scoring scheme) determines prioritisation within a category. If a scheduling clash still occurs then allocation of resources within that category will be on a first-come-first served basis. Applications from NERC-funded Ph.D students will be considered as part of Direct Access.

In the event of a scheduling clash that cannot be resolved within these guidelines, the Facility Manager will consult by email with AMOFSC. Disputes will be referred to the Chair of AMOFSC.

#### 2.2. Costing

- 1. NERC grants, including applications to UKRI cross-cutting schemes where the application comes through NERC on the UKRI TFS form.
  - a) Facility (ready-to-go) Charges

These are included in the Facility cost section on the UKRI TFS form and recovered by NERC at source. The Facility charge has two components, equipment rental and staff time.

- i) Equipment Rental
  - A daily charge will be applied for each part the facility requested see Appendix B for details of these charges.
  - The charge will be applied for the time "science" is occurring
  - The charge will be applied for a maximum of 14 days of transit.
  - There is no equipment rental charge when a project deploys instrumentation at an AMOF Observatory.

#### ii) Staff time

- Staff time is charged at £270 per day
- This is the time Facility staff require to prepare instruments, train users, deploy equipment, monitor during deployment, QC and archive data. The time is determined by the Facility scientist as part of the technical review.
- No charges apply if < 3 working days of staff time is required.</li>
- A maximum of 40 working days of staff time, charged at the Facility rate, are available per project.
  - For the NERC Large Grant scheme this is extended to a maximum 40 working days per project per participating institution.
- Where a proposal requires more than 40 working days of Facility staff time the PI must consult the National Centre for Atmospheric Science (NCAS), via the Facility Manager, and include the extra staff time costs on the UKRI TFS form: for example by making the staff member a Co-investigator or named researcher on the grant.

#### iii) Facility Charge Capping

- For NERC large grants the Facility charge is capped at £50k
- For all other schemes where the application comes through NERC on the UKRI TFS form the Facility charge is capped at £30k

#### b) User Costs

These are the additional Facility costs required to carry out the project, e.g. consumables, shipping or travel and subsistence and should be included as Directly Incurred costs on the UKRI TFS form.

• Consumables: project is liable for any consumables the project will require. An appropriate amount will be arrived at after discussion with Facility staff involved.

- Marginal T&S (travel and subsistence) will be charged and this will be costed as directed by the staff member concerned host institution guidelines.
- 2. Grant schemes from national and international funding agencies, and from public sector not-for-profit organisations. This applies to all public not-for-profit organisations that do not directly involve NERC.
  - a) Facility (ready-to-go) Charges
    - i) Equipment Rental
      - A daily charge will be applied for each part the facility requested see Appendix B for details of these charges.
      - The charge will be applied for the time "science" is occurring
      - The charge will be applied for all the time the instrument is in transit.
      - There is no equipment rental charge when a project deploys instrumentation at an AMOF Observatory.
      - Payment to institution(s) employing relevant NCAS staff member(s)
    - ii) Staff Time
      - Staff time is charged at £270 per day
      - All staff time must be met by grant.
      - o PI must discuss with Facility Manager how staff costs will be met.
      - Payment to institution(s) employing relevant NCAS staff member(s)

#### b) User Costs

These are the additional Facility costs required to carry out the project, e.g. consumables, shipping or travel and subsistence.

- o Consumables: project is liable for any consumables the project will require. An appropriate amount will be arrived at after discussion with Facility staff involved.
- Marginal T&S (travel and subsistence) will be charged and this will be costed as directed by the staff member concerned host institution guidelines.
- Payment to institution(s) employing relevant NCAS staff member(s)

#### 3. Direct Access

- a) Facility (ready-to-go) Charges
  - i) Equipment Rental
    - Not applicable
      - o if the applicant is a researcher in a UK University or NERC Centre
      - o if the applicant is a NERC Ph.D student
      - if the applicant is a researcher in a UK University or NERC Centre supervising a non-NERC Ph.D student
    - Not-for-profit organisation charged at the daily rate shown in Appendix B, in which case payment is to institution(s) employing relevant NCAS staff member(s)
  - ii) Staff Time
    - No charges apply
      - o if the applicant is a researcher in a UK University or NERC Centre
      - o if the applicant is a NERC Ph.D student
      - if the applicant is a researcher in a UK University or NERC Centre supervising a non-NERC Ph.D student
    - Maximum of 20 working days of Facility staff support for researchers in UK Universities or NERC Centre
    - o Maximum of 40 working days of Facility staff support for NERC Ph.D students

- Not-for-profit organisations charged at £270 per day
  - Maximum of 20 working days of Facility staff support time
  - Payment to institution(s) employing relevant NCAS staff member(s)

#### b) User Costs

These are the additional Facility costs required to carry out the project, e.g. consumables, shipping or travel and subsistence.

- Consumables: project is liable for any consumables the project will require. An appropriate amount will be arrived at after discussion with Facility staff involved.
- Marginal T&S (travel and subsistence) will be charged and this will be costed as directed by the staff member concerned host institution guidelines.

#### 4. Direct Access for large instruments

This applies to the mobile X-band, Ka-band and Radar Wind Profiler when deployed at its 'home' location.

- a) Facility (ready-to-go) Charges
  - i) Equipment Rental
    - Not applicable
      - o if the applicant is a researcher in a UK University or NERC Centre
      - o if the applicant is a NERC Ph.D student
      - if the applicant is a researcher in a UK University or NERC Centre supervising a non-NERC Ph.D student
    - Not-for-profit organisation charged at the daily rate shown in Appendix B; payment to institution(s) employing relevant NCAS staff member(s)

#### ii) Staff Time

- Maximum of 20 working days of Facility staff support for NERC eligible researchers in UK Universities or NERC Centre
- o Maximum of 40 working days of Facility staff support for NERC Ph.D students
- Maximum of 20 working days of Facility staff support time available to none NERC, not-for-profit organisations
- None NERC, not-for-profit organisations: Payment to institution(s) employing relevant NCAS staff member(s)

#### b) User Costs

These are the additional Facility costs required to carry out the project, e.g. consumables, shipping or travel and subsistence.

- o Consumables: project is liable for any consumables the project will require. An appropriate amount will be arrived at after discussion with Facility staff involved.
- Marginal T&S (travel and subsistence) will be charged and this will be costed as directed by the staff member concerned host institution guidelines.

#### 5. Commercial users.

Costs for commercial users are determined individually by the institutions hosting the NCAS staff member and the equipment concerned. Full economic costs apply. Contractual and invoicing arrangements are between the applicant and the host institution.

#### 3. Operational Exceptions

AMOF accepts that these terms do not cover all eventualities and a PI should contact the Facility as soon as possible if exceptional circumstances arise. The Facility will always endeavour to support a user's scientific aspirations whenever possible.

# **Appendix A: Application Process**

### **Facility Standard Operating Procedure**

When an application arrives with AMOF the process shown schematically in figure 1 is followed. Following the information provided in the application form this structure allows the Facility to process the application following the correct costing and access criteria.

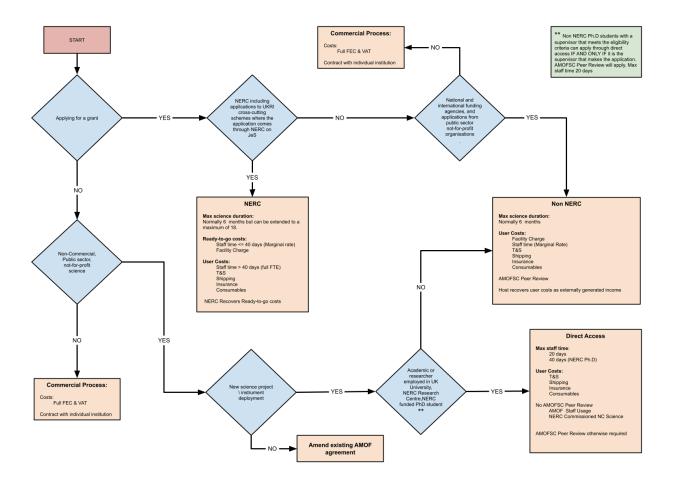


Figure 1. AMOF Process flow for servicing in coming applications.

#### **Guidance for Applicants**

## Welcome to AMOF.

To get the best possible results please follow the flow below.

If you have any questions drop a line to: <a href="mailto:amof@ncas.ac.uk">amof@ncas.ac.uk</a>

We'll get in touch with you and discuss your needs.

1. Take a look at the **AMOF website** 

If you have any questions\queries, can't find what you are looking for or want to talk through options. Drop a line to either <a href="mailto:amof@ncas.ac.uk">amof@ncas.ac.uk</a> or to the individual instrument expert (contact details are on each instrument page).

- 2. Once you have an idea of the instruments\facilities you want to access use the link to the calendar to check availability.
  - If there is no entry then the item is available.
  - If there is entry ending with "-pending" then the item is part of a grant submission that is awaiting a decision and you can still apply.
  - If the entry ends with "-confirmed" the item is booked out and cannot be applied for.
- 3. Check out the AMOF "Access and Costing" document

If you have any questions\queries, can't find what you are looking for or want to talk through options. Drop a line to either <a href="mailto:amof@ncas.ac.uk">amof@ncas.ac.uk</a>

4. Fill in the AMOF online application form: Application Form

#### Welcome to AMOF.

You've submitted an application to AMOF - what happens next?

Below are the details what happens and what you should expect to get from us.

If you have any questions drop a line to: amof@ncas.ac.uk

- 1. You should receive an email to say the system has received the form.
  - This email is automatically generated by google forms
  - A copy of you application should be attached
- 2. Google forms enters all the details into a master spreadsheet, adds a timestamp and sends an email to AMOF to let us know an application has been submitted.
  - The timestamp is in UTC and is the time the form arrived on the server.
- 3. When AMOF is informed that an application is made a workflow lead is appointed.
  - This lead is responsible for taking you through the entire process and is your main point of contact.
- 4. The lead will generate a unique ID tag for your application.
  - a. This is based on the timestamp the server gave the application and has the form: AMOF\_<yyyymmddhhMMss>.
  - b. You should use this tag when you contact us about this project.
- 5. The lead will take a high level look at the application.
  - a. This is to see if there is anything that might cause a problem.
- 6. The lead will get in contact.
  - a. This will be an email with the tag as the subject.
  - b. A spreadsheet summary of your application will be attached
  - c. The body of the email will confirm the title, funding details, and the ID tag.
  - d. Should any issues been spotted they will be explained in this email.
  - e. The email will give brief explanation of what will happen next this is dependent on the mode of access.
  - f. The Facility expert will be cc'd into the email.
- 7. You should get this email within 5 working days of submitting you application.
- 8. In parallel (sent at same time) to the acknowledgement email to the applicant the lead will also get in contact the appropriate Facility expert(s).
  - a. The email to the the expert(s) will have the tag in the subject.
  - b. A spreadsheet summary of your application will be attached.
  - c. Will expand on any issues that may need special consideration.
- This email is to request the Facility expert(s) to perform a "Technical Review" of the project.
  - a. The Technical Review checks if the requested resources are available if there is a problem is there a possible work around
  - b. It determines the amount of staff time needed to support
  - c. The Facility Expert may get in touch to discuss your project if they find any issues, have insufficient information to make an assessment, or have suggestions that could maximise the science potential.
  - d. The Facility expert returns their technical review via a response form the link to which is provided in this parallel email.
- The Technical Review should be performed and the response submitted within 10 working days of request being made.
- 11. The lead will let you know when the review has come in and advise as to the next step in the process.
  - a. The next step is dependent on the access mode

# Welcome to AMOF.

The technical review is in and you are in the process of **making a grant** submission to a funding body - what happens next?

Below are the details what happens and what you should expect to get from us.

If you have any questions drop a line to: amof@ncas.ac.uk

- 1. Based on the application and the technical review the cost will be calculated.
  - A daily rental cost will be charged for access to instruments and labs (access to observatories is not charged for)
  - The charging period will include some or all of the shipping time as well as the science deployment.
  - The amount of staff time required will be calculated based on the estimates provided by the Facility Experts in their technical review.
  - Where the funding stream being applied for is NERC based or involving NERC upto 40 working days of staff time per project (per institution in the case of NERC Large Grant) is available at a facility rate of £270 per day. The remaining time has to be covered by the grant will be dependent on the individual.
  - For funding streams not involving NERC all staff time must be covered by the grant at FEC. The exact rate will be dependent on the individual.
- 2. A preliminary costing spreadsheet will be developed by the workflow lead.
  - This spreadsheet will provide a detailed breakdown of how the Facility costs have been calculated.
- 3. This spreadsheet will be mailed to you can work with the lead and the Facility Expert to adjust timing or instrumentation to meet your budget.
- 4. Once you are happy with the arrangement let us know.
- 5. You should receive a preliminary project cost within 5 working days of being informed that we have received the "Technical Review".

#### Welcome to AMOF.

The technical review is in and your project is funded - what happens next?

Below are the details what happens and what you should expect to get from us.

If you have any questions drop a line to: amof@ncas.ac.uk

- 1. As the funding is in place you are on the "DIrect Access" (DA).
  - When you made your original application you should have been prompted to submit a 2 page science proposal.
  - If we do not have this you will be requested to send one to <u>amof@ncas.ac.uk</u>.
  - Your application cannot progress until we have it.

If, and only if, the funding for your DA project comes from an active NERC grant we are obligated to contact NERC Service & Facilities (S&F).

- The workflow lead will contact you to explain that because the project is funded by an active grant we have to let NERC S&F know.
- NERC S&F will want to know why access to the facility was not made at the time of the original grant submission.
- We provide S&F with the full details of the application and the science proposal
- NERC S&F may well get in touch with you for further details we are not informed if that happens
- NERC S&F tell us if we can proceed
- As soon as we hear from NERC S&F we will let you know
  - How long NERC S&F take to respond is not constant.
- 2. Once the Technical review is in and we are clear to proceed then:
  - Two members of the AMOF Steering Committee will be sent your application, the technical review and the 2 page science proposal.
  - These will be asked to grade your proposal on the NERC scale, to access any risk the proposed work may pose to the Facility and the potential impact of the work
  - They will return their review via a form and in addition to the grades they will be asked for a narrative justification of the decisions.
- 3. We will keep you informed as to the progress of your applications with regular updates.
  - This stage of the process should take 10 15 working days to complete.
  - If we do not get a response from the reviewers additional reviewer will be approached. We require 2 reviews to proceed.
  - If the project grades from the 2 reviewers are divergent we will request a third review for clarification.
- Once we have the reviews the workflow lead will be in contact to let you know the results and if the Facility will be able to support the project.
  - Projects receiving a grade on the NERC scale of 7 or above will be supported.
  - We will provide the reviews if requested.
  - If you are unsuccessful you will be invited to re-apply taking into consideration of the reviewers comments.

If you are unhappy with the decision or how a decision was made then we would encourage you to contact the Chair of the AMOFSC and make a complaint.

Please use: amof-chair@ncas.ac.uk

# **Appendix B: Equipment Rental**

#### **Mobile Instrumentation**

Facility instruments are placed in bands based on their replacement market value and used to determine the daily equipment rental charge. Table 1 shows the AMOF banding structure.

Replacement cost (£)	Band	Daily Charge ex VAT (£)
< 10K	1	10.00
10K - 50K	2	20.00
50K - 100K	3	30.00
100K - 150K	4	40.00
150K - 200K	5	50.00
200K - 250K	6	60.00
>£250K	7	70.00

Table 1. Equipment daily rental cost structure.

Table 2 shows the cost band for the mobile instruments available through AMOF

Instrument	Cost Band
2B Technologies Model 714 NO2/NO/O3	1
2B Technologies Ozone Monitor Single Channel	1
2B Technologies Ozone Monitor Dual Channel	1
3 GHz Chilbolton Advanced Meteorological Radar (CAMRa)	7
94 GHz Galileo Cloud Radar	7
Aerodynamic Particle Sizer - Unit 1 and 2	2
Aerolaser AL5002 CO Monitor	2
Ametek CO Monitor - Unit 1 and 2	2
Airyx ICAD NO2 / NOx / NO Analyser	3
Ceilometer	2
Cimel Sun Photometer	2
Cloud Particle Imager - Unit 1: 3V-CPI (3-View Cloud Particle Imager)	3
Cloud-Aerosol & Precipitation Spectrometer with Depolarisation	3
Dewpoint Hygrometer	2
Doppler Aerosol Lidar - mobile and IAO user configurable	5
Filtered Radiometer	1
Flux Tower - Unit 1 and 2	1
GRIMM Optical Particle Counter 1.108	2
HATPRO Radiometer	5
High Volume Precipitation Spectrometer	4
Ka-band Mobile Cloud Radar - operating at CAO	5
Ka-band Mobile Cloud Radar - operating away from CAO	7

Licor - Unit 1 and 2	2
Lidar Wind Profiler	5
Los Gatos Research Ultraportable Greenhouse Gas Analyzer	2
Micro Rain Radar	2
Raymetrics Raman Lidar	5
Scanning Mobility Particle Sizer - Unit 1 and 2	3
Spectral Radiometer - Unit 1 and 2 (aircraft)	1
Sonic Anemometer - Unit 1 and 2	2
Surface Energy Balance Station - Unit 1 and 2	1
TECO 42i NOx Analyser - Unit 1 and 2	2
TECO 49 Series Ozone Analyser - Unit 1 and 2	2
TELEDYNE T200UP NOx Analyser	2
Teledyne T300U Trace Level	2
Ultrafine Condensation Particle Counter 3750 - Unit 1 and 2	2
Ultrafine Condensation Particle Counter 3776 - Unit 1 - 4	2
Vaisala Radiosonde - Unit 1 and 2	3
Whole Air Sampler (WAS)	3
Windsond Reusable Radiosonde - Unit 1 and 2	1
X-band Mobile Weather Radar operating at CAO	5
X-band Mobile Weather Radar operating away from CAO	7

Table 2. Equipment rental costing bands.

#### **Observatory Access for guest instruments**

There is no daily charge for hosting guest instruments at any of the AMOF Observatory sites. The only costs are the additional User Costs and these cover local staff costs, power and any additional services required.

#### **Laboratory Access**

This applies to the EnFLO COZI (CO and ozone calibration) & PTU (Pressure, temperature and humidity calibration) laboratories.

The daily equipment rental for COZI and PTU

Facility	Daily Charge ex VAT (£)
COZI	£40.00
PTUCal	£20.00

Table 3. Laboratory daily rental cost.

For EnFlo a daily charge of £70 per day is only applied to the NERC schemes (including applications to UKRI cross-cutting schemes where the application comes through NERC on the UKRI TFS form). For all other funding pathways applications are made directly to the EnFlo Facility and any access costs incurred are discussed with them.