esteem3

Enabling Science through European Electron Microscopy

Manual describing best practice for Transnational Access
Deliverable D1.1 – version 1.1

Estimated delivery date: 31/12/2019

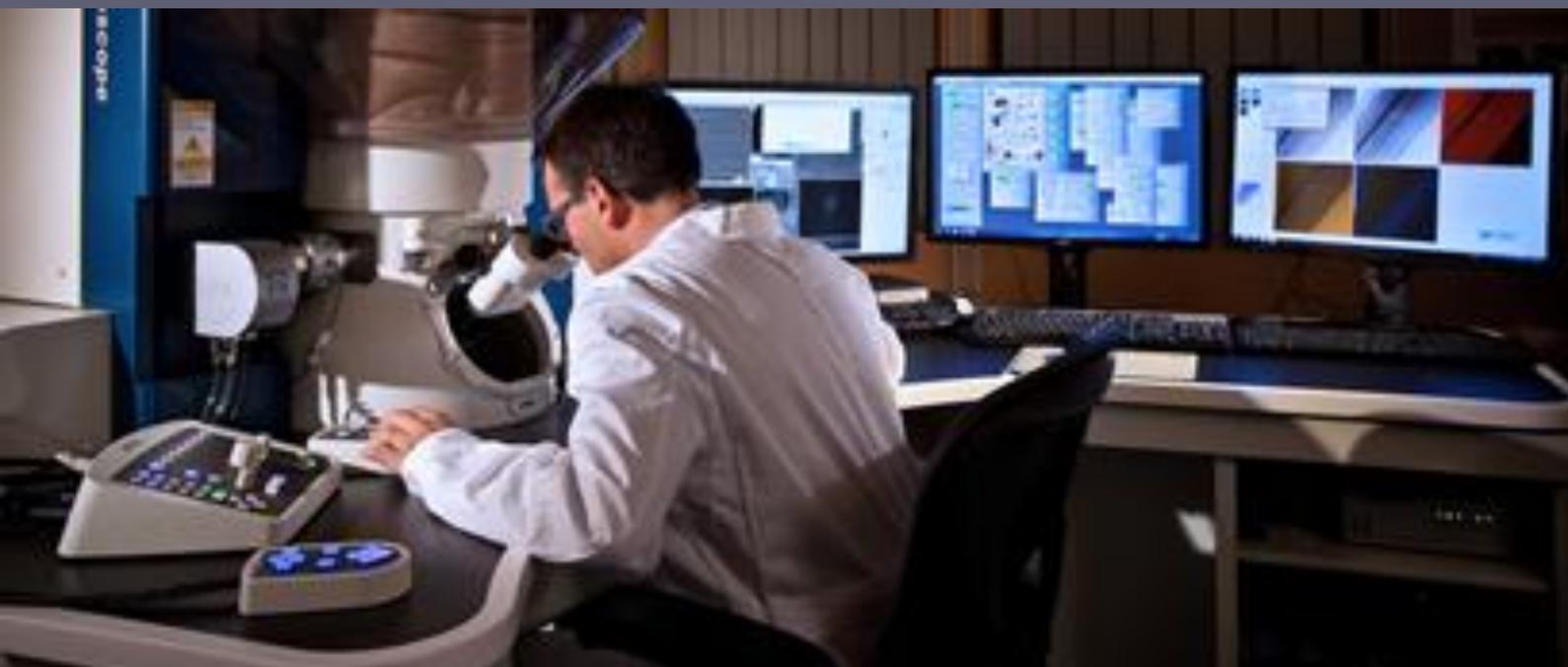Actual delivery date: 11/12/2019

Lead beneficiary: Euronovia

Person responsible: Lucie Guilloteau

Deliverable type: ☒ R ☐ DEM ☐ DEC ☐ OTHER ☐ ETHICS ☐ ORDP

Dissemination level: ☒ PU ☐ CO ☐ EU-RES ☐ EU-CON ☐ EU-SEC

Grant Agreement No:	823717
Funding Instrument:	Research and Innovation Actions (RIA)
Funded under:	H2020-INFRAIA-2018-1: Integrating Activities for Advanced Communities
Starting date:	01.01.2019
Duration:	48 months

Table of contents

Revision history log

Version number	Date of release	Author	Summary of changes
V1	22/11/2019	Lucie Guilloteau	First draft of the deliverable
V1.1	11/12/2019	Peter van Aken	Amendments to the first draft and approval of the deliverable

Introduction

ESTEEM3 is a transnational project which can be seen as **role model** for other **European projects of Transnational Access (TA)**. This deliverable D1.1 "Manual describing best practices for Transnational Access" describes the following points:

- The transnational access **provision**
- **The coordination of** transnational access
- **The communication activities** regarding transnational access

After the description of the main aspects of the TA, **10 best practices** can be derived. They function as **success factors** for Transnational projects.

Transnational Access Provision

ESTEEM3 aims to provide Transnational Access to the leading European state-of-the-art Transmission Electron Microscopy (TEM) research infrastructures in order to facilitate and extend TA services.

Target groups for Transnational Access

The target groups of Transnational Access are European and international users in the field of physical, chemical and biological sciences. The users form groups led by a **group leader** representing a legal institution. The groups consist of one or more researchers requesting access in a laboratory located in another country than their sending institution.

- At least **80 %** of all TA projects must be executed by **European research groups** and **20 %** of all TA projects can be made into practice by **international teams**.
- European groups are defined as teams coming from **European member states** or **associated countries.**
- The sending organizations include **Universities** and **Institutes of Higher Education**, as well as **Research Institutes** and **enterprises**.

Best practices

1. **Include European and international researchers in the project in order to establish a world-wide network.**

   By allowing international researchers participating in the project, cooperation at a global level can be reached. Regarding building links to other networks on the European and international scales, many different countries should participate in the project.

2. **Accommodate different types of institutions, such as educational institutions and companies to create opportunities for closer collaboration with industry and academia.**

   By involving different institutions in the project, the closer collaboration between industry and academia will develop skills and foster job creation.

Hosting institutions

In total, **15 laboratories** provide access to research infrastructures or installations. It is possible to use **three types of units of access**, including **sample preparation**, **TEM** and **data analysis**.

- The 15 laboratories are based in **11 countries all over Europe**, including Austria, Belgium, France, Germany, Italy, Norway, Poland, Slovenia, Spain, Sweden and the United Kingdom.
- The access is **free of charge** and **transnational**.
- The access includes the **logistical, technological and scientific support** and additionally a **specific training**.

Best practices

3. **Distribute the contact points in different countries to broaden transnational access.**

   Applicants of a wide geographical distribution are encouraged to participate in the project, because itineraries to get access to the laboratory are balanced, in comparison to the potential countries of the user groups.

4. **Provide a comprehensive range of infrastructure, materials and advice to the users.**

   Offering the highest quality scientific support for researchers increases the focus on users' needs.

Coordination of Transnational Access

To guarantee the coordination of the Transnational Access, a management team accompanies the different parties throughout the process of all phases.

The phases of a TA project

There are **three phases** of a TA project:

- **Before** the TA project
- **During** the TA project
- **After** the TA project

Before a TA project

This section will focus on the first steps a researcher takes to realize the project. It will focus on **the application procedure**.

The submission of proposals

Access to ESTEEM3 installations can be requested by submitting a **proposal** online on the website including a description of the work, which the applicants wish to carry out and an administrative form.

It is possible to submit **two types of proposals**:

- **Lab proposals** are for applicants, who know exactly, in which laboratory they want to execute their project, and which and how many units of access they need.

- **Open proposals** can be submitted by applicants, who have a great idea but do not know, if their experiment is feasible, and where is the best place to do it. They can also ask advice concerning the type and number of units of access.

The proposals must, among others, respond to the following points:

- The applicants need to describe the **scientific objectives** of the project.
- The **state-of-the art** in the study of these materials must be explained.
- The **potential for academic or industrial innovation** needs to be pointed out.

Best practices

5. **Give applicants the opportunity to submit Lap proposals and Open proposals.**

   It is necessary to offer specific and open proposal forms, so that candidates can either realize their specific goals or receive advice concerning to their needs.

6. **Ask candidates to express the potential of the project concerning academic or industrial innovation.**

   Clarifying the potential for academic or industrial innovation contributes to define an innovation and impact strategy for advanced TEM.

The evaluation of proposals

The proposal is evaluated by the **TAPEC** (Transnational Access Proposal Evaluation Committee), which is composed of **renowned scientists** in microscopy and materials science. During the selection procedure, the following rules must be observed:

- The evaluating scientists are **not associated with the project** to ensure **transparency**.
- To avoid potential conflicts of interest, the TAPEC members reviewing proposals will **neither** come from the **country of the applicant nor of the TA provider**.

Each proposal will be assessed by the TAPEC against the following **selection criteria,** which are scored with points from 0 to 10:

- **Scientific quality** of the proposal
  (rank: weak: 0 – outstanding: 10)
- Demonstration of **the need for the use of the advanced infrastructure**
  (rank: weak: 0 – outstanding: 5)
- Potential **impact for academic or industrial innovation**
  (rank: weak: 0 – outstanding: 5)

Proposals with a total ranking less than 10 will be rejected. Prior to assessment by the TAPEC, the **TA provider** will assess the **feasibility** of the experiment as well as all **possible related safety and environmental issues**. Proposals, which do not meet the requirements of the TA provider, will be rejected and may be transferred to an alternative TA provider. In the case of **open proposals**, the **TA provider** will be selected by the **Coordination Team**.

Best practices

7. **Instruct impartial scientists to evaluate the project.**

    To guarantee the fair rating of the proposal, the evaluation committee should be composed by neutral researches. The implication of evaluators form different countries as the host laboratory and the user group also maximizes the transnational philosophy.

During the TA project

During the TA project, the user groups are in touch with a **local contact responsible** of accompanying the researchers throughout the process and providing them with all necessary information needed for the specific laboratory.

Best practices

8. **Determine a local contact in each hosting institution.**

    To increase local cooperation, the user groups can directly get in touch with a local contact of the hosting laboratories after the project has been positively rated.

After the TA project

After having successfully completed the TA project, the user groups are asked to fill in a **TA reporting form** in order to evaluate their **satisfaction**.

The survey includes questions about the following topics:

*   User groups can indicate **how they learned about ESTEEM3**.
*   They can value the **selection procedure** from their point of view.
*   TA users should rate the **quality of installations** they had access to.
*   The researchers are invited to rate the **scientific support**.

Best practices

9. **Analyze the selection procedure of TA projects as well as their implementation.**

    By evaluating the selection process and the execution of TA projects, the provided service can constantly be improved. Consequently, a long-term and sustainable research infrastructure service can be developed.

Communication activities

The beneficiaries promote the project and its results by using different canals of distribution:

*   Information about the project in general and the application procedure is given on **the official website ESTEEM3**, on which it is also possible to get in touch with the management team via a contact email address.
*   **Social networks**, such as Twitter, Linked-in and Facebook, help to diffuse information on business online networks and to make researchers, the public and the media aware of ESTEEM3.

- **Events and works** are organized in order to create physical contact between the different researchers, the public and the media.

Best practices

10. **Develop communication activities using different canals and ways of distribution.**

By using several methods of communicating the actions and results of the project, different target groups get to know the project. Interested groups can get in touch with each other, which fosters the establishment of research communities. Additionally, the public gets aware of the fact that ESTEEM3 has received funding from the European Unions' Horizon 2020 research and innovation programme.

Conclusion

ESTEEM3 can be seen as **role model** for other **European projects of Transnational Access**. By describing its **provision, coordination and communication activities**, 10 best practices can be derived. They function as **success factors** for Transnational projects.

Best practices

1. **Include European and international researchers in the project in order to establish a world-wide network.**

2. **Accommodate different types of institutions, such as educational institutions and companies to create opportunities for closer collaboration with industry and academia.**

3. **Distribute the contact points in different countries to broaden transnational access.**

4. **Provide a comprehensive range of infrastructure, materials and advice to the users.**

5. **Give applicants the opportunity to submit lab proposals and open proposals.**

6. **Ask candidates to express the potential of the project concerning academic or industrial innovation.**

7. **Instruct impartial scientists to evaluate the project.**

8. **Determine a local contact in each hosting institution.**

9. **Analyze the selection procedure of TA projects as well as their implementation.**

10. **Develop communication activities using different canals and ways of distribution.**