esteem3

Enabling Science through European Electron Microscopy

Annual Report on TA Access

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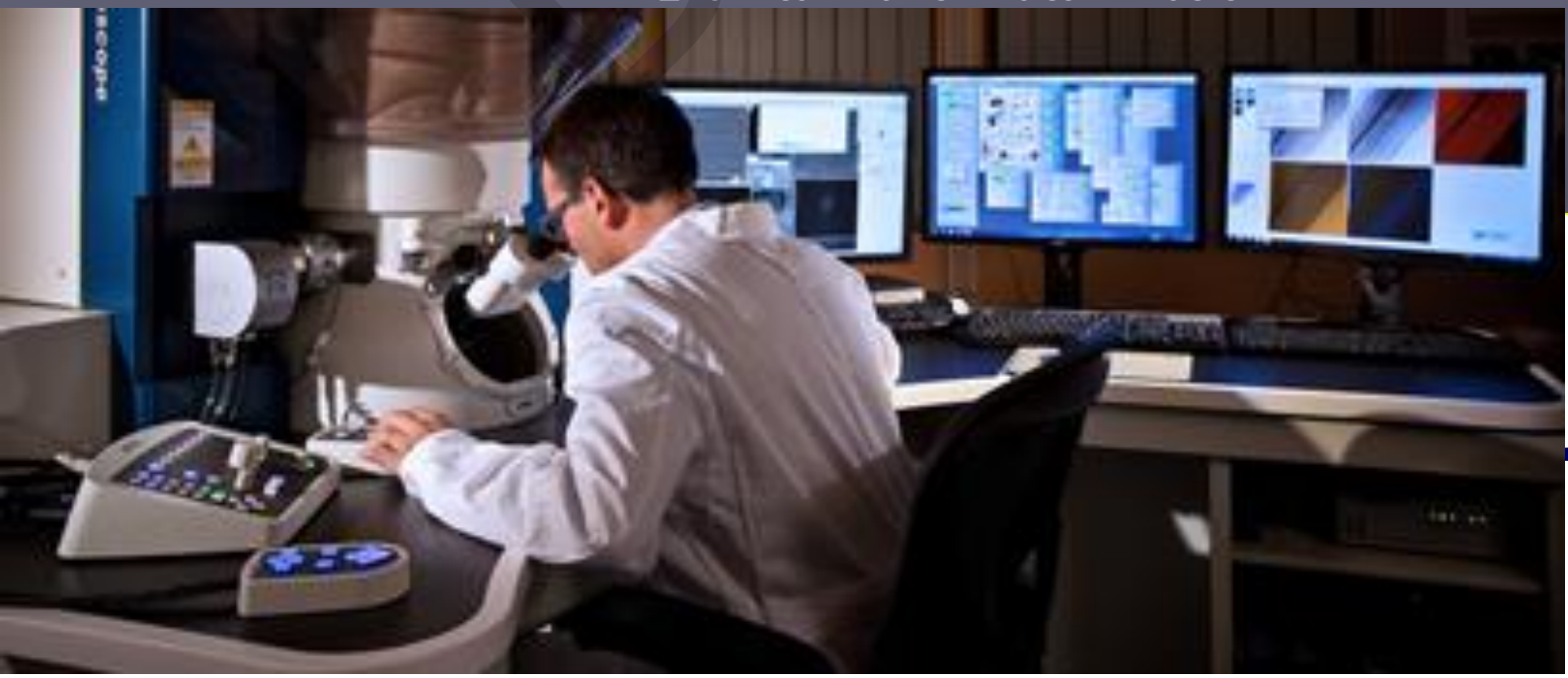

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Table of contents

Revision history log

Version number	Date of release	Author	Summary of changes
V1.0	15/11/2019	Lucie Guilloteau	First draft of the deliverable
V1.1	11/12/2019	Peter A. van Aken	Amendments to the first draft and approval of the deliverable
V2.0	19.01.2021	Antoine Kieffer	Second draft of the deliverable
V2.1	27.01.2021	Peter A. van Aken	Revisions of draft
V2.2	03.02.2021	Antoine Kieffer	Final version
V3.0	27.07.2022	Aude Garsès	Third draft of the deliverable
V3.1	24.08.2022	Peter A. van Aken	Amendments to the third draft and approval of the deliverable
V3.2	24.08.2022	Aude Garsès	Finalisation of the third draft

Introduction

To guarantee Transnational Access (TA) excellence of the ESTEEM3 project, it is necessary to assess the project with respect to the specific objectives set out in the Grant Agreement signed between the European Commission, the coordinator, and the other beneficiaries.

Therefore, this deliverable D12.1 provides evidence on the main statistics on the requested and provided TA units since the beginning of the project. The collected data refer to the period of 1st January 2019 to 31st May 2022.

This will include:

- A **general overview** of the projects that have been submitted
- Statistics of approved projects according to their **country of origin**
- Statistics of approved projects according to their **type of institution**
- Statistics of approved projects regarding the **hosting laboratories**, including the access units of the different components
- Statistics of approved projects regarding **gender balance**
- A **conclusion** on the latest progress in Transnational Access

General overview

The general overview provides evidence on the project figures about the number of projects, which have been submitted and assessed from during the project's start to May 2022 (M41).

During this period, 395 projects applied to the ESTEEM3 project. Seventeen of these projects were not accepted due to eligibility issues and/or insufficient consolidation of the proposal. 367 projects have been accepted and 11 are still in review process. Therefore, the success rate is reaching 93%.

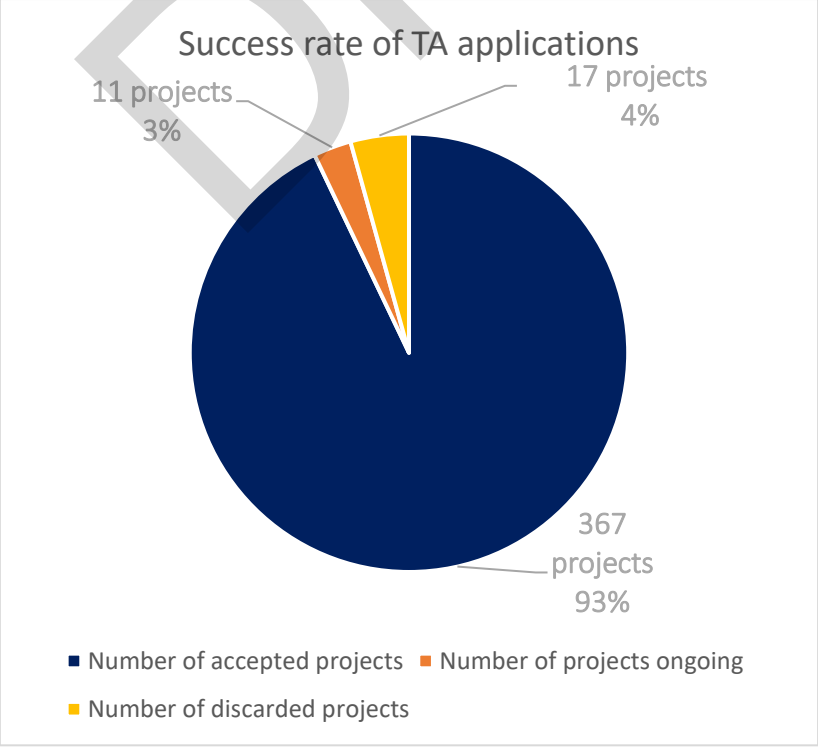

Figure 1: Success rate

A large majority of these approved projects (317 projects) were submitted by European organisations, which represents 86% of the total. The ESTEEM3 project is internationally visible and attracts talented projects as 50 projects (approx. 15%) benefit from ESTEEM3 expertise. The KPI *Number of international projects* aiming to reach 50 projects is achieve in May 2022 (M41).

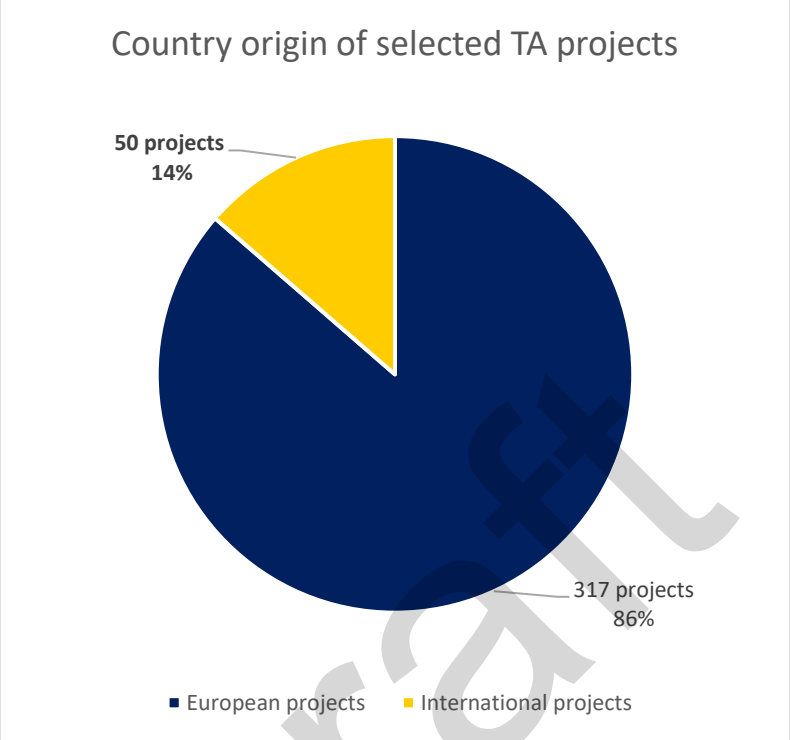

Figure 2: Country origin

In total, 13 projects came from the private sector including 9 projects lead by SMEs.

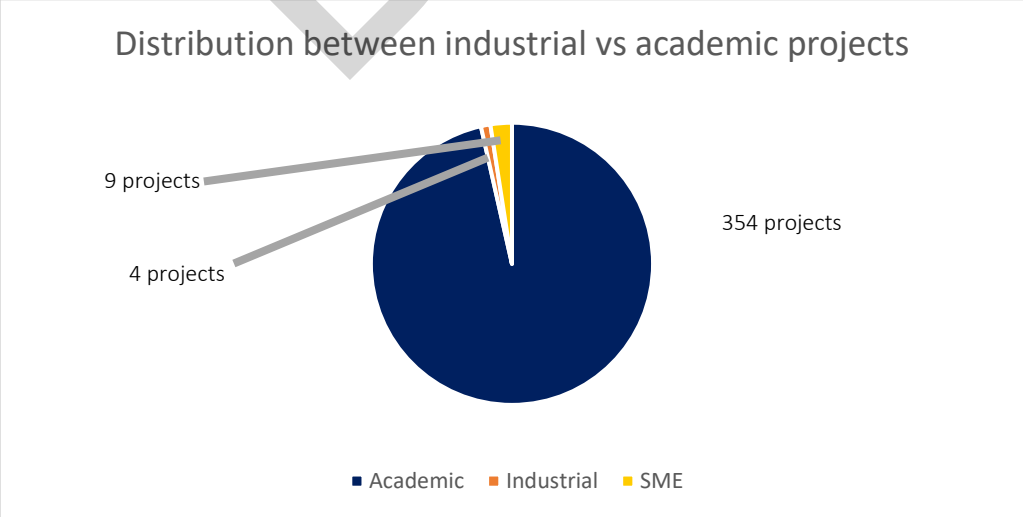

Figure 3: Industrial vs Academic projects

Distribution of approved projects

The consortium is monitoring the approved projects and follows up accurately on the following themes: “country of origin”, “type of institution”, “frequentation of access of hosting laboratories” and “gender balance”.

Country of origin

For the EU projects, 333 projects were submitted and 317 of them were accepted. The *Table 1* shows the origin of the 32 countries (Member States and Associated Countries) that applied and those that were selected. It also indicates the number of applications and projects selected for each country. Germany, Spain, France, Netherlands, United Kingdom, and Italy are the main countries applying.

The *Table 2* shows the same information for the submitted projects by 19 international countries. 62 projects were submitted and 50 of them were accepted. United States, China, Singapore and Japan are the main countries applying.

In total, projects from **51** different countries were submitted.

Table 1: Origin of European countries

EU	Total of submitted projects	Total of accepted projects
Austria	13	13
Belgium	5	5
Croatia	1	1
Czech Republic	6	6
Denmark	11	11
Estonia	1	1
France	**28**	**27**
Germany	**43**	**42**
Greece	3	3
Hungary	2	2
Iceland	1	0
Ireland	8	7
Israel	1	1
Israel	2	2
Italy	**24**	**24**
Lithuania	2	2
Netherlands	**28**	**27**
Norway	7	7
Poland	9	9
Poland/Germany	1	1
Portugal	12	9
Romania	6	5
Serbia	5	5
Slovakia	3	2
Slovenia	10	9
Spain	**39**	**37**
Sweden	13	12
Switzerland	12	11
Turkey	4	4

Ukraine	6	6
United Kingdom	27	26
TOTAL PROJECTS	333	317

Table 2: Origin of international countries

Country	Total of submitted projects	Total of accepted projects
Argentina	4	3
Australia	2	2
Brazil	1	1
Canada	4	4
China	8	8
Colombia	3	3
Egypt	1	1
India	3	3
Iran	2	0
Japan	4	4
Pakistan	1	0
Panama	2	0
Russia	1	1
Singapore	5	4
South Africa	1	1
South Korea	4	4
Taiwan, Province of China	1	1
United States	15	10
TOTAL PROJECTS	62	50

Type of institution

The accepted projects were conducted by researchers from different types of institutions, which are represented in the following figure:

- 270 were led by Universities or Higher Education organisations, which represents 73,57%.
- 86 projects were led by Research Institutes, which represents 23,43%.
- 4 SMEs, 2 other industrial and/or profit organisations and 5 other organisations led a project, representing 3 % of all approved projects.

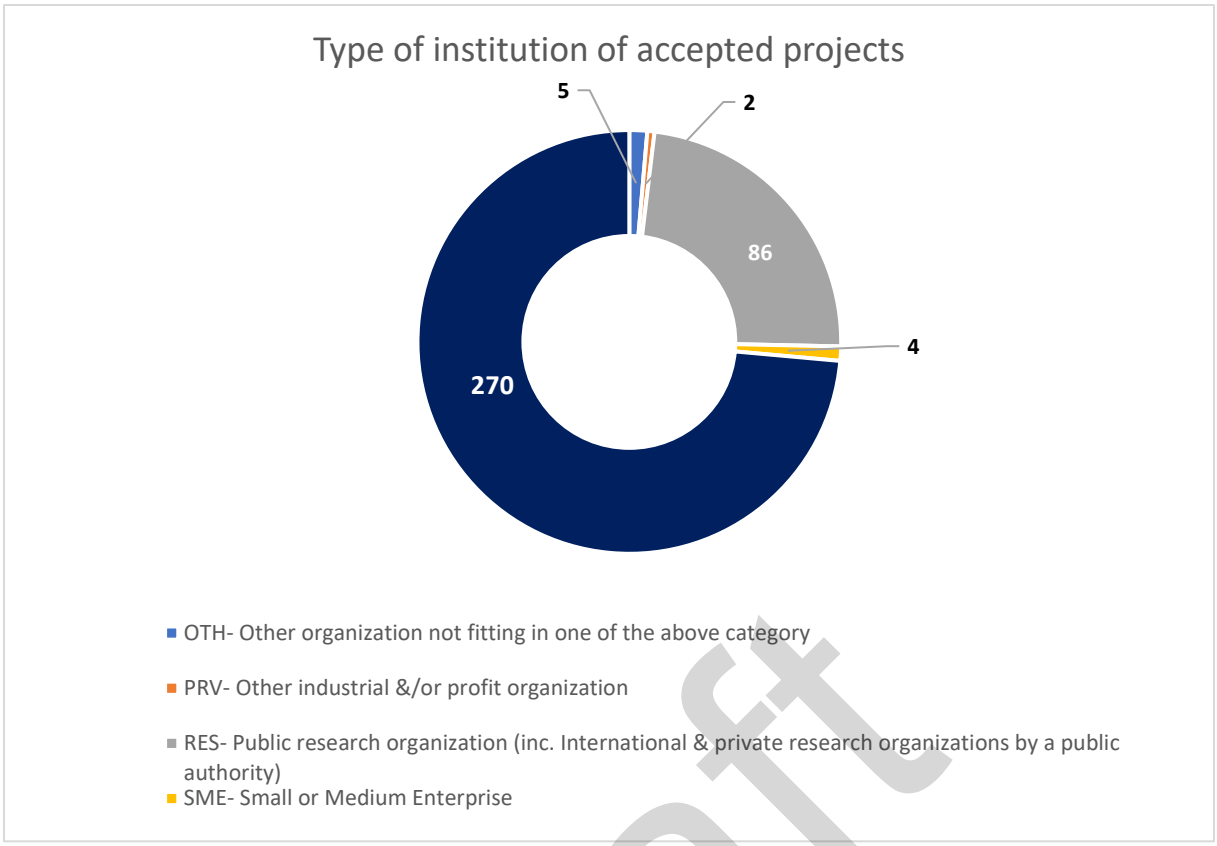

Figure 4: Type of institution of accepted projects

Gender equality

The figure below shows the gender balance of the group leaders of all approved projects. Based on the **367 approved projects**, **245 projects were led by male group leaders** and **122 were led by female group leaders**.

This means that:

- **67 % of the group leaders** of all approved projects are **male**.
- **33 % of the group leaders** of all approved projects are **female**.

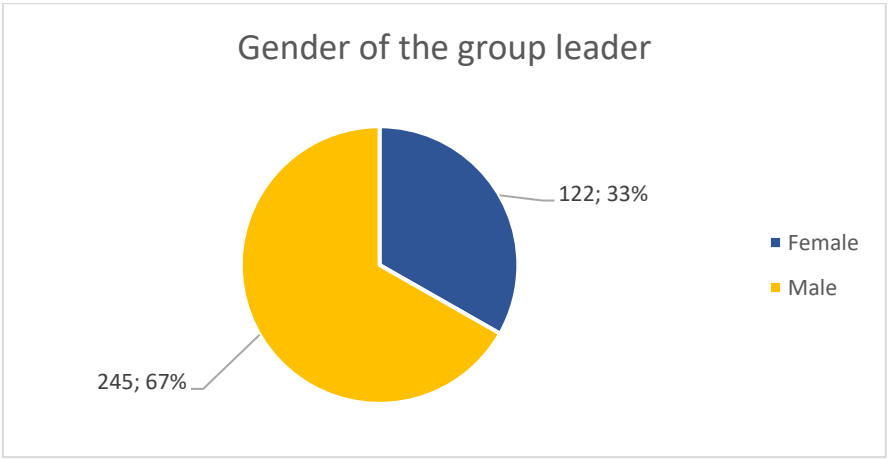

Figure 5: Gender of group leaders - Approved projects

Frequentation of access of hosting laboratories

This section analyses the frequentation of access of hosting laboratories, including the units of access of the different items. First, the laboratories are compared among each other concerning the number of conducted projects. Secondly, the requested items of units of access are illustrated. Thirdly, the requested units of access per laboratory are compared to the minimum number of TA access as indicated in the Grant Agreement.

The table below shows the number of approved projects in the different laboratories. Out of all **15 laboratories**, most of the projects are run by **EMAT Antwerp**, then **ER-C Juelich** and **LPS Orsay (**respectively **45 and 41 projects)**. **LMA Zaragoza, CEMES Toulouse, FELMI-ZFE Graz** and **StEM Stuttgart** are also ranked among the most visited laboratories, counting **32, 28** and **26 projects**.

Table 3:Frequentation of access of hosting laboratories

Laboratory	Number of approved projects
A-DME Cadiz	18
Beyondnano Catania	17
CEMES Toulouse	28
CMAL Gothenburg	9
EMAT Antwerp	**45**
ER-C Juelich	**45**
FELMI-ZFE Graz	26
Gemini Trondheim	18
IC-EM Krakow	21
JSI Ljubljana	10
LMA Zaragoza	**32**
LPS Orsay	**41**
OXTEM Oxford	12
StEM Stuttgart	26
WEMS Cambridge	19

Units of access in total

In total, **5.261 units of access have been requested by all institutions**, considering only approved projects until the end of May 2022. This means that although 20 access units are available per project, the average number of units requested is approximately 14.

The figure below represents the distribution of the units requested.

- **986** units for **sample preparation**
- **2443** units for **TEM**
- **1832** units for **data analysis**

Unsurprisingly, the unit in highest demand is TEM representing approximately 46% of all requested TA units. Sample preparation represents 19% and data analysis is reaching 35%.

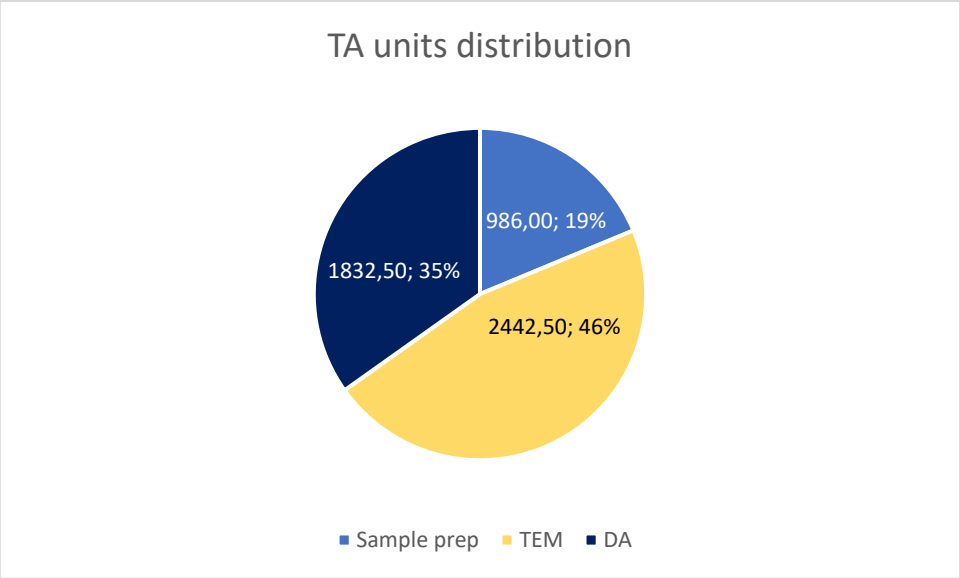

Figure 6: TA units distribution

Units of TA access allocated and provided per infrastructure

To assess the progress of TA units allocated and provided for each infrastructure, the coordination team is monitoring the different unit categories. The allocated units are directly compared to the minimum of TA access that needs to be provided according to the Grant Agreement.

Table 4 is summarising the allocated/requested units per category and per laboratory since the beginning of the project.

We can observe that some infrastructures appear to be more attractive than others such as MPG and UANTWERP.

In addition, StEM Stuttgart, ER-C Juelich, EMAT Antwerp, LMA Zaragoza, Gemini Trondheim, IC-EM Krakow, Beyondnano Catania have already exceeded their initial targets.

Other infrastructures, such as the University of Oxford, have fewer applications. The coordination team and the partners are currently examining the measures and actions to be implemented to reduce these disparities and/or possibly redistribute the TA units.

If all laboratories and categories are considered, the progress of TA allocation achieves 89%.

	Min. quantity of access to be provided				Allocated/ Requested units - incl. amendements				% Allocated/ requested units			
	Sample prep	TEM	DA	**TOTAL to be provided**	Sample prep	TEM	DA	**TOTAL requested units**	Sample prep	TEM	DA	**TOTAL % requested units**
MPG	80	180	0	260	159	235	3	397	198,75%	130,56%		152,69%
JUELICH	60	270	270	600	92	405	142	639	153,33%	150,00%	52,59%	106,50%
CNRS-CEMES		200	300	500	36	192,5	216,5	445		96,25%	72,17%	89,00%
CNRS-LPS	0	180	510	690	0	232	373	605		128,89%	73,14%	87,68%
UANTWERP	110	320	0	430	178	332	37	547	161,82%	103,75%		127,21%
OXFD	0	200	480	680	0	64	87	151		32,00%	18,13%	22,21%
UCAM	90	90	130	310	56	87	115	258	62,22%	96,67%	88,46%	83,23%
JSI	50	70	135	255	39	74	45	158	78,00%	105,71%	33,33%	61,96%
TUGraz	125	160	240	525	107	165	142	414	85,60%	103,13%	59,17%	78,86%
UNIZAR	60	150	180	390	91	155	158	404	151,67%	103,33%	87,78%	103,59%
UCA	0	96	196	292	7	85	158	250		88,54%	80,61%	85,62%
AGH-UST	80	120	120	320	89	159	106	354	111,25%	132,50%	88,33%	110,63%
CHALMERS	50	90	130	270	32	64	63	159	64,00%	71,11%	48,46%	58,89%
NTNU	20	55	90	165	39	86	85	210	195,00%	156,36%	94,44%	127,27%
CAT	40	65	120	225	61	107	102	270	152,50%	164,62%	85,00%	120,00%
TOTAL	**765**	**2246**	**2901**	**5912**	**986**	**2442,5**	**1832,5**	**5261**	128,89%	108,75%	63,17%	88,99%

Table 4 :Percentage of allocation progress per TA units and per infrastructure

Furthermore, the next four figures illustrate the progress of each infrastructure, by comparing the target, the allocated units and the units delivered until May 2022. The figure 10 also shows the average progress per laboratory in total.

The provided TA units' figures are based on the figures officially reported during RP2 and the forecasted TA units between1st January to 21st May 2022 (data provided during the internal report -figures may vary during RP3).

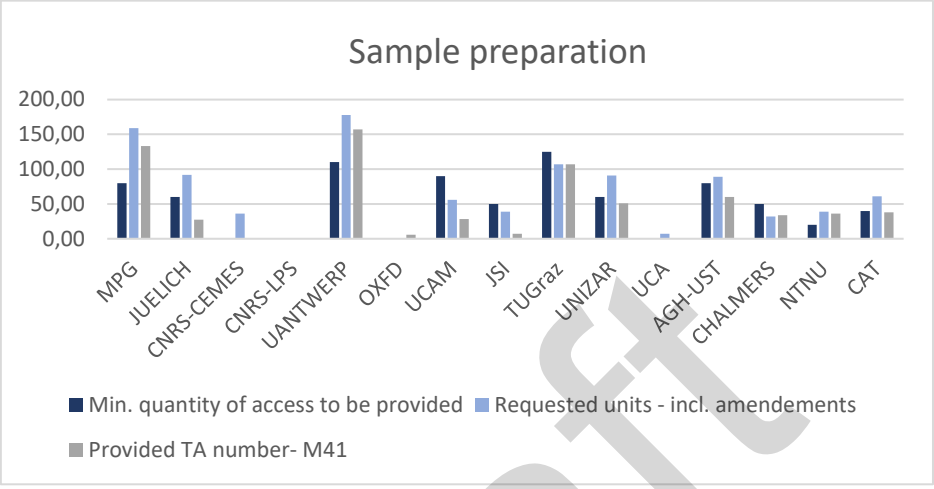

Figure 7: Progress on Sample preparation units

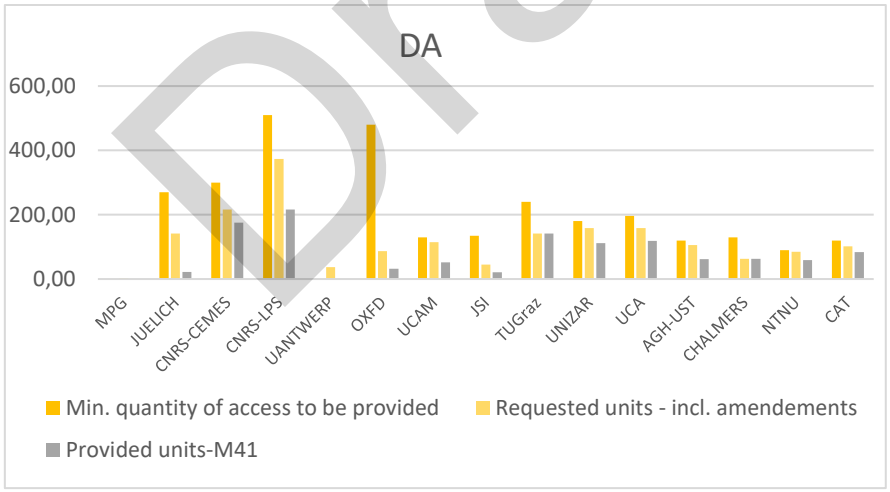

Figure 8: Progress on Data Analysis units

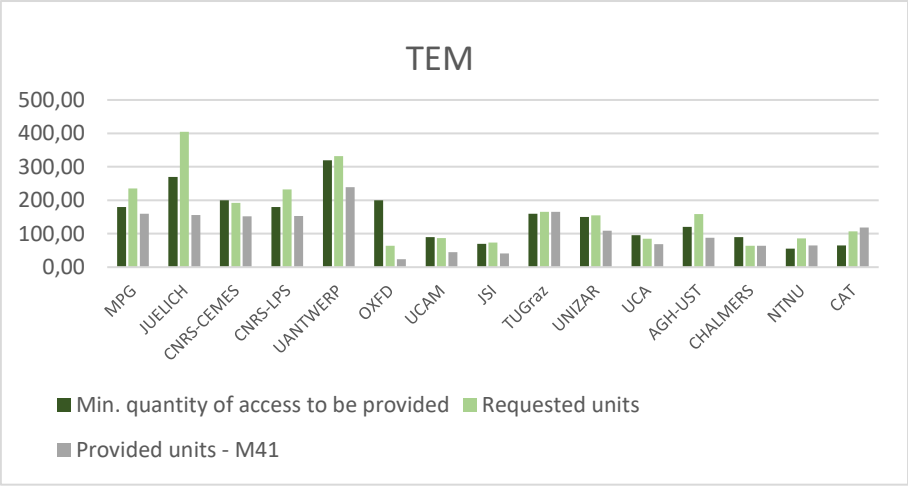

Figure 9: Progress on TEM units

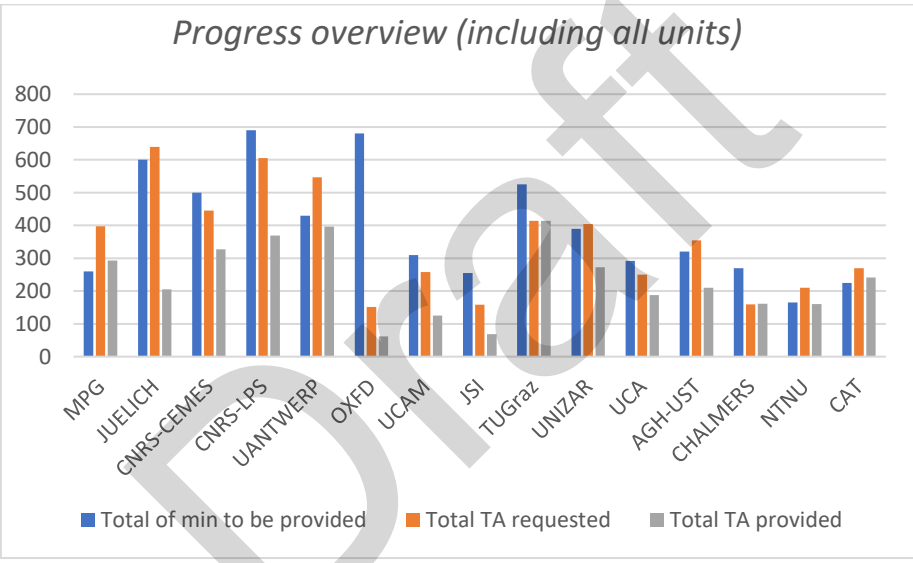

Figure 10: Progress overview for each infrastructure (including all units)

Finally, the table below summarize the key figures and progress at consortium level

Number & Type of Units of access	KPI	M41 requested	M41 provided	Completion rate (requested/allocated)	Completion rate (provided)
Samples	780	986	577	126%	74,0%
TEM	2.200	2.443	1.413	111%	64,2%
Data analysis	2.950	1.832	1.038	62%	35,2%

Table 5 : Key figures and progress at consortium level

Conclusion

To conclude, after 41 months of the ESTEEM3 project, the **achievement progress of allocated units is reaching 89 %.** The consortium will shortly reach its allocation targets**. In this context, the consortium will decrease its activities related to the assessment of new projects and will focus on the implementation of the selected projects.**

The consortium will continue to lead measures **promoting equal opportunities** between **men and women** in the implementation of the action.

List of tables and figures