NanoCommons
Nano-Knowledge Community

**The European Nanotechnology Community Informatics Platform:
Bridging data and disciplinary gaps for industry and regulators**

User Guidance Manual

We develop, you access

Experimental Workflows Design & Implementation

Automated data acquisition, online lab-books, data curation templates, nanoinformatics implementation.

Data Processing & Analysis

From data cleansing, mining and analysis to modelling and from ISA-TAB tools to ontologies.

Data Visualisation & Predictive Toxicity

Omics, QSARs, modelling and risk assessment tools.

Data Storage & Online Access

Data repositories, storage, online access

Table of Contents

Dear NanoCommons User,

These NanoCommons User guidelines aim at supporting our Users through their interaction with the Transnational Access (TA) element of the NanoCommons e-infrastructure, and provide detailed guidance on all aspects of the application process, what to expect during your TA experience, and the final reporting requirements. It also describes the services available and the conditions of use, as well as providing contact details for all potential Transnational Access hosts to facilitate the development of your application.

Please note that these guidelines are subject to regular updating. So, please make sure you are working with the latest edition. This version (version 1.0) dates from 09.10.2018.

Should you have any queries that are not answered in this User Guidance Manual or the Frequently Asked Questions document, please email your queries to the NanoCommons TA Helpdesk (helpdesk@nanocommons.eu).

The NanoCommons Team

Contact (Coordinator):	Contact (Project Manager):
Prof. Iseult Lynch	Mr. Thomas Carney
University of Birmingham	University of Birmingham
School of Geography, Earth and Environmental Sciences	School of Geography, Earth and Environmental Sciences
Geography Building	Geography Building
Edgbaston, Birmingham	Edgbaston, Birmingham
B15 2TT	B15 2TT
United Kingdom	United Kingdom
Phone: +44 (0) 121 414 5532	Phone: +44 (0) 121 414 7798
Email: I.Lynch@bham.ac.uk	Email : T.Carney@bham.ac.uk

1. Introduction

NanoCommons is a European research e-infrastructure funded as a 4-year project by the European Commission (EC) within the Horizon 2020 (H2020) "Capacities" Programme. NanoCommons integrates the data management and chemo- and nano-informatics expertise of 10[1] academic and SME partners from 8 European countries, plus 2 US partners (Oregon University and Duke University), to create an integrated nanosafety e-infrastructure whose purpose is to drive high quality nanoinformatics research. It also supports the accessibility and Openness of past, current and future European nanosafety data in order to support the European Commission's vision of the innovation economy within which nanotechnologies are an enabling technology that will underpin advances across a wide range of technology sectors, as long as they can be implemented in a safe and responsible manner.

NanoCommons is creating an openly accessible e-infrastructure serving the current and future (unmet) needs of the key research communities and pivotal industrial users and regulators. NanoCommons will bring pan-European added value and innovation opportunities, by answering the increasing demands concerning the prediction of safety of existing and new nanoscale materials for health and environmental sustainability. NanoCommons is creating a community framework and infrastructure for reproducible science, and in particular *in silico* workflows for nanomaterials and beyond, by:

(i) integration and federation of existing nanomaterials physicochemical characterisation and interaction mechanisms knowledge, protocols and data (beyond simple toxicity), along with quality assurance criteria and underpinning ontologies;

(ii) compilation, development and expert support of computational tools for mechanistic and statistical modelling, read-across, grouping, safe-by-design and life cycle assessment of nanomaterials and nano-enabled products to the broader user community, and benchmarking of their predictive power; and

(iii) provision of (virtual) access to its KnowledgeBase (KB), modelling toolbox and workflow optimisation and supporting expertise to facilitate commercialisation of nanotechnology-derived products.

Users of the NanoCommons Transnational Access (TA) services will have the opportunity to develop their own research proposals in conjunction with technical experts from the various data management and nanoinformatics partners. They will be able to access a wealth of knowledge on all aspects of nanomaterials data management and nanoinformatics including model development, dataset curation and quality assurance and guidance on implementation of data management best practices for individuals, laboratories, research centres and multi-site projects. These include access to the latest protocols and best practices for nanomaterials physicochemical characterisation for safety assessment, and, the associated data capture templates fully annotated to community agreed ontologies and integrated with databases and repositories. The focus of the research proposals must be on nanosafety data management best practices and/or nanoinformatics, to be within the scope of NanoCommons.

The EC supports Transnational Access to NanoCommons by reimbursing the expertise costs of the TA facilities and the travel expenses of its Users. Selection of Users is via an open competition, with 6-monthly application deadlines (each call is open for ~8 week), and a full review process. This document explains how external Users can obtain access to TA services and tools provided by NanoCommons.

NanoCommons is coordinated by the University of Birmingham (UoB) and consists of the following partners offering Transnational Access:

---

[1] Note there are 14 partners in total in NanoCommons, but only 10 are offering Transnational Access.

Partner name	Short name	Country	
University of Birmingham	UoB	United Kingdom	
Douglas Connect GMBH	DC	Switzerland	
United Kingdom Research and Innovation	UKRI	United Kingdom	
National Technical University of Athens	NTUA	Greece	
University College Dublin, National University of Ireland, Dublin	NUID UCD	Ireland	
Acondicionamiento Tarrasense Associacion	LEITAT	Spain	
Bundesinstitut für Risikobewertung	BfR	Germany	
Novamechanics Limited	NM	Cyprus	
Biomax Informatics AG	BIOMAX	Germany	
Universiteit Maastricht	MU	Netherlands	

Summary of the Application Process

Applications for access to NanoCommons e-infrastructure facilitates must be submitted electronically using the application form available from http://www.nanocommons.eu/apply-for-access. The first call for proposals will be launched on **11th February 2019** with a closing date of **31st March 2019**, and the following calls will be published at six monthly intervals.

Proposals will be reviewed together by the User Selection Panels (see section 2.7.1) at their meeting 4-8 weeks after the call deadlines. Proposals may request the use of more than one partner's services per application (as many of the services the partners offer may be needed to deliver the proposed project).

The four categories of access provided under NanoCommons are as follows:
Experimental Workflow Design & Implementation
- Automation of data acquisition
- Implementation of online lab notebooks and database integration
- Data curation templates

- Nanoinformatics workflow implementation

Data Processing and Analysis
- Data cleansing and Quality Assessment / Quality Control processes
- Dataset Annotation Tools
- Statistical analysis Tools
- Ontology linking

Data Visualisation and Predictive Toxicity
- Omics analysis and processing tools
- Predictive modelling tools (QSAR, Jaqpot etc.)
- Molecular modelling tools
- AOP development
- Risk assessment models

Data Storage and Online Access
- Data repository / data storage
- Automation of data upload
- Cloud services

These are all offered through NanoCommons via the same application form (see section 2.3 Application) and can be accessed remotely or inclusive of a physical visit to discuss the project design or the results and their interpretation, as agreed between you and the TA providing partner.

Upon receipt, proposals will be checked for eligibility by the Project Office and for technical feasibility by the partner providing the TA. The relevant TA partner will provide feedback to the User Office on the scientific ambition of the proposed work, its technical feasibility, its contribution to **NanoCommons's goals of supporting FAIR and Open datasets[2]**, and a recommendation on the effort required to achieve the proposed work. All proposals should be discussed with the technology expert prior to submission, if this does not occur proposals will likely be recommended for resubmission to a subsequent call.

Proposals that meet the eligibility criteria and the technical criteria are then forwarded to the User Selection Panel (USP) where they are rated for access. Track record in science of the applicants can also be included in the considerations of the USP. The USP may ask the applicants for clarification of particular points. Feedback on unsuccessful proposals will be provided to facilitate re-application if relevant and suitable.

For projects that are accepted for TA, arrangements for the proposed work are made directly between the proposer and the host TA partner. The timing of the proposed work will be subject to the availability of the requested technologies and staff time at the proposed TA partner, but all **TA projects must be completed within 1 year of offer**. Discussions via online platforms and detailed support in preparing datasets for utilisation in the various modelling tools will be provided by the TA partner as the project gets underway. Figure 1 shows the application process schematically.

---

[2] NanoCommons prefers that all data will be Open and FAIR, unless there is a strong case to prevent this (e.g. commercial sensitivity), but a User commitment to Open and FAIR data and publications will be a plus.

Approval of a proposal and assignment of User time at a TA partner under NanoCommons is accompanied by an obligation to publish the results obtained in due time, acknowledging the funding from NanoCommons, preferably in ISI refereed journals (see 2.7.2 Conditions of Access) as Open Access route (green or gold) under the Creative Commons license allowing re-use. Datasets that are developed and/or processed via NanoCommons should be made available following publication, unless there are valid reasons for not doing so, of the relevant work (maximum embargo period 2 years) to comply with NanoCommons FAIR and Open Data principles, and should also be given a Digital Object Identifier (DOI), which can be provided via the NanoCommons Knowldgebase (through Zenodo), and linked to the relevant publications and protocols.
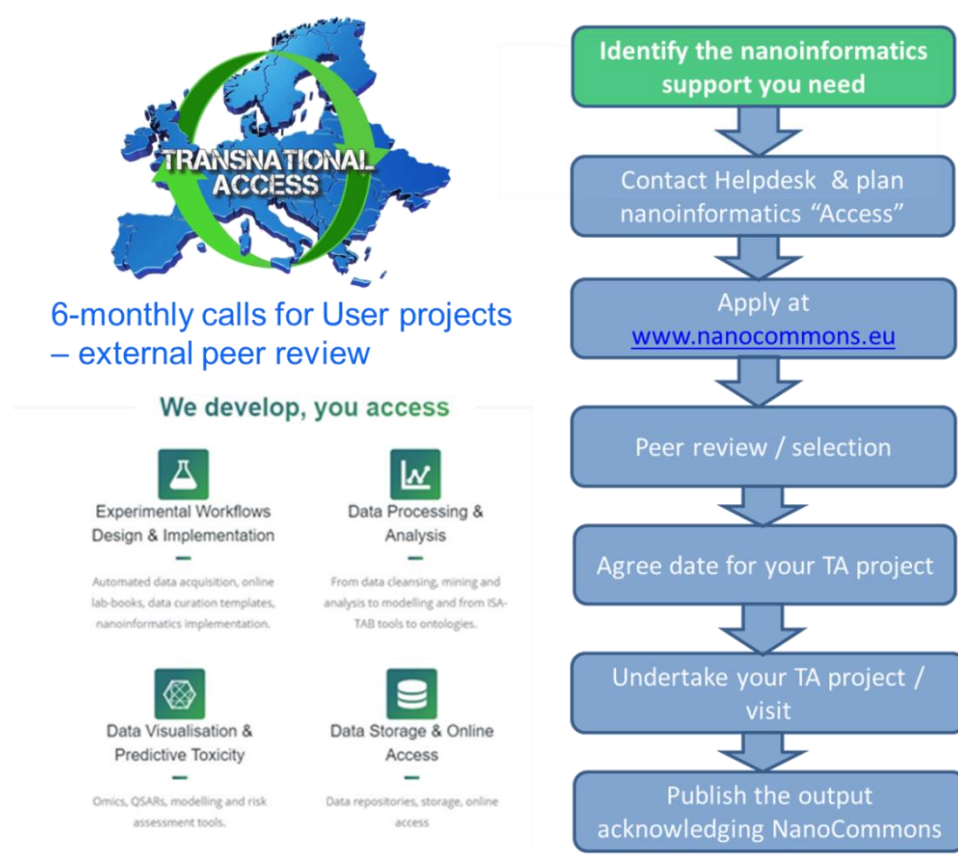
Figure 1: Summary of the NanoCommons Transnational Access application process

2. Applying for access

2.1 Who can apply

No fee open access is available for Transnational Access for Users from industry, regulators or research institutions located in EU member states and associated states. EC financial support requires that the results of the work carried out are intended for publication. For more details see section 2.7.2 Conditions of access.

2.2 What does the award cover

The award covers all research costs in the form of a daily rate. This will be calculated directly from your application form and therefore you need to have discussed your project with your proposed host technology expert in advance of submission. You will not be required to formulate a budget.

The award also covers the cost of your international travel, local accommodation and a per diem which contributes towards your subsistence and local travel. You will be required to meet the cost of local travel in your country of origin, e.g. taxi to the airport.

2.3 Application

You can apply for access for NanoCommons TA at any time during an open call via the online application form (https://www.nanocommons.eu/apply-for-access), and all applications will be reviewed together about 4-8 weeks from the call closing date.

NanoCommons will publish two regular calls for application each year from 2019-2021. The first call will be published 1st February 2019. All calls for proposals will be published on the project website and advertised via the NanoSafety Cluster website (https://www.nanosafetycluster.eu/) and newsletter and via other relevant channels.

2.3.1 How to apply

The application form should be completed and submitted on-line at:

 https://www.nanocommons.eu/apply-for-access.

There are 3 simple steps to submitting an application:

- Define the nanosafety data management and/or nanoinformatics work you want to carry out, and ensure that it is within the scope of the NanoCommons research infrastructure (see section 1);

- Select the technologies/tools that are most appropriate for your needs via the NanoCommons TA section of the website, and discuss your ideas directly with the technology expert at the appropriate TA partner. Alternatively, register your enquiry via the NanoCommons Helpdesk (https://www.nanocommons.eu/helpdesk), who will direct your query to the relevant TA partner and technology expert.

- Complete the application form online, which has two sections, firstly the Personal Details section which ensures that you do not have to re-enter your personal information for each subsequent TA application, and your TA Application details (Project details, further information, TA facility information and resource needs).

Special notes for completion of a successful application:

Country of home institution: The countries in the drop-down list of the online application form are EC member states and associated states. The EC supports TA to NanoCommons for researchers working in organisations based in these countries. Please check that the desired TAF is not located in the country where you work (If this is the case access may be possible via local arrangement rather than via TA).

Supporting Statement: A supporting statement is requirement for PhD and Postdoctoral applicants. It should be submitted by a senior peer who knows both you and your work first-hand (e.g. supervisor). Please see further details in section 2.5.6.

Technology Experts: It is essential that you discuss your proposal with the particular technology expert before submitting your proposal via the online system, as you must include a named expert at your proposed TA partner. If you are uncertain which technologies to select please contact the NanoCommons TA Helpdesk (https://www.nanocommons.eu/helpdesk) who will point you in the right direction. A list of current data management and nanoinformatics tool descriptions are included on the NanoCommons website (www.nanocommons.eu), along with the names of relevant experts to contact.

Note: Proposals will only be accepted if written in English, if submitted by the call deadline, and with all information present (including host technology expert contact details). A report on the outcomes from any previous NanoCommons User access must be provided before any additional access to NanoCommons tools and services can be approved.

2.3 NanoCommons's Scope within the European Research Area

All applications must fit within the remit of NanoCommons and the European Research Area. The main objectives of NanoCommons within the European Research Area are to:

(i) integrate and federate existing nanomaterials physicochemical characterisation and interaction mechanisms knowledge, protocols and data (beyond simple toxicity), along with quality assurance criteria and underpinning ontologies;

(ii) development of computational tools for mechanistic and statistical modelling, read-across, grouping, safe-by-design and life cycle assessment of nanomaterials and nano-enabled products to the broader user community, and benchmarking of their predictive power; and

(iii) develop and optimise data management workflows and tools for all aspects of nanosafety research, including annotation of protocols, development of data capture templates directly linked to databases and knowledge warehouse to facilitate data mining, clustering and modelling.

Further information can be found on the NanoCommons website www.nanocommons.eu.

2.4 Categories of Access, Tools and Services and Transnational Access Facilities

The tools, services and TA facilities offered in NanoCommons are operated in different locations under four different categories. They are subject to continuous improvement. Please check the descriptions of the tools and services on the NanoCommons website (www.nanocommons.eu).

A summary of which NanoCommons TA partner is offering access under each category is given below. Users can apply to more than one Category per call.

	Category of Access			
TA Partner	**Experimental Workflow Design & Implementation**	**Data Processing and Analysis**	**Data Visualisation and Predictive Toxicity**	**Storage and Online Access Data**
UoB	√	√	√	√
DC		√	√	
UKRI	√	√	√	
NTUA		√	√	
NUID UCD			√	
LEITAT	√			
BfR		√	√	
NM		√	√	
BIOMAX		√	√	√
UM		√	√	

Access provider short name	**Infrastructure name**	**Installation name**
UoB	UoB-TA	NanoOntology Omics metadata nanoWorkflows Predictive tools Visualisation / Risk
DC	DC-TA	KnowledgeBase Ontology services Processing services Predictive tools Visualisation / Risk
NERC	NERC-TA	Processing services Predictive tools nanoWorkflows
NTUA	NTUA-TA	Data mining Processing services Predictive tools
UCD	UCD-TA	Predictive tools Visualisation / Risk
LEITAT	LEITAT-TA	nanoWorkflows Predictive tools Visualisation / Risk
BfR	BfR-TA	nanoWorkflows Predictive tools Visualisation / Risk
NM	NM-TA	nanoWorkflows Predictive tools Processing services Visualisation / Risk
Biomax	Biomax-TA	Knowledge Base AOP search
UM	UM-TA	AOP search Ontology services

Note that NanoCommons TA does not necessarily require a physical visit, but can simply be a request for access to specific tools and services supported remotely but with the TA partner's time and effort funded by NanoCommons. Users can apply to more than one Category per call. The unit for measuring access to NanoCommons is days – i.e. computational or developmental time required from the TA partner to perform the User's project, i.e., to develop a computational model based on a specific dataset, or expand the Domain of Applicability of an existing model utilising the users' data.

Details of all tools and services of the TA partners accessible under NanoCommons are given on the NanoCommons website by Category and by TA partner (www.nanocommons.eu).

Figure 2 shows the modalities of TA to be offered through NanoCommons and whether they are Virtual (to service and expertise without requiring the User to travel and/or invest significant of their own time/effort) or Transnational whereby there will be development time/effort required on the part of the User (funded via the TA budget of NanoCommons) and/or physical travel by either the User or the TA provider (e.g. to visit the User's laboratory to advice on implementation of best practice and nano-informatics workflows).
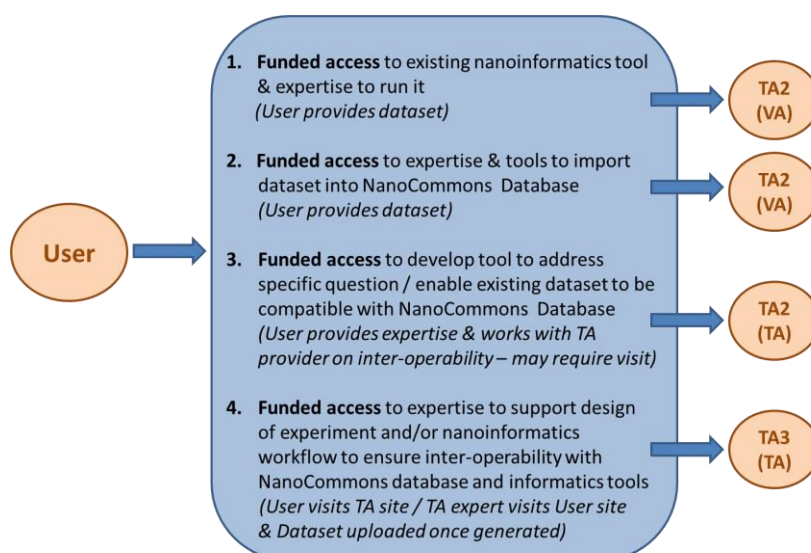
Figure 6: Modalities of Access envisaged within NanoCommons which will include virtual access to existing resources and tools (Service Activities), Transnational access to develop new tools to address User's research questions, and Transnational access to support Users to develop and integrate nano-informatics workflows and best practice into their existing research set-ups.

2.5 Online Application Form

Guide to using the application form:

2.5.1 Registration

Once you have registered at http://www.nanocommons.eu/apply-for-access you can complete an application form to access tools, services and expertise from your chosen TA partner. The registration process allows you to generate an application for each TA tool/expertise that you propose to access, save it and then edit it where appropriate before finally submitting it/them for assessment. Should a User apply for access to services from more than one TA partner in the same project application (joint application) a clear justification is required. For a joint application the User must submit one application indicating on the

application form that it is a joint application and indicating the two or more TA partners that the User needs to access.

There will be two calls per year from 2019 - 2021.

2.5.2 Applying to more than one TAF under a call

If you require access to more than one TAF you must complete another TAF application, however, your personal details only have to be submitted once.

2.5.3 Personal details and the application form (compliance with GDPR)

The application form has two sections. Firstly, the Personal Details section which ensures that you do not have to re-enter your personal information for each subsequent TA application. This information will be attached to each TA application upon submission. If you wish to update these details please go into the 'Update your details' section to amend and save them. The TA Application form includes sections for you to complete on the project details, further information, facility information and resource needs. Please refer to section 2.6 for further information.

Any personal information submitted to NanoCommons will be treated according to the GDPR requirements of the EU. NanoCommons will save and use the submitted information solely for the purposes of TA evaluation and delivery processes and for communication regarding the TA application and subsequent arrangements or feedback if the application is successful or not, respectively. NanoCommons will not share any personal information with third parties. NanoCommons will share personal information and contact details only with NanoCommons partners and associated partners who will be involved in the TA application process and or delivery of the TA access (if granted) and the obligatory reporting to the European Commission to justify the TA spends by partners in support of NanoCommons TA Users.

2.5.4 Submission and Receipt of TA applications

You must submit your application for assessment **BEFORE** the deadline for it to be eligible for consideration. Once you have submitted a TA application you will not be able to make any further changes. You will receive an email to confirm that we have received your application.

Receipt of the application will be acknowledged. If you do not receive an acknowledgement by email, which will include your application reference (e.g. XXX-TA-01) within two working days please contact the User Office (helpdesk@nanocommons.eu). The status of proposals can be tracked online by using your login and password provided upon registering, if you forget your password this can be retrieved on the login page.

2.5.5 Supporting statement (for PhD/Postdoctoral applicants)

The supporting statement is required by PhD and Postdoctoral applicants only, and will be used as a reference. Therefore, it should be provided by a senior peer who knows both you and your work first-hand (e.g. supervisor).

Once you request the supporting statement an email will be sent with your attached application form to your designated supporter. The supporter will then need to complete the statement **BEFORE** the call deadline and submit it online as per the instructions received in the email. Late statements will not be

accepted. Once they have submitted the supporting statement, an email will be sent to the NanoCommons TA partner and the applicant with a copy of the completed application.

Only applications with completed supporting statements will be eligible for consideration by the NanoCommons User Selection Panel (USP). Please note that an applicant can submit their completed application without their supporting statement. The supporting statement will be added once it has been completed. Supporting statements cannot be sent via email as they are an integrated part of the application and it becomes available to the USP. If submitters have issues uploading the supporting statement please contact the User Office at helpdesk@nanocommons.eu for assistance.

2.5.6 Website timeout

Please note that for security reasons the system will timeout after 30 minutes of inactivity. If you have not saved your application during your session you will lose new data.

Note: In the web application form the ? symbol indicates additional information must be provided.

Once you have finished a session please make sure you click logout.

2.6 Project Proposal

The details requested in the application form are necessary for our reporting duties to the EC and for the assessment of the novelty and Scientific merit of your proposal. Please read the conditions of EC support before submitting your application (see section 2.7.2 Conditions of access).

2.6.1 Project summary

State clearly the objectives of the proposed application together with the general and specific scientific background and project methodology; give results of preliminary work.

Please explain the scientific importance and originality of your proposal and expected outputs. Especially for scientists who are new in the field they apply for; the following questions might be helpful when writing an application for access at NanoCommons:

- Tell us what you want to do, why it is new or interesting or essential for your research?
- Why do you need the use of the particular tools / services requested at the proposed TA partner for your measurements?
- Roughly estimate the time required to complete your project (consult with the TA partner for their estimate for model development / data curation etc.).
- Do you have experience in the approach proposed?
- Please give references, preferably own publications.

Method(s): The suitability and necessity of the proposed methods / tools / models for the proposed application should be clearly described. Queries concerning the feasibility (technical or safety aspects) of a proposed application should be clarified with the relevant technology / tool / model expert before the proposal is submitted.

Results expected: Describe the results expected from the application to NanoCommons, and their scientific or technical relevance.

2.6.2 Safety

Ensuring safety of our Users and staff is of highest priority in NanoCommons. Therefore, any information relevant to safety has to be disclosed in proposals relating to implementation of data management workflows or where NanoCommons staff will be visiting your facilities. Safety comprises everything from the use of toxic materials, radioactive samples, potentially hazardous biological materials, dangerous equipment, and others. Failure to provide sufficient information will automatically void the application.

2.6.3 Ethical approvals

If any ethical approvals were required for your research, please confirm that these are in place in your home institution, and provide the relevant ethical approval numbers. These will be included in the metadata related to your datasets, as a pre-requisite for re-usability (i.e. the R of FAIR data).

Failure to include a statement on ethical approval for datasets relating to *in vivo* experiments will automatically void the application. Note that this information will become part of the metadata accompanying the resulting dataset.

2.7 What happens after submitting a proposal

The following stages in the proposal handling are indicated in the system:

- Notification of receipt of application sent.
- The application form is checked for completion and eligibility for Transnational Access and any other supplementary information is sent to the TAL and technology experts of the requested TAFs. This information is also sent to the technology experts of TAFs with similar capabilities.
- The application is returned to the User Office along with the feasibility report and an estimate of the time required for the work.
- The User Office forwards the collected information and application to the USP. The USP consists of technical representatives from the NanoCommons TA partners.
- The USP assesses the proposal according to scientific excellence and gives a recommendation.
- The User Office is informed of the recommendation. The USP may request more information or clarification. In this case, the User Office acts as "go between" between the User and the USP, and the proposal may be recommended for re-submission to the subsequent call.
- The Users and TA technology experts are notified of the results of the USP.
- The Users and technology experts make technical and practical arrangements for the visit, with the assistance of the UoB TA administrator.
- Please refer to the User Checklist provided in Annex 2 upon being awarded access to a NanoCommons TA partner. Note that the access may be virtual, may include a visit by the User to the TA partner, or may include a visit by a NanoCommons partner to the User's lab depending on the type of TA applied for.

- Carry out the work with the TA expert – note that much of the effort may be on the part of the TA partner, but detailed discussions with the User will be required. Work must start within 12 months of approval of the User application.
- Complete the NanoCommons User Evaluation Form (see Annex 3) which is accessible through the online system.
- Prepare joint publication between the TA partner and the User, including the appropriate acknowledgement of the NanoCommons support (see section 3.5 Acknowledgements) and details of all publications arising from TA awarded entered into the NanoCommons online application system (via your User login and password).

The application process takes between 4-8 weeks from the call deadline. Once the USP has met and agreed the allocation of awards the results of your application will be emailed to you and your TA partner host.

2.7.1 User Selection Panel

Each User application is evaluated by the project's User Selection Panel (USP). All TA partners have a representative on the USP and there are also independent members from the project's advisory board.

The USP follow standard guidelines for reviewing all User applications. The work is assessed on the main criteria of scientific and technological excellence, however other criteria are considered, such as:

- Realistic methodological approach and work plan;
- the potential impact of the research on the European Research Area;
- the value of supporting statement (PhD and Postdoctoral Researches only)
- the strength of the justification for requested access to service/facilities for the TA;
- the value of expected gains and outputs
- the CV of the applicant;
- the potential for ongoing research collaboration from the proposal.

Once the Panel has scored the applications, they will meet to discuss their scores and recommendations. The degree of demand for individual TAFs and previous use by the user are also considered.

2.7.2 Conditions of access including Open Access publications and datasets

No fee access is only available for TA i.e., the User must travel to a country that is not the country in which they are currently working. Users must be from organisations in EU member or associated states, or belong to Approved User Groups.

Users and their hosts are required to sign the User Agreement (see Annex 4) prior to the commencement of the User visit / Access. Upon arrival at a TAF, Users are required to sign the Rules and Regulations of the host institution. These may vary slightly from institution to institution, but the generic template is shown in Annex 5. Should Users home institutions require sight of all documents prior to signature, the institution-specific version of the Rules and Regulations form can be requested from the User Office (helpdesk@nanocommons.eu) prior to the visit.

Intellectual property generated within the projects belongs to the User. However only Users and User Groups with the right to publish results are entitled to access free of charge. For format of the required acknowledgement see section 3.5 Acknowledgements.

NanoCommons has a central ethos of supporting Open Access and FAIR (Findable, Accessible, Inter-Operable and Reusable), which requires that TA Users agree to the following conditions:

1. To publish the outcomes from the NanoCommons TA research in an Open Access format, preferably via a Creative Commons licence.

2. Datasets generated within / supported by NanoCommons TA should be made available and re-usable, preferably with a Digital Object Identified (DOI), which can be provided by NanoCommons (via Zenodo). The dataset can be deposited in any suitable database (e.g. eNanoMapper, NanoCommons, FigShare etc.) and the DOI added to the report from the TA visit.

The User should note that the EC has the right to publish an anonymised list of Users from all of its Research Infrastructures. Reports from User visits made by the NanoCommons project coordinator to the EC will contain the names, nationalities, home institutions and description of the work of all Users funded through NanoCommons.

2.7.3 Time allocation

The User Selection Panel (USP) reviews the proposals and ranks them according to scientific and technological merit.

Expert time for specific models / tools / TA partners is allocated according to the recommendations of the USP, based on the estimated access time in the feasibility check. The time allocation process is based on a close interaction between Users and NanoCommons technology / tool / model experts following the USP process.

2.7.4 Safety requirements

Prior to your visit to any NanoCommons TA partner or of any NanoCommons partner to your facility for evaluation of your experimental workflows and data management needs, it is necessary to read the General Safety Regulations of the access provider inside the NanoCommons consortium.

Users whose experimental protocols include potentially dangerous materials and/or equipment must notify the User Office and host TA partner in advance of the TA partner's visit to the User site.

3. Assistance and collaboration

3.1 Technology experts

An assigned NanoCommons technology expert is responsible for each tool / model / service at each TA partner. It is mandatory that the User contacts the technology expert of the TA partner they wish to access prior to submitting a proposal. The technology expert will serve as your local contact in the development of your application.

Details of the local technology experts are given on www.nanoccommons.eu/ta-access. Should you need assistance with choosing which technologies you should apply for please contact the NanoCommons helpdesk either through the ticketing system or at helpdesk@nanocommons.eu who will discuss your needs with you and guide you on the services and/or tools that fit your needs best.

3.2 Transnational Access main contact

Each TA partner has an assigned main contact person who is responsible for the overall management of the TA access at their specific institute. Details of the local TA contacts are given on www.nanocommons.eu/ta-access.

3.3 TA Administrator

There is a dedicated TA administrator for the project who will assist with arrangements for TA, including arrangements for webinars or other online discussions, and arrangements for any proposed physical visits, and will ensure to provide you with the relevant documentation is completed at the start and end of your visit.

3.4 Collaboration

NanoCommons encourages collaborations between Users and NanoCommons partners. Such collaborations are especially relevant in cases where researchers from NanoCommons access providers are expected to develop tools / models / processes that are beyond the current state-of-the-art. Collaboration should be agreed on before a proposal is submitted, but in any case well before the work on a project commences.

3.5 Acknowledgements

Irrespective of special arrangements such as those under point 3.4 Collaborations, publications resulting from work supported by NanoCommons have to contain an acknowledgement according to the following pattern:

> **"This research received support from the NanoCommons Project (www.nanocommons.eu) which has received funding from the European Union Horizon2020 Programme (H2020) Under Grant Agreement No. 731032"**

A similar acknowledgement should be included during conference presentations, including the proceedings, and at other public presentations. The name of the TA partner and technology expert may also be given in the acknowledgement.

Datasets generated as a result of NanoCommons TA, or initial datasets generated following implementation of NanoCommons developed data management plans / utilising NanoCommons data templates or tools should also include the acknowledgement of NanoCommons funding, using the above format.

3.6 Publications

The details of all publications relating to work in NanoCommons must be submitted on the User online system. Please indicate the type of publication: Scientific Journal, Book, Patent, Proceedings, article on www, other. These publications should also carry the acknowledgement given above.

A pdf file of the publication and full citation details of a publication as soon as it has been accepted or published should also be sent to ta@nanocommons.eu.

We need this information in order to monitor the success of our Open access and are required to report this information in our regular project reports.

Please bear in mind, that your publication record will also be made available to the USP and will impact the success of future applications.

4. After the access is completed

4.1 Project follow up

After your visit to one of our partners a User Evaluation form is required on your visit which may seem minor but are quite important to us. The information required is essential for our project reporting to the EC and recovery of the access costs from them, it is also important for improving our services therefore we are most grateful for the time you spend completing the forms.

The User Evaluation Form should be completed within four weeks of your visit. This should be submitted online using your User login and password.

4.1.1 User Evaluation Form

User Evaluation Forms are to be submitted online using your User login and password.

Please note our EC funding for the access activities is dependent upon our reporting of this information. Therefore, we are grateful for the completion of this form. We are also continually looking to improve our services and therefore appreciate your feedback in this form.

The template of the Evaluation form is shown in Annex 3.

In addition, the European Commission requests that Users complete their confidential questionnaire. The link to the personal questionnaire will be sent by the EC following completion of the visit, as informed by the NanoCommons User Office.

Abbreviations

EC – **European Commission**

DOI – **Digital Object Identifier**

GDPR – **General Data Protection Regulation**

TA – **Transnational Access**

TA Admin **– User Office Transnational Access Administrator**

TAF Admin **– Transnational Access Facility Administrator**

USP **– User Selection Panel**

VA – **Virtual Access**

Glossary

Access provider: means the beneficiary that is in charge of providing access to the infrastructure(s) or its tools / services / models or expertise.

Infrastructure: means a facility, a resource (or a coherent set of them) together with the related services that are used by the scientific community to conduct research.

TAF/Installation: means a part of an infrastructure that could be used independently from the rest.

User: means a researcher applying for access, either individually or as part of a User Group, including the User Group leader.

User Group: means a research team of one or more researchers given access to the infrastructure under the NanoCommons project. The User Group leader and majority of the Users must work in an institution established in a Member State or Associated State. The User Group leader and majority of the Users should work in a country other than where the TAF/Installation to be visited is based.

Transnational Access: means the provision of cost free access to Users to the 10 partners offering Transnational Access, in response to TA calls via the NanoCommons website.

Annexes
Annex 1: TA User application form

The TA User application form is an online application form. There are two sections, the personal details section and the application section. The personal details section only needs to be completed once the same information can be used then for all subsequent applications. Please see below the personal details and application questions for reference.

The TA partners are identified by their short name / abbreviation. Thus, applicants to University of Birmingham (UoB) will identify the TA partner as UoB-TA.

Application – Project details	
Proposed project:	Project title (max 225 characters)
Project Objectives:	(max 100 words)
Proposed length of visit:	
Proposed start date and end date:	
Which TA partner do you propose to access? (This should be the main focus of your proposal)	
Which other TA partners (if any) do you need to visit to complete your proposed project? Please briefly explain why you also need access to these other TA partners.	
Have you had a visit to this or any other TA partner(s) funded by NanoCommons? If yes which TAF partner(s)? If Yes, please give your application number(s) and describe the output(s) delivered from your prior visit(s)	
Further Information	
Project discipline and Project specific discipline.	Please choose from drop down boxes provided in application system
Project summary using non-technical terminology only **(maximum 2000 characters including spaces)**	
Scientific content and project methodology including a detailed work plan with timetable for planned activities during the period of research at the TAF, so it is clear what you will actually be doing during your visit. **(maximum 2500 characters**	

including spaces)	
Reasons for requesting access to the Infrastructure **(maximum 2500 characters including spaces)**	
What do you expect to gain from your visit **(maximum 2000 characters including spaces)**	
Expected outputs resulting from your visit **(maximum 2000 characters including spaces)**	
Training, Safety and Ethical requirements / considerations **(Please include statement on each)**	
Facility Information	
Is this your first application for support to visit XXX-TA under the NanoCommons project? If no, please give details including previous Project Acronyms	
Is this your first visit to XXX-TAF (including non-NanoCommons funded visits). If no, please give details including dates and who your visit was funded by.	
If no, was it related to this project?	
Do you have the requested combination of tools and expertise in your home country? If yes, please explain why you need access to a similar facility under XXX-TA.	
Name of XXX-TA technology expert that you expect to be your host. (If you are applying to access more than one piece of equipment please name a technology expert for each instrument within the TA partner that you are applying for. Please ensure that you have contacted the relevant technology expert(s) through your host TA main contact.	
Have you contacted your proposed host technology expert about your visit?	
Resource needs	In this section the applicant chooses the TA partner they wish

	to access and the tools / services / models / data that they require to use including the number of days of access required.
Supporting Statement	The supporting statement will be used as a reference for PhD/Postdoctoral applicants. Therefore, it should be provided by a senior peer who knows both you and your work first-hand (e.g. supervisor) Information required:
	Supporter name:
	Institution:
	Position:
	Email address:
	Phone number:

Annex 2: User Checklist – Access Approved

What	Who	When	Achieved
Pre-arrival			
Have the dates been agreed between User and technology expert?	User	2 months prior to visit	Y / N
Have flights and accommodation arrangements for the appropriate dates and within budget been discussed with the TAF Administrator?	User and TAF Administrator	2 months prior to visit	Y / N
Have any necessary datasets been secured?	User / TAL	1 month prior to visit	Y / N / NA
Has any necessary ethical approvals been secured?	User / TAL	1 month prior to visit	Y / N / NA
Have any necessary visa or immigration documents been secured (if applicable)?	User	1 month prior to visit	Y / N / NA
Has the User been provided with details of how to travel to the institution, and when to arrive and who will meet them?	TAF Administrator	2 weeks prior to visit	Y / N
On Arrival			
Have both the User and the Host TAL signed the User Agreement form (Annex 4) and arrival forms?	User & TAL/TAF Admin	1 week prior to visit	Y / N
Has the User been given their per diem for the visit duration? (This will depend upon the regulations of the TAF please discuss with the TAF administrator)	User / TAF Administrator	Day 1 of visit	Y / N
Has the User been given the local safety instructions, access card & other necessary papers?	TAL / TAF Administrator	Day 1 of visit	Y / N
During the access visit			
Has a User seminar been arranged to allow the User to present their ongoing research at the TAF?	TAL / User	During visit	Y / N
Post access visit			
Has the User completed the TA User Evaluation Form	User / TAF Administrator	Within 4 weeks of visit	Y / N

Annex 3: User Evaluation Form

Annex 4: The User Evaluation Form

This is completed online. Please see the Evaluation Form below for reference.

User Name	
Project Title	
TA Partner Name	
Technologies / Tools Accessed	
Project/Unique ID	
Visit Dates	
Technology Expert Name	
Host Department	
Project Objectives **(maximum 100 words)**	
Project Achievements including summary of work carried out **(maximum 400 words)**	
Training Received	
How would you rate the training received?	Excellent, Very Good, Good, Poor
Seminars attended and given whilst at TA. Please give brief abstract of each seminar given. (only applicable for physical TA)	
Would you still have been able to carry out this work without the support of NanoCommons TA	
If no to the above question please state why not.	
How would you rate the administrative support provided for your TA (including organisation of webinars to assess your needs and plan the details of the TA provision, timeliness of the provision of preliminary and final results / datasets / model code etc.). For physical visits, please also comment on the travel and accommodation arrangements, provision of desk space, internet	Excellent, Very Good, Good, Poor

access etc.	
How would you rate the layout of the website and the information provided on the NanoCommons tools, services and models available?	Excellent, Very Good, Good, Poor
How would you rate the application process and information provided in the User Guidance Manual?	Excellent, Very Good, Good, Poor
How would you rate the assistance with choice of technologies via the helpdesk and the technical experts at the TA partners?	Excellent, Very Good, Good, Poor or Not applicable
How would you rate the assistance with experimental design and work plan preparation?	Excellent, Very Good, Good, Poor or Not applicable
How would you rate your visit to the TA partner overall?	
How does the TA partner compare to any other TA partner(s) which you have visited?	
Would your research benefit from access to another TA partner?	
If yes to the above, which TA partner(s) and why?	
Are there any ways that you can suggest to improve NanoCommons TA for future Users?	
Any further comments	

Annex 4: User Agreement

User Agreement

Between

…….(Name of the Transnational Access provider)

…….(Address of the Transnational Access provider)

- hereinafter referred to as "…."

and

…….(Name of the User)

…….(Address of the User)

- hereinafter referred to as "…."

WHEREAS, following an award of funding by the European Commission to a project "A pan-European infrastructure for quality in nanomaterials safety testing (NanoCommons)" under the Horizon2020 Programme of the European Commission, ….(*Name of the Transnational Access provider)* and other parties entered into a Grant Agreement with the European Commission (the "Grant Agreement"), specifying, *inter alia,* the activities to be undertaken in NanoCommons.

WHEREAS, ….(*Name of the Transnational Access provider)* and other parties have also entered into a Consortium Agreement whereby the ….(*Name of the Transnational Access provider)* and the other parties have, between themselves, specified and supplemented the provisions of the Grant Agreement.

WHEREAS, according to Section 4.1 of this Consortium Agreement User Agreement each Party providing Transnational Access to its installation (TAF) to the selected Users shall enter into a User Agreement.

WHEREAS, ….(*Name of the Transnational Access provider)* is prepared to provide access to its installations (TAFs) *(specifications of the installations (TAFs) and the Category of Access to be provided, as per the DoW)*.

WHEREAS, ….(*Name of the User)* has considerable expertise and experience in the field of ……. and is interested in having access to the installations (TAFs) of ….(*Name of the Transnational Access provider).*

NOW THEREFORE, ….(*Name of the Transnational Access provider)* and ….(*Name of the User)* have agreed as follows:

I   General Principles

> ….(*Name of the Transnational Access provider)* provide, from *(date)* to *(date),* access free of charge to ….(*Name of the User)* to its installation (TAF), indicated above, which is managed by it, including, according to the Grant Agreement, all the logistical, technical and technological, and scientific support as well as specific training, that is normally provided to external researchers using the TAF.

> ….(*Name of the User)* shall conform to the safety, security, ethical and specific regulations, inclusive of the respective general and specific instructions of the ….(*Name of the Transnational Access provider).*

….(*Name of the User)* is obliged to comply with the Terms and Conditions of the Grant Agreement (Appendix 1) and with the terms of Consortium Agreement (Appendix 2).

The Transnational Access of ….(*Name of the User)* to the installation (TAF) of ….(*Name of the Transnational Access provider)* will be subject to the proof of any relevant insurance policies according to the requirements of the Transnational Access provider, and to the provision of proof of all of the required ethical approvals for the proposed research being in place.

<mark>Can we add a clause on Creative Commons Licence here – all outputs from NanoCommons should as far as feasible be published Open Access and via a creative Commons Licence.</mark>

II   Confidentiality

All information in whatever form or mode of transmission, which is disclosed by a *Party* (the "*Disclosing Party*") to any other *Party* (the "*Recipient*") in connection with the *Project* during its implementation and which has been explicitly marked as "confidential", or when disclosed orally, has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within 15 days at the latest as confidential information by the *Disclosing Party*, is "Confidential Information".

The *Recipients* hereby undertake in addition and without prejudice to any commitment of non-disclosure under the *Grant Agreement*, for a period of 5 years after the end of the *Project*:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed;
- not to disclose Confidential Information to any third party without the prior written consent by the *Disclosing Party*;
- to ensure that internal distribution of Confidential Information by a *Recipient* shall take place on a strict need-to-know basis; and
- to return to the *Disclosing Party* on demand all Confidential Information which has been supplied to or acquired by the *Recipients* including all copies thereof and to delete all information stored in a machine-readable form. If needed for the recording of ongoing obligations, the *Recipients* may however request to keep a copy for archival purposes only.

The *Recipients* shall be responsible for the fulfilment of the above obligations on the part of their employees and shall ensure that their employees remain so obliged, as far as legally possible, during and after the end of the *Project* and/or after the termination of employment.

The above shall not apply for disclosure or use of Confidential Information, if and in so far as the *Recipient* can show that:

- the Confidential Information becomes publicly available by means other than a breach of the *Recipient*'s confidentiality obligations;
- the *Disclosing Party* subsequently informs the *Recipient* that the Confidential Information is no longer confidential;
- the Confidential Information is communicated to the *Recipient* without any obligation of confidence by a third party who is in lawful possession thereof and under no obligation of confidence to the *Disclosing Party*;
- the disclosure or communication of the Confidential Information is foreseen by provisions of the *Grant Agreement*;
- the Confidential Information, at any time, was developed by the *Recipient* completely

independently of any such disclosure by the *Disclosing Party*;
- the Confidential Information was already known to the *Recipient* prior to disclosure.

The *Recipient* shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the *Project* as with its own confidential and/or proprietary information, but in no case less than reasonable care.

Each *Party* shall promptly advise the other *Party* in writing of any unauthorised disclosure, misappropriation or misuse by any person of Confidential Information as soon as practicable after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

If any *Party* becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure

- notify the *Disclosing Party*, and
- comply with the *Disclosing Party*'s reasonable instructions to protect the confidentiality of the information.

The confidentially obligations under this User Agreement and the Grant Agreement shall not prevent the communication of Confidential Information to the Project Coordinator and thereby to the European Commission.

III   Publicity

…(*Name of the User*) have the same rights and obligations in regard to publicity as referred to for the ….(*Name of the Transnational Access provider)* in Annex II.9 of the Grant Agreement.

In particular, …(*Name of the User*) shall suitably acknowledge the support provided by the European Commission and the Transnational Access provided to the User by the NanoCommons research infrastructure.

The Commission is authorised to publish, in whatever form and on or by whatever medium, including the internet, the relevant data of …(*Name of the User*).

IV   Access Rights

….(*Name of the Transnational Access provider)* grants …(*Name of the User*) non-transferable, non exclusive Access Rights to its Background[3] and Foreground[4] on a royalty-free basis if needed by …(*Name of the User*) to carry out its own work under the NanoCommons Project.

….(*Name of the Transnational Access provider)* will inform, as soon as possible, …(*Name of the User*) of any restriction which might substantially affect the granting of Access Rights.

…(*Name of the User*) grants ….(*Name of the Transnational Access provider)* non-transferable, non-exclusive Access Rights to its Background and Foreground on a royalty-free basis if needed by …(*Name of the User*) to carry out its own work under the NanoCommons Project.

---

[3] Definition of Background is given in Annex II.1 of the Grant Agreement

[4] Definition of Foreground is given in Annex II.1 of the Grant Agreement

V   Liability

1. In respect to any information or materials (including Foreground and Background) supplied by one Party to another under this User Agreement, no warranty or representation of any kind is made, given or implied as to the sufficiency or fitness for purpose, nor as to the absence of any infringement of any proprietary rights of third parties.

2. Each Party shall be liable for the damage and losses suffered by the other Party due to a wilful act or gross negligence. However, subject to the Transnational Access provider's specific rules no Party shall be liable to the other Party for indirect or consequential loss or damages, such as but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act.

VI   Disputes and Governing Law

1. This User Agreement shall be construed according to and will be governed by the laws of Belgium.

2. All disputes arising out of, or in connection with, this User Agreement, which cannot be resolved amicably, shall first be referred to the Transnational Access Steering Group for resolution and if unsuccessful to the Executive Coordination Board which shall attempt to mediate between the Parties. If the dispute cannot be resolved in this manner it shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules.

   The place of arbitration shall be Brussels unless otherwise agreed by the Parties.

   The award of the arbitration will be final and binding upon the Parties.

   Nothing in this User Agreement shall limit the Parties' right to seek injunctive relief or to enforce arbitration award in any applicable competent court of law.

VII   Miscellaneous

1. Rights and obligations arising from this User Agreement shall not be assignable without the prior written consent of the other Party.

2. Any alterations and amendments to this User Agreement shall be in writing, and copied to the Coordinator, to be effective. This requirement can only be waived in writing.

3. Should a provision of this User Agreement be or become invalid, this shall not affect the validity of the rest of the User Agreement as a whole. The Parties shall make a concerted attempt to reach retrospectively an agreement on a new valid provision the result of which shall reflect as much as possible the invalid provision which it will replace.

   The Transnational Access provider may refuse proposed access to its TAF on the grounds that while ethical approval has been granted by the proposed User's institution, the research does not meet the criteria for ethical approval in the Transnational Access provider.

Signatures

………………………………….. ………………………………………..
(Name of Transnational Access Provider)   (Name of the User)

Annex 5: NanoCommons TA User Rules & Regulations

The regulations and guidelines detailed below must be read and adhered to by all Transnational Access Users of the NanoCommons research infrastructure.[5]

Both User and Host should sign two copies of this form. One copy is retained by the Host (a scanned copy to be sent to helpdesk@nanocommons.eu and the second copy is retained by the User.

1. Access to the TA partner premises and online resources must follow the [*Insert TA Partner Name*] procedures.

2. As a holder of a temporary access pass you will be able to access the building between 8 am and 7.30 pm. If you wish to work after 7.30 pm or at weekends it is at approval of the Head of School (HoS). Authorisation must be arranged by your Host and via the HoS. Specific departmental procedures will be supplied by the Host to the User upon arrival at [*Insert TAF Name*].

3. Departmental safety guidance notes, Codes of Conduct including Health and Safety and Fire Evacuation procedures should be read and signed, where appropriate, on arrival and adhered to at all times. (It is the Host's responsibility to ensure that each User is given copies of relevant documents and signs copies of them where appropriate).

4. The IT and computational facilities offered as part of NanoCommons TA are covered by service agreements and are maintained in the best possible working order. In the event of IT or service failure, which is beyond the reasonable control of [*Insert TA Partner Name*], which impacts upon the scheduled access of the NanoCommons User, [*Insert TA Partner Name*] shall not be obliged to automatically grant an extension to the visit to permit the delayed work to be completed. Where the access was remote, every effort will be made to accommodate the needs of the NanoCommons User once the problem is resolved.

5. Any publication and dataset resulting from collaboration under NanoCommons TA should acknowledge: **"This research received support from the NanoCommons Project (www.nanocommons.eu) which has received funding from the European Union Horizon2020 Programme (H2020) Under Grant Agreement No. 731032".**

6. The User should deposit copies of all resultant publications with their Host (1 copy) and with the NanoCommons Project Office (helpdesk@nanocommons.eu). Details of all outputs should be entered onto the NanoCommons website and updated regularly.

7. Personal Laptops and Memory sticks can only be used in [*Insert TA PArtner Name* PCs/MACs once they have been virus checked by IT. Please contact [*insert appropriate contact person / details*] to have your memory stick checked. The IP address of personal laptops will be recorded, and must be used in accordance with [*Insert TA PArtner Name*] IT guidelines, which will be provided by the Host.

8. The User will collect a *per diem* allowance for local travel and subsistence on a weekly basis from the Host [*or finance office – add details as appropriate*]. The daily allowance is €100 and includes the cost of B&B accommodation.

---

[5] Each TA partner to adapt this form for their TA, and return the revised form to helpdesk@nanocommons.eu

9. The User will complete the User Evaluation form on https://www.nanocommons.eu/apply-for-access within one week of your visit.

10. All NanoCommons Users who undertake a physical visit to the TA partner are covered by workers insurance while on the premises of the TA partner. Neither NanoCommons nor [Insert TAF Name] are responsible for the provision of Insurance for medical requirements or personal possessions. It is the direct responsibility of the User to arrange adequate personal insurance for the duration of the visit undertaken as part of their NanoCommons TA.

I the undersigned User agree to abide by the rules detailed above.

User Name

User Signature   Date:

Host Signature (witness)   Date:

Please return an electronic copy of the signed form to helpdesk@nanocommons.eu