NIMG

Core DS Knowledge Model

Organization	ELIXIR Norway
Created by	Espen Åberg (espen.aberg@uit.no)
Based on	RI gap analysis, 0.0.1 (elixir.no:ri-elixir-norway:0.0.1)
Project Phase	Before Submitting the Proposal
Created at	11 Mar 2021

I. Administrative details

Report

Indications

Answered (current phase)	4 / 4
Answered	8 / 12

Metrics

No metrics for this chapter.

Questions

1 **Contributors**

Each person contributing to creating or executing the data management plan should be added as a contributor. A project probably should have a Contact Person, and a Data Curator.

Tags: *maDMP, Science Europe DMP*

✗ **This question has not been answered yet!**

2 **RI**

Add each of the project(s) that are you will be working on and for which the data and work are described in this DMP. Give each project a small identifying name for yourself.

Tags: *maDMP, Science Europe DMP*

Answers

2.b.1 **RI name**

Tags: *maDMP, Science Europe DMP*

✓ *NIMG*

2.b.2 **Project short discription**

Tags: *maDMP, Science Europe DMP*

✓ *The Norwegian Infrastructure for Microbial Genomics (NIMG) is a national initiative bringing together the leading research environments within microbial genomics in Norway. Its aims are to promote the use of advanced sequencing technology, to provide means for handling large amount of sequence data and developing new bioinformatics tools in order to solve important research questions concerning infectious diseases, such as those related to antimicrobial resistance development, the development of virulence and the epidemiological*

spread of pathogens between humans, and to humans from animals and the environment. This funding application is a request for: 1) establishment or adaptation of a general IT infrastructure that facilitates storage, sharing and analysis of microbial sequence information linked to sensitive data; 2) setting up analytical pipelines that can be easily accessible, facilitating sharing of both genomic sequence data as well as corresponding metadata and tools; 3) setting up a team of experts (help desk) that can assist users in performing their analyses; and 4) building microbial bioinformatics expertise in Norway by establishing a network of bioinformaticians serving the different partners. The NIMG infrastructure is working in close collaboration with ELIXIR through BioMedData (funded by RCN) in the development of a structure allowing portability of the microbial and human data between the partners and exchange of expertise, especially in the metagenomics area. As an IT infrastructure, NIMG will permit storage, immediate sharing and analysis of data linked to microbial sequence information in a secure way and as such will be an essential tool to fight infectious diseases.

2.b.3 **Date the RI will started**

Tags: *Science Europe DMP, maDMP*

✔ *Unknown*

2.b.4 **Date the RI funding will end**

Tags: *Science Europe DMP, maDMP*

✔ *Unknown*

2.b.5 **Funding**

Add all the funding that are part of this project.

Tags: *maDMP, Science Europe DMP*

Answers

2.b.5.b.1 **Funder**

Specify the name of the funder that you ask for funding for your project. If the funder is not present in the suggested list, please specify a complete URL to the funder web site.

Tags: *Science Europe DMP, maDMP*

✔ *Norges Forskningsråd*

Crossref http://dx.doi.org/10.13039/501100005416

2.b.5.b.2 **Funding status**

Tags: *Science Europe DMP, maDMP*

✔ *a. Planned*

2.b.5.b.3 **Grant number**

Tags: *maDMP, Science Europe DMP*

✘ **This question has not been answered yet!**

3 **To execute the DMP, is additional specialist expertise required?**

Tags: *Science Europe DMP*

✖ This question has not been answered yet!

4 **Do you require hardware or software in addition to what is currently available in the participating institutions?**

✖ This question has not been answered yet!

II. Re-using data

Before you decide to embark on any new study, it is nowadays good practice to check all options to re-use existing available data, either collected or generated by yourself in an earlier project, or data from others (Barend Mons calls this "Other PEople's Data And Services" or OPEDAS). This can include reusable data that have been created for an earlier study, and also so-called "reference data" which is used by many projects.

It is not because we can generate massive amounts of data that we always need to do so. Creating data with public money is bringing with it the responsibility to treat those data well and (if potentially useful) make them available for re-use by others. And the circle is only complete if such data is actually re-used.

Report

Indications

Answered (current phase)	4 / 6
Answered	4 / 8

Metrics

No metrics for this chapter.

Questions

1 **Describe the utility of data produced at the RI; to whom might it be useful?**

✔ *research environments within microbial genomics in Norway*

2 **Is there pre-existing data?**

Are there any data sets available in the world that are relevant to your planned research?

Tags: *maDMP, Science Europe DMP*
Data Stewardship for Open Science: *atq*

✔ *b. Yes*

> 2.b.1 **Will you be using any pre-existing data (including other people's data)?**
>
> Will you be referring to any earlier measured data, reference data, or data that should be mined from existing literature? Your own data as well as data from others?
>
> Tags: *maDMP, Science Europe DMP*
> Data Stewardship for Open Science: *ezi*
>
> ✔ *b. Yes*
>
> > 2.b.1.b.1 **What reference data will you use?**
> >
> > Much of todays data is used in comparison with reference data. You may be comparing your own data with a "standard set" which is maintained as a collection by someone else. Or you could be determining differences to a stanndard (in bioinformatics, a genome is often compared with a reference genome to identify genomic variants). If you use reference data, there are several other issues that you should consider. What are the reference data sets that you will use?
> >
> > Tags: *Science Europe DMP*
> > Data Stewardship for Open Science: *quc*

✗ This question has not been answered yet!

2.b.1.b.2 **Will you use non-reference data sets?**

Tags: *Science Europe DMP*

✓ *b. No*

2.b.1.b.3 **Will you couple existing (biobank) data sets?**

✗ This question has not been answered yet!

2.b.2 **Do you need to harmonize different sources of existing data?**

If you are combining data from different sources, harmonization may be required. You may need to re-analyse some original data.

Data Stewardship for Open Science: *wht*

✗ **This question has not been answered yet!**

2.b.3 **Will you be using data that needs to be (re-)made computer readable first?**

Some old data may need to be recovered, e.g. from tables in scientific papers or may be punch cards.

Data Stewardship for Open Science: *pth*

✗ **This question has not been answered yet!**

III. Creating and collecting data

We will make sure that we know what data will be generated at the RI and when it will be generated. We also need to make sure that there will be adequate storage space to deal with it, and that all the responsibilities have been taken care of.

Report

Indications

Answered (current phase)	9 / 17
Answered	13 / 28

Metrics

Metric	Score
Interoperability	1

Questions

1 **What data formats/types will you/your users be using?**

Have you identified types of data that you will use that are used by others too? Some types of data (for example "images" or "tables") are used by many different projects. For such data, often common standards exist (in our example "PNG" and "CSV") that help to make these data reusable. Are you using such common data formats?

You should make sure also to list the formats used in any data sets that you are re-using.

Tags: *Science Europe DMP*

Data Stewardship for Open Science: *njy*

Answers

1.b.1 **Data format/type**

Tags: *Science Europe DMP*

✔ *FASTQ Sequence and Sequence Quality Format*

FAIRsharing https://fairsharing.org/bsg-s000229

1.b.2 **Is this a standard data format used by others in this field?**

Tags: *Science Europe DMP*

✔ *b. Yes*

1.b.3 **Does this data format enable sharing and long term archiving?**

Complicated (binary) file formats tend to change over time, and software may not stay compatible with older versions. Also, some formats hamper long term usability by making use of patents or being hampered by restrictive licensing.

Tags: *Science Europe DMP*

✔ *b. Yes*

1.b.4 **What volume of data of this type will you be working with?**

Tags: *Science Europe DMP*

✘ **This question has not been answered yet!**

1.c.1 **Data format/type**

Tags: *Science Europe DMP*

✔ *Binary Alignment Map Format*

FAIRsharing https://fairsharing.org/bsg-s000210

1.c.2 **Is this a standard data format used by others in this field?**

Tags: *Science Europe DMP*

✔ *b. Yes*

1.c.3 **Does this data format enable sharing and long term archiving?**

Complicated (binary) file formats tend to change over time, and software may not stay compatible with older versions. Also, some formats hamper long term usability by making use of patents or being hampered by restrictive licensing.

Tags: *Science Europe DMP*

✔ *b. Yes*

1.c.4 **What volume of data of this type will you be working with?**

Tags: *Science Europe DMP*

This question has not been answered yet!

1.d.1 Data format/type

Tags: *Science Europe DMP*

Comma-separated Values

FAIRsharing https://fairsharing.org/bsg-s001546

1.d.2 Is this a standard data format used by others in this field?

Tags: *Science Europe DMP*

b. Yes

1.d.3 Does this data format enable sharing and long term archiving?

Complicated (binary) file formats tend to change over time, and software may not stay compatible with older versions. Also, some formats hamper long term usability by making use of patents or being hampered by restrictive licensing.

Tags: *Science Europe DMP*

b. Yes

1.d.4 What volume of data of this type will you be working with?

Tags: *Science Europe DMP*

a. So small that it is not a problem

2 Will you/your users be using new types of data?

Sometimes the type of data you collect can not be stored in a commonly used data format. In such cases you may need to make your own, keeping interoperability as high as possible.

Data Stewardship for Open Science: *ikk*

a. No, all of my data will fit in common formats

3 How will you/your users be storing metadata?

For the re-usability of your data by yourself or others at a later stage, a lot of information about the data, how it was collected and how it can be used should be stored with the data. Such data about the data is called metadata, and this set of questions are about this metadata.

SEEK is a webtool to store (meta)data and provenance. The public global instance FAIRDOMHub is free to users in Norway. SEEK can can be integrated with the data storage and analysis platform for users in Norway NeLS .

Data Stewardship for Open Science: *rhm*
External Links: *SEEK*

a. Explore

3.a.1 Do suitable 'Minimal Metadata About ...' (MIA...) standards exist for your experiments?

External Links: *FAIRsharing repository of standards*

✖ This question has not been answered yet!

3.a.2 Do you know how and when you will be collecting the necessary metadata?

Often it is easiest to make sure you collect the metadata as early as possible.

External Links: *FAIRsharing repository of standards*

✖ This question has not been answered yet!

3.a.3 Will you consider re-usability of your data beyond your original purpose?

Adding more than the strict minimum metadata about your experiment will possibly allow more wide re-use of your data, with associated higher data citation rates. Please note that it is not easy for yourself to see all other ways in which others could be reusing your data.

✖ This question has not been answered yet!

3.a.4 Did you consider how to monitor data integrity?

Working with large amounts of heterogenous data in a larger research group has implications for the data integrity. How do you make sure every step of the workflow is done with the right version of the data? How do you handle the situation when a mistake is uncovered? Will you be able to redo the strict minimum data handling?

Data Stewardship for Open Science: *spg*

✖ This question has not been answered yet!

3.a.5 Do all datasets you work with have a license?

It is not always clear to everyone in the project (ad outside) what can and can not be done with a data set. It is helpful to associate each data set with a license as early as possible in the project. A data license should ideally be as free as possible: any restriction like 'only for non-commercial use' or 'attribution required' may reduce the reusability and thereby the number of citations. If possible, use a computer-readable and computer actionable license.

✖ This question has not been answered yet!

3.a.6 How will you keep provenance?

To make your experiments reproducible, all steps in the data processing must be documented in detail. The software you used, including version number, all options and parameters. This information together for every step of the analysis is part of the so-called data provenance. There are more questions regarding this in the chapter on data processing and curation.

✖ This question has not been answered yet!

3.a.7 How will you do file naming and file organization?

Putting some thoughts into file naming can save a lot of trouble later.

✖ This question has not been answered yet!

4 Please specify what data you will acquire using measurement equipment

You can use any name for the data set, make sure that it identifies the data set to yourself.

Tags: *Science Europe DMP*

✖ This question has not been answered yet!

5 **Do you have any non-equipment data capture?**

Does the data you collect contain non-equipment captured data such as questionnaires, case report forms, electronic patient records?

Tags: *Science Europe DMP*
Data Stewardship for Open Science: *ybw*

This question has not been answered yet!

6 **Is there a data integration tool that can handle and combine all the data types you are dealing with in your RI?**

This question has not been answered yet!

7 **Will you be storing physical samples?**

Data Stewardship for Open Science: *kuz*

This question has not been answered yet!

8 **Will you need consent for any newly collected personal data?**

Tags: *maDMP, Science Europe DMP*
External Links: *NSD Information and consent, REC Informed consent*

This question has not been answered yet!

9 **How is the ownership of the collected data arranged?**

Tags: *Science Europe DMP*

This question has not been answered yet!

IV. Data sensitivity

Ethical and legal issues

adapted from 2019 version of NSD DMP tool and Tryggve Checklist on ELSI issues and GDPR compliance

Report

Indications

Answered (current phase)	1 / 3
Answered	1 / 5

Metrics

No metrics for this chapter.

Questions

1 **Will you collect or generate data about people?**

✔ *a. Yes*

> 1.a.1 **Will you collect and/or process personally identifiable data?**
>
> What is personally identifiable data?

Personal data is any information that can be connected to a person e.g. name, address, phone number, e-mail address, IP-address, car registration number, images, fingerprints, iris patterns, head shape (for facial recognition) and birth number, or through a combination of background information. Information about behavioral patterns may also be considered as personal data.

Sensitive personal data is information relating to racial or ethnic origin, political, philosophical or religious beliefs, that a person has been suspected, charged or convicted of a crime, health, sex life, and union membership.

Read more about personal and sensitive data at the Data Inspectorate and at the NSD - Data Protection Services.

Sensitive data has to be stored and analysed using appropriate measures and infrastructure. (such as TSD) - You can apply for quotas through: contact@bioinfo.no

✗ This question has not been answered yet!

1.a.2 **Other comments regarding processing of personal data**

✗ This question has not been answered yet!

2 **Will the RI follow any institutional policies, codes of conducts or other ethical guidelines?**

Each researcher has an independent responsibility for making sure that the research is being carried out in accordance with general scientific and ethical principles and guidelines. For an overview of general and subject-specific research ethics guidelines, see the Norwegian National Research Ethics Committees. Note that in multidisciplinary projects it may be relevant to look to guidelines for several subject areas. In addition, the Research Ethics Act applies to all research in Norway. Also, check which guidelines apply to your institution.

✗ This question has not been answered yet!

3 **Other ethical / legal issues.**

✗ This question has not been answered yet!

V. Processing data

In the processing phase, the data will be undergoing the mostly automated steps for processing, before the analysis and interpretation.

Report

Indications

Answered (current phase)	0 / 3
Answered	0 / 9

Metrics

No metrics for this chapter.

Questions

1 **Will you be providing the data to the user through a shared working space ?**

Will you be using a working space that is shared between all the people working on the data in the project? Sometimes such a system is called a *Virtual Research Environment*.

Tags: *Science Europe DMP*

✗ This question has not been answered yet!

2 **Data storage systems and file naming conventions**

It is a good idea to pre-define how data will be organised in the project work space, and to set conventions for how any data files and folders will be named.

Tags: *Science Europe DMP*

This question has not been answered yet!

3 Workflow development

It is likely that you will be developing or modifying the workflow for data processing. There are a lot of aspects of this workflow that can play a role in your data management, such as the use of an existing work flow engine, the use of existing software vs development of new components, and whether every run needs human intervention or whether all data processing can be run in bulk once the work flow has been defined.

This question has not been answered yet!

4 How will you make sure to know what exactly has been run?

This question has not been answered yet!

5 How will you validate the integrity of the results?

This question has not been answered yet!

6 Do you need to do compute capacity planning?

If you require substantial amounts of compute power, amounts that are not trivially absorbed in what you usually have abailable, some planning is necessary. Do you think you need to do compute capacity planning?

This question has not been answered yet!

7 Is the risk of information loss, leaks and vandalism acceptably low?

There are many factors that can contribute to the risk of information loss or information leaks. They are often part of the behavior of the people that are involved in the project, but can also be steered by properly planned infrastructure.

Tags: *Science Europe DMP*

This question has not been answered yet!

8 Do you have a contingency plan?

What will you do if the compute facility is down?

This question has not been answered yet!

9 Will you version datasets?

SEEK which is used in FAIRDOMHub and can be used together with NeLS supports versioning by default.

NeLS can also be used with Git Large File Storage (LFS)

External Links: *FAIRDOMHub, SEEK, NeLS, Git Large File Storage (LFS)*

This question has not been answered yet!

VI. Interpreting data

The interpretation of the data consists of the last steps of processing (often with manual interventions), visualisation, and data integration. In this chapter many questions about data interoperability will come up.

Report

Indications

Answered (current phase)	12 / 12
Answered	16 / 23

Metrics

Metric	Score
Interoperability	1
Reusability	1

Questions

1 **How will you be doing the integration of different data sources?**

✔ *a. Explore*

1.a.1 **List the data formats you will be using for data integration**

Answer some questions for each

Answers

1.a.1.b.1 **Data format:**

✔ *FASTQ Sequence and Sequence Quality Format*

FAIRsharing https://fairsharing.org/bsg-s000229

1.a.1.b.2 **How is the data structured in general?**

✔ *a. (meta)data fields in a domain specific file*

1.a.1.b.2.a.1 **Can all of the data you want to couple be captured in that format?**

✔ *b. Yes*

1.a.1.b.2.a.1.b.1 **Will you be doing it that way?**

✔ *b. Yes*

1.a.1.b.2.a.2 **Does the domain specific format come with its own suite of integration tools that you will use?**

✔ *b. Yes*

1.a.1.c.1 **Data format:**

✔ *Binary Alignment Map Format*

FAIRsharing https://fairsharing.org/bsg-s000210

1.a.1.c.2 **How is the data structured in general?**

✔ *a. (meta)data fields in a domain specific file*

1.a.1.c.2.a.1 **Can all of the data you want to couple be captured in that format?**

✔ *b. Yes*

1.a.1.c.2.a.1.b.1 **Will you be doing it that way?**

✔ *b. Yes*

1.a.1.c.2.a.2 **Does the domain specific format come with its own suite of integration tools that you will use?**

✔ *b. Yes*

1.a.2 **Will you/your users be using a workflow for data integration, e.g. with tools for database access or conversion?**

Data Stewardship for Open Science: *qqb*

✔ *b. Yes*

1.a.3 **Will you/your users use a 'linked data' approach?**

External Links: *Linked data (wikipedia)*

✔ *b. Yes*

1.a.3.b.1 **Are your data sources using linked data?**

✘ **This question has not been answered yet!**

1.a.3.b.2 **Will you provide your results as semantically interoperable linked data?**

Data Stewardship for Open Science: *fxm*

✔ *b. Yes*

2 **Will you/your users be using common or exchangeable units?**

✘ **This question has not been answered yet!**

3 **Will you/your users be using common ontologies?**

✔ *b. Yes*

Choose the ontologies before you start

4 **Will there be potential issues with statistical normalization?**

✘ **This question has not been answered yet!**

5 **Will you/your users be integrating different data sources to get more samples or more data points?**

✖ This question has not been answered yet!

6 **Will you/your users be integrating different data sources in order to get more information for each sample or data point?**

✖ This question has not been answered yet!

7 **Do you/your users have all tools to couple the necessary data types?**

✖ This question has not been answered yet!

8 **Will you/your users be doing (automated) knowledge discovery?**

Data Stewardship for Open Science: *bzu*

✖ This question has not been answered yet!

VII. Preserving data

In this chapter, issues regarding data publication and long term archiving are addressed.

Report

Indications

Answered (current phase)	0 / 5
Answered	0 / 14

Metrics

No metrics for this chapter.

Questions

1 **Will you /your usersbe archiving data (using so-called 'cold storage') for long term preservation already during the RI runtime/project?**

Much of the raw data you have will need to be archived for your own later use somewhere. This is often done off-line on tape, not on the disks of the compute facility. Please note that this does not refer to the data publication.

Data Stewardship for Open Science: *kjp*

✖ This question has not been answered yet!

2 **Specify details of data types which will be produced at your RI**

It is useful to think about a data types as some collection of data that will be ending up in the same place.

Tags: *maDMP, Science Europe DMP*

✖ This question has not been answered yet!

3 **Will any of the repositories you use charge you/your users for their services?**

Tags: *Science Europe DMP*

✖ This question has not been answered yet!

4 **Did you budget for the time and effort it will take to help user to prepare the data for publication?**

Tags: *Science Europe DMP*

This question has not been answered yet!

5 Will you be making sure that blocks of data deposited by you or by the users in different repositories can be recognized as belonging to the same study?

This question has not been answered yet!

6 Are there any recurring fees to keep data or documents available?

Are you using any commercially licensed products to keep data, software or documents available, for which a regular fee must be paid?

This question has not been answered yet!

7 Will you be archiving your data after the RI runtime in 'cold storage'?

Will you be storing (in cold storage) copies of your own data for a longer period after the project has ended? Possibly as a continuation of archival as part of data storage strategy during the project? Data archival is distinct from data publishing, an archive is usually limited in who can access the data.

Data Stewardship for Open Science: *fxe*

This question has not been answered yet!

8 Will you also publish data if the results of your study are negative/inconclusive or unpublishable?

Even if you do not obtain the results you had foreseen from your own study, the data can still be valuable for reuse in another context. Also, publishing the data can avoid that someone else collects a similar data set with a similar negative result.

This question has not been answered yet!

9 Specify a list of software packages you will be publishing

Specify a short name for each software package.

This question has not been answered yet!

10 How will you be making sure there is good provenance of the data (and analysis)?

Data analysis is normally done manually on a step-by-step basis. It is essential to make sure all steps are properly documented, otherwise results will not be reproducible.

Tags: *Science Europe DMP*

This question has not been answered yet!

11 Will reference data be created?

Will any of the data that you will be creating form a reference data set for future research (by others)?

Data Stewardship for Open Science: *rbz*

This question has not been answered yet!

12 How will you document your/the user data?

For reusability, the data should be well documented. In this section of the questionnaire you can specify what kinds of documentation you will be providing.

Tags: *Science Europe DMP*

✗ **This question has not been answered yet!**

13 **Will you do systems biology modeling (for users)?**

✗ **This question has not been answered yet!**

14 **Will you do structural modeling?**

✗ **This question has not been answered yet!**

VIII. Giving access to data

This chapter deals with the information needed by people who will re-use your data, and with the access conditions they will need to follow.

Report

Indications

Answered (current phase)	6 / 11
Answered	6 / 17

Metrics

Metric	Score
Openness	0.5

Questions

1 **Will you be working with the philosophy 'as open as possible' for your data/your users data?**

Tags: *Science Europe DMP*
Data Stewardship for Open Science: *jvm*

✓ *b. Yes*

2 **Are there potential copyright and Intellectual Property Rights (IPR) issues?**

✓ *b. No*

3 **Can all of your data at your RI become completely open immediately?**

Tags: *maDMP, Science Europe DMP*

✓ *a. No*

> 3.a.1 **Are there legal reasons why (some of your) data can not be completely open?**
>
> Tags: *maDMP, Science Europe DMP*
>
> ✓ *b. Yes*
>
> > 3.a.1.b.1 **Are there privacy reasons why data can not be open?**

Tags: *maDMP*

✔ *b. Yes*

3.a.1.b.1.b.1 **Are there restrictions on where the data need to be stored?**

Tags: *maDMP*

✘ **This question has not been answered yet!**

3.a.1.b.1.b.2 **Could pseudonymization be used to make the data more openly available?**

Legally, pseudonymous data (which means that someone has the key to reverse the process) is still considered privacy sensitive information. However, the EU is working on special cases where the data can still be opened as long as the key availability is sufficiently limited.

Tags: *maDMP*

✘ **This question has not been answered yet!**

3.a.1.b.1.b.3 **Could anonymization be used to make the data more openly available?**

Different anonymization techniques exist. Disadvantage of anonymization is that data integration becomes virtually impossible, but it may be the only way to open up your data for other research

Tags: *maDMP*

✘ **This question has not been answered yet!**

3.a.1.b.1.b.4 **Could you use data aggregation to make the data openly available?**

Aggregated data, where typically at least 15 individuals are in any data point, are considered sufficiently anonymous. This is an alternative way of making data openly available for future research

Tags: *maDMP*

✘ **This question has not been answered yet!**

3.a.1.b.2 **Are there IP reasons why data can not be open?**

✔ *b. Yes*

3.a.1.b.2.b.1 **Is it clear who owns data and documents?**

✘ **This question has not been answered yet!**

3.a.1.b.2.b.2 **Will someone be given decision power to move documents or data to a new place after the project has finished?**

In one case in the past, all documents that had been assembled by a project in a documentation system had to be deleted because not a single person could decide to move them to a new platform when the documentation system was going off-line.

✘ **This question has not been answered yet!**

3.a.1.b.3 **Will you/your users be allowing authenticated access to the data?**

Tags: *Science Europe DMP*

✘ **This question has not been answered yet!**

3.a.2 **Are there business reasons why (some of) the data at your RI can not be completely open?**

Tags: *Science Europe DMP*

This question has not been answered yet!

3.a.3 **Are there other reasons why (some of) the data at your RI can not be completely open?**

Tags: *Science Europe DMP*

This question has not been answered yet!

3.a.4 **Will you use a limited embargo?**

Tags: *Science Europe DMP*

This question has not been answered yet!

4 **Will there be valorization or translational returns of the data generated at your RI?**

This question has not been answered yet!