

## Research and Archiving Storage cost model

### Introduction

Researchers can use several solutions for storing and archiving research data. Some of these solutions are recommended and managed by VU: Research Drive, Yoda and DataverseNL. The costs of using these solutions are charged to users in various ways. The starting point is that storage and archiving are basic facilities for researchers that must meet the general requirements described in the [VU Research Data and Software Management Policy](#) (2024).

To clarify which systems, volumes and costs are involved and how they are passed on, a cost model has been developed. To avoid unintended mutual competition between solutions, a coherent proposal has been made in which all solutions are included in one model. This only distinguishes between storage for archiving purposes (Yoda archive, DataverseNL) and (active) storage during research (Research Drive, Yoda active).

|          | <b>Active Research Storage</b><br>(during research project)<br>Cost Model is applicable | <b>Archived Data Storage</b><br>(after research project)<br>Cost Chargeback Model (KDM) is applicable |
|----------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Services | Yoda / Research Drive                                                                   | Yoda / DataverseNL                                                                                    |

The cost model described below relates only to NeRDS-managed solutions: Yoda, Research Drive and DataverseNL. A different cost model currently applies to Scistor. Storage and archiving solutions managed in-house and solutions from external providers are not part of this model. More information on the RDM storage solution can be found on the [Research Support Handbook](#).

### Cost model

In drafting the current cost model, it was important to have one model for all storage and archiving solutions mentioned in the previous paragraph. The costs for archiving solutions are fully covered by the KDM (Cost Chargeback Model). The active storage solutions costs are partly charged through the KDM and partly through billing. In drafting the cost model, the following principles were formulated:

- Use of up to 500Gb of storage per research project is free of charge.
- To prevent the middle group of users from incurring high costs too quickly, there is an intermediate step for usage between 500Gb and 2Tb with a fixed price.
- Large consumers are charged a fee per Tb above 2Tb, on top of the base fee for the part between 500Gb and 2Tb.

The cost model assumes three levels:

1. The first level is a basic facility for all researchers whose costs are recharged through KDM (the Cost Chargeback Model). This covers storage and archiving up to a volume of 500Gb per project. Researchers are not charged any costs for storage within this level.

2. The second level is an intermediate level in which costs are passed on to researchers and research projects but not on a 1-to-1 basis. This covers all storage and archiving between 500Gb and 2Tb. The costs for this are € 200 per year for all data between 500Gb and 2Tb.
3. The third level is fully charged to researchers and research projects. The costs for this are € 250 per Tb per year.

## Storage tiers

| Price per year/project/tier          |              |                         |
|--------------------------------------|--------------|-------------------------|
| Active storage: Research Drive, Yoda |              |                         |
| <b>First tier</b>                    | Up to 500GB  | No costs for researcher |
| <b>Middle tier</b>                   | 500 GB-2TB   | € 200                   |
| <b>Upper tier</b>                    | > 2TB per TB | € 250/TB                |

Figure 1: Overview of storage and archiving cost pass-through levels.

| Examples of yearly storage costs     |       |       |         |         |
|--------------------------------------|-------|-------|---------|---------|
| Active storage: Research Drive, Yoda |       |       |         |         |
| 150 GB                               | 1 TB  | 3 TB  | 10 TB   | 30 TB   |
| No costs for researcher              | € 200 | € 450 | € 2,200 | € 4,700 |

Figure 2: Examples have been made of how the costs may work out in practice.

## Chargeback of costs

Every month the increase or decrease in storage space is monitored. In the new calendar year (measured on January 1<sup>st</sup>), the University Library determines for each project what the used volume of storage was for the previous year. For this purpose, we use the calculation below:

### Active storage

1. The Research Data Support Network lists the storage volume of every research project.
2. If the number of GB's used is below 500: No chargeback because it is already included in KDM → End of calculation.
3. If the number of GB's used is above 500 but below 2TB, then € 16.70 will be billed per month above the 500GB threshold to the research project → End of calculation.
4. If the number of GB's used exceeds 2TB, these will be billed as follows: for the months where the storage volume was above 500GB € 16.70 will be charged. Additionally, for each TB above 2TB € 20.80 per month will be charged. This amounts to middle tier + upper tier → End of calculation.

The amount to be invoiced will be charged to the cost center that is registered during the intake of new research projects. For careful determination of chargeable costs, KDM and additional billing, it is important that:

- A cost center is specified during the intake process (this is a mandatory field on the Research Drive and Yoda request forms)
- Any changes to cost center numbers are passed on to the functional managers of the relevant RDM systems