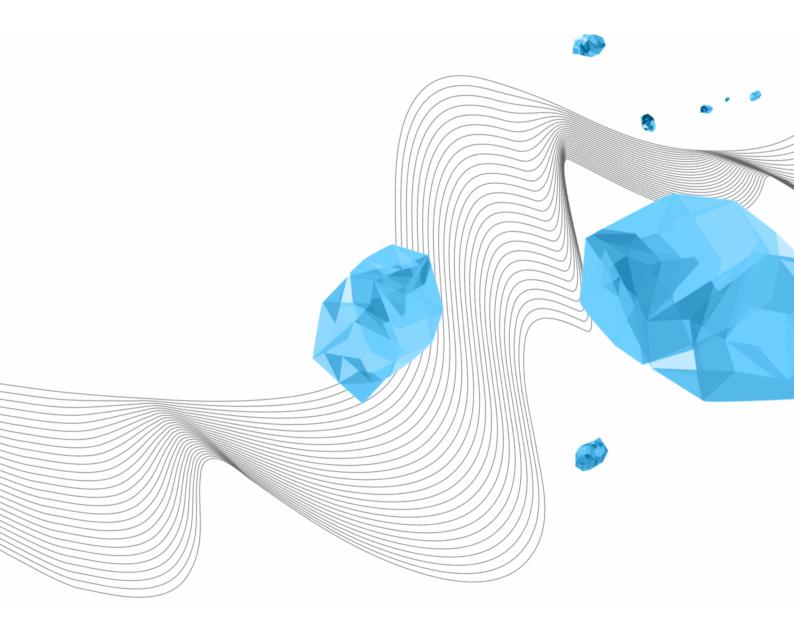
# RESEARCH DATA MANAGEMENT POLICY DEPARTMENT OF MECHANICS OF SOLIDS, SURFACES & SYSTEMS (MS3)

Approved by the Department Board of MS3 on 11-03-2024

Version: 1.2



# UNIVERSITY OF TWENTE.

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# 1 INTRODUCTION

Regulations regarding research data management (RDM) are specified at various levels: <u>UT level</u>, faculty level, department level, research chair level, and individual researcher level. This document is intended as an addendum to the ET RDM policy (ET.23.19925, 055305-05-2023), with the purpose of defining department-level and research chair-level regulations for the department of Mechanics of solids, surfaces & systems (MS3). All content in this document are **MS3 department-specific rules and guidelines**. All content from higher-level regulations applies to this document, unless specifically indicated otherwise. Research chair-specific rules are given in Appendix I.

This document will be made available online to all researchers in a research chair, e.g. in the research chairs' network folders or Teams-environment via a link to the <u>research support service portal</u>. New employees will be notified about this document in the first week within the department by the daily supervisor and/or secretary. When the first version is released and after each modification, all department members will receive an e-mail with the document and main changes.

# 2 DEPARTMENT-SPECIFIC ROLES AND RESPONSIBILITIES

General roles and responsibilities are described in the <u>UT policy</u> and <u>ET RDM policy</u>.

The chair holders are responsible for the MS3 department-specific rules and guidelines, and for their chairs' specific guidelines. Researchers are responsible for the execution of their own data management plan (DMP) during the project (including archiving at the end of the project). Daily supervisors will assure that a DMP is written in compliance with UT, ET, MS3 and chair specific rules, and will supervise the execution.

Employees with additional RDM-related tasks are described in Appendix I for each research chair separately.

All PhD candidates are **obliged** to follow the TGS course entitled: <u>Data Management Bootcamp</u>. Every employee can find most of the contents of the course <u>on Canvas</u>. Questions about the Bootcamp, Canvas course, data management plans (DMPs), and data management more generally can be directed to the <u>ET Faculty Research Data Steward</u>.

# 3 DATA MANAGEMENT PLAN (DMP)

General rules regarding DMPs are described in the <u>UT policy</u> and <u>ET RDM policy</u>.

#### DATA MANAGEMENT PLAN | MS3 WORKING RULE

For each research project, a DMP should be written, reviewed by the <u>ET Faculty Research Data Stewards</u>, and used during the project. DMPs of a chair are stored in a location which is accessible to the head of the research chair and all researchers within the chair, see the appendix for the specific location that is used for each research chair.

A DMP must refer to the latest MS3 department/chair regulation document with which it has to comply.

A DMP, as well as the actual data management resulting from it, must be updated if the DMP would no longer comply with regulations due to policy changes on any level.

# 4 PRIVACY REGULATIONS

This part of the policy is about privacy-sensitive <u>research data</u>, and only applies to research that deals with personal data (e.g. using human participants). The general rules regarding privacy-sensitive data are described in the <u>UT policy</u> and <u>ET RDM policy</u>.

#### DATA PRIVACY REGULATIONS | MS3 WORKING RULE

During the research, informed consent forms are stored in a safe way (e.g. a locked cabinet). A digital copy of these forms is only available to the researchers who are involved in the experiments, daily supervisor and head of the department. The original (paper) informed consent forms should be archived at the UT (ET) archive, as described in the ET RDM policy.

Files that link participants' names with subject identification numbers/codes are stored in a separate folder than the pseudonymized data. This folder is only accessible to the researchers who are involved in the experiments, (daily) supervisor and head of the department.

# 5 DATA STORAGE AND TRANSFER

General rules regarding data storage and transfer are described in the UT policy and ET RDM policy.

#### DATA STORAGE | MS3 WORKING RULE

Chosen storage options for the different research chairs are described in Appendix I. The <u>UT Storage-Decision-Tree tool</u> shows various options for storing and sharing data that are offered by the University of Twente.

At least the chair holder, and if applicable the daily supervisor, have access to the data of a researcher. If applicable, the chair holder shares his/her research data with at least one other permanent staff member of choice. Data on the M-drive is not accessible to anyone else, therefore, the M-drive should not be used for storing research data.

If portable devices are really the only option for storing very large amounts of data, it should be ensured that data is encrypted and at least a copy is available on another portable device which is kept at another place, and that all the research data is also available to the (daily) supervisor.

If the raw data set is very large, a well-documented first processing of the data may be used to reduce the size. Data reduction/deletion always has to be discussed before with the principal investigator/daily supervisor related to the research project.

Data from third parties is stored and documented in the same way as other data, unless there are restrictions (e.g. legal).

# 6 DATA DOCUMENTATION

General rules regarding data documentation are described in the UT policy and ET RDM policy.

#### DATA DOCUMENTATION | MS3 WORKING RULE

When archiving project data, the project folder contains a README file (.txt or .pdf) that describes the underlying directory structure and naming convention. It includes a section on the original author, ownership and confidentiality of the data.

Where data is stored, documentation is added to understand experimental procedures and simulations, and to be able to reuse the data (e.g. used devices, experimental/simulation settings such as sampling rates and conversion factors, specific versions of software and code, measurement units). All necessary documentation is saved together with the data.

Before closure of a project, the documentation and archived data is assessed by the daily supervisor/principal investigator for conformance with the DMP of the project and this data management policy. For each publication, it should be clearly indicated where the corresponding data can be found.

# 7 DATA SHARING

General rules regarding data sharing are described in the <u>UT policy</u> and <u>ET RDM policy</u>.

#### DATA SHARING | MS3 WORKING RULE

If needed, data should always be shared in a safe and secure way with collaborators (within and outside the UT). Data should be shared using one of the storage/sharing solutions mentioned in the <a href="UT Storage-Decision-Tree tool">UT Storage-Decision-Tree tool</a>, unless the group and/or external partner has another method to share data in a safe and secure way.

Data that is collected in the projects of MS3 is often obtained in relation with industrial partners and can be subject to confidentiality agreements. Publication of project results requires approval from the project partners and data should be handled equally. If confidential data is shared within the group, all group members are bound to confidentiality. In specifically sensitive cases, confidential data should only be shared with the involved project members. Confidential data should never be stored on or shared by using 'free' cloud services like Dropbox, Google Drive etc.

# 8 DATA ARCHIVING

General rules regarding data archiving described in the <u>UT policy</u> and <u>ET RDM policy</u>.

#### DATA ARCHIVING | MS3 WORKING RULE

In Appendix I, it is described where data should be archived at the UT for each research chair. In all cases, at least the chair holder and (daily) supervisor need to have access to the archived data and management of access rights. Access rights should be passed to another member of the group when the access holder leaves the group.

Executable versions of simulation software (commercial or not) are not archived because it would not be useful without also storing operating systems and hardware. The documentation should include reference to used software versions.

Unpublished experimental and simulation data must be archived if it could be useful (for others). It should be discussed with the daily supervisor for which data this holds.

Before closure of a project, data is archived at the UT, preferably in the domain of the particular research group in Areda (unless personal data is involved).) after consulting the <u>ET Faculty Data Steward</u>. Research data related to a publication can additionally be uploaded to the 4TU.ResearchData repository or another trusted repository, unless this is prohibited by other legal and contractual regulations (e.g. confidential data). If needed, datasets can be embargoed (i.e. publicly available after a specific period) or made 'confidential' (i.e. allowing no/restricted access to others).

Archived data may not be altered, only appended to. Access management should be set such that files cannot be modified once placed in archive. If modifications are required, a new version should be created.

Data might be deleted after expiration of its storage term (typically 10 years after project-ending), and possible other conditions. Archived data on UT storage will only be deleted by the archive manager (i.e. person who is responsible for the archived data within a research chair) after discussing this with the head of the group. The archive manager will keep track of deleted information.

# 9 DATA REGISTRATION

General rules regarding data registration are described in the UT policy and ET RDM policy.

Once they are (permanently) archived, all datasets that are related to a publication should be registered in the research information system only contains metadata (e.g. author, title, possible link to dataset), not the datasets themselves. If applicable, data descriptions should conform to confidentiality agreements.

# APPENDIX I – CHAIR-SPECIFIC RULES

#### Applied Mechanics and Data Analysis (AMDA)

#### Chair-specific roles and responsibilities:

- Linux/Windows administrator (responsible for software/hardware, backup of home directories on server): Herman Corbach/Axel Lok. In his absence LISA staff (Peter Lasker) can perform basic administration tasks. The backup on the Windows server the user is responsible by him/her-self. The Windows server is a normal OS system and has normal connection to all network drives the UT offers (similar to personal laptop). This information is shared with new users in order to avoid confusion.

#### Data collection:

In general, no personal data is collected in projects within AMDA that would be subjected to privacy rules and legislation.

Data that has to be managed include typically:

- Input files for computer simulations and selected output data.
- Computer programs and other types of codes.
- Measurements of forces, displacements, temperatures etc. evolving over time.
- Measurements of strain and temperature fields, and similar
- Microscopic images.
- Theses, reports and other publications.

Quality of data is assessed directly after generating/creating the data by the researcher and daily supervisor and coauthors.

#### Data storage:

The group owns a Linux cluster with file-server (Dell PowerEdge R740XD and Dell PowerEdge R440 Server). Larger data sets can be stored on a new Linux server (22Tb). Data storage on the Linux cluster is implemented through a dedicated file server with redundant storage (RAID6). The server is under a maintenance contract with a 'next business' day response time. The backup strategy is as follows: a mirror of the data is made every night to a separate NAS disk unit. This NAS unit, uses a storage cluster where the data between both UT data centres is synchronised asynchronously.

Should one of these data centres go down, the other data centre has to be selected manually. The service will then not be available for some time. The storage cluster is ISO 27001 and NEN 7510 certified. The storage cluster uses many disks and offers high data storage capacity. Snapshot techniques are used to back up the data. The previous versions methodology works for both Windows and Linux. Ransomware protection is implemented using a vault in which the data is read-only. The data stored there can only be used for disaster recovery in collaboration with ITO technicians. (No end-user interface). The storage time for backup and vault is 31days. At the moment UT Drive has no offsite data (UT Drive + has a 3rd data location: not in either UT data center). In Q1 of this year, UT Drive will have an offsite location; that project is almost complete.

Data is preferably stored on a project level at the following location (as defined in the project's DMP):

- The Universities 'P' project disk in P:\ET\MS3\AMDA folder.
- Computer program source code and other codes are usually maintained in a version control system. The preferred version control system is 'Git'. Manuals and test suites for these codes are also maintained within the same version control system (more information can be obtained from Herman Corbach or Axel Lok). The software that is developed within is stored under version control on the group's Linux fileserver and on gitlab.utwente.nl and is available to all researchers unless otherwise stated.

- Programs and codes that are not made for the purpose of one single project are stored at P:\ET\MS3\AMDA\PhD-graduation-projects when PhD's work on it.
- Students' data (e.g. bachelor/master assignment, internship) is stored at P:\ET\MS3\AMDA\BSc-graduation-projects and P:\ET\MS3\AMDA\MSc-graduation-projects when they work on it.

## Data archiving:

- Small data sets:
  - Data will be archived at the UT network drive (project and organization directory, also called P-drive) in the P:\ET\MS3\AMDA\Archive.
  - o Read and write permission are arranged per project in sub-folders.
  - The chair holder, Axel Lok and Herman Corbach are responsible for who has read and write permission, where and when. The P-project disk has a centralized backup scheme executed by Library, ICT Services & Archive.
- Students' data (e.g. bachelor/master assignment, internship) is archived at:
   P:\ET\MS3\AMDA\Archive\AMDA\students.

#### Dynamics Based Maintenance (DBM)

#### Chair-specific roles and responsibilities:

- P-drive administrator: Z.A.J. Lok (Axel) and H. van Corbach (Herman) as backup.

#### Data collection:

In general, no personal data is collected in projects within DBM that would be subjected to privacy rules and legislation.

Data that has to be managed include typically:

- Experimental results, measurements
- Input files for computer simulations and selected output data
- Computer programs and other types of codes
- Reports and other publications

For experimental results it is essential to clearly register the settings of testing and measurement devices, environmental conditions and other relevant parameters. This information should be stored with the actual measurement data, or a reference must be made to the associated publication, in which the experimental details are described.

Computer program source code and other codes/files must be maintained in a version control system by the researcher. Suggested version control systems are Subversion and Mercurial. Manuals and test suites for these codes are also maintained within the same version control system.

Quality of (both experimental and simulation) data is assessed directly after generating/creating the data by the researcher and daily supervisor. Data from experiments or simulations that are demonstrated to be invalid will be deleted. Data from experiments or simulations that are suspected to be incorrect will be marked as unreliable but are not deleted during the project. They will not be archived after the project. The primary researcher should not delete research data without approval of the daily supervisor.

#### Storage:

- DMPs should be stored at: p:\ET\MS3\DBM\RDM
- During the project, research data should be stored on the UT network drive (project and organization directory, also called P-drive).
- If the size of the data is too large for convenient analysis according to the researcher, a local copy of the data may be stored by the researcher for the duration of the project and provided the data is stored on an encrypted disc drive.
- Data that forms the basis of published results (thesis, journal and conference articles) must be stored in folders containing the name of (or a clear reference to) those publications. For each journal or conference publication, a separate folder in p:\ET\MS3\DBM\DBM Publications\ has to be created with the name year-Author-journal or conference name (e.g. 2016-Tinga-RESS). Settings that are used to obtain 'raw data', like sampling rates and conversion factors, but also specific versions of software and programs, should be documented in these folders. If the 'raw data' size is very large, a well-documented first processing of the data may be used to reduce the size. Data from a PDEng Thesis or PhD thesis that is not part of a journal publication should be stored in a separate folder, following the same conventions as for journal and conference papers and naming convention year-Author-PhD-Thesis or year Author-PDEng-Thesis.
- Students' data (e.g. bachelor/master assignment, internship), of students working on an internal assignment, is stored at a personal P:drive folder, created by Axel Lok or his substitute Herman van Corbach, to which both the student and the daily supervisor have access.

#### **Archiving:**

- Data that forms the basis of published results (e.g. PhD thesis, conference/journal article, reports) is archived in the folders mentioned under 'Data storage' and uploaded to a trusted repository. The preferred trusted repository is 4TU.ResearchData, but data does not necessarily have to be openly available.
- Bachelor, master and visiting students must also archive their data upon finishing their thesis projects or assignment. All relevant data must be collected in one folder (with subfolders) and will be stored at p:\ET\MS3\DBM\DBM MSc graduation projects\, by the student, the supervisor or by Axel Lok (or in case of his absence Herman van Corbach). The data is stored at this location for a period of at least 5 years, after which an assessment follows on the continuation of the archiving of the data.

# Elastomer Technology and Engineering (ETE)

#### Chair-specific roles and responsibilities:

- P-drive administrator: Ceciel ter Horst, Wisut Kaewsakul.

#### Storage:

- DMPs should be stored at: P:\ET\ETE\Group\RESEARCH DATA.
- All research data (including data received from third parties) has to be stored on the P-drive (P:\ET\ETE\Group\RESEARCH DATA). Prof. Blume and your supervisor will have full access rights.
- All experimental details and results have to be stored here in a way, that the data can be traced by Prof. Blume or your supervisor. It has to be detailed enough that someone with an elastomer background can reproduce the experiments and results. That means you need to give recipes, processing conditions, ways of measurement, raw results. If you have to transform results, give the way of transformation as well (e.g. when you relate them to a reference, or you have to extrapolate results to different circumstances of measuring). Include remarks of deviant observations. Tip: Using an excel file with all this information on separate tabs for each step of the investigation might be handy. If you use another software, make sure that it is commonly available software and that the results can be read by the supervisor/Prof. Blume.
- When you give a presentation during progress meetings, conferences or at any other occasions, store a backup of the presentation and the underlying data as well in a subfolder. The folder name should be as follows: Year, month (of publication), first author surname, publication title, acronym of the journal or conference (e.g. 2017\_11\_Hoek\_Closing\_the\_loop\_RCT).
- When you write a publication (including PhD thesis) or want to file a patent, make a separate folder for it with all information, if it is not stored in the general part. If you use data/tables/graphs from the general part, it is sufficient to place a link to the site where the data can be found. Important: This is not only for internal purposes, but highly-ranked journals are requesting that all (raw) data can be traced and supplied on request.
- Students' data (e.g. bachelor/master assignment, internship) is stored at: \ET\ETE\Group\RESEARCH DATA. Full access rights to this folder will be given to Prof. Blume, the student and the students supervisor. All final non-confidential thesis' will be available on GENERAL part of the P-DRIVE. The students will sign the Confidentiality and Intellectual Property Assignment Agreement to make sure that the rights to use the data are transferred to UT.

#### Archiving:

- All data will be archived in the abovementioned folders on the P-drive.
- The data will be checked by the supervisor whenever information goes public, e.g. if you give a presentation or publish a paper. It can only be published when all data are stored properly. At the end of your PhD/EngD trajectory, the thesis will only be approved when all information is saved on the P-drive in a traceable manner.
- Students' data (e.g. bachelor/master assignment, internship) is archived at: P:\ET\ETE\Group\RESEARCH DATA.

Laser Processing (LP), Skin Tribology (ST), Surface Technology and Tribology (STT), Tribology Based Maintenance (TBM), Production Technology (PT), Computational Design of Structural Materials (CDSM)

#### Chair-specific roles and responsibilities:

P-drive administrators and contact persons of the group(s) are:

- LP: G.R.B.E. Römer and M.L. Stok-Van Houwelingen
- ST: E. van der Heide and D.T.A. Matthews
- STT: M.B. de Rooij
- TBM: P.M. Lugt
- PT+MPM+CDSM: R. Akkerman, T.C. Bor and I.M. Gitman

#### Data to be stored/archived:

- Scientific papers, which are published in peer reviewed (scientific) journals, of which a group member, possibility a (PhD) student, is the first author,
- The (raw) data, which was collected or analysed or generated or processed, in order to support the (scientific) conclusions and findings in the scientific paper mentioned above,
- Input files for computer simulations and selected output data, computer programs and other types of codes.

See below, for additional rules/remarks w.r.t. (raw) data, or other data, to be stored (or not).

#### Storage:

- DMPs of the groups are stored on the UT network drive (project and organization directory, also called P-drive): P:\ET\MS3\<group-abbreviation>\DMP\
- For scientific papers which are "in preparation", so not yet published, the data related to these papers will be stored on the P-drive, in: P:\ET\MS3\<group-abbreviation>\Publications\Not-yet-published\year\1stAuthorFamilyName-Title-year\Data\
- The software that is developed within the group is stored on the UT network drive (P-drive): P:\ET\MS3\<group-abbreviation>\\cproject\_directory>

#### **Archiving:**

- If the scientific paper (see above) has been published, the folder "Data" with corresponding data (see above) is moved to the folder: P:\ET\MS3\<group-abbreviation>\Publications\Published\year\1stAuthorFamilyName-Title-year\
- Also the (final/published) paper itself is stored in this directory.

#### Additional rules/remarks:

- The first author of the paper stores the necessary data/information as mentioned above. The supervisor(s), in case the first author is a (PhD) student—i.e. a non-permanent staff member, checks that the data is appropriately stored.
- Data management of data related to results presented in published journal papers is for a period of 10 years see VSNU document "De Nederlandse Gedragscode Wetenschapsbeoefening, principes van goed wetenschappelijk onderwijs en onderzoek" starting after the date of submitting is performed.
- Raw data is stored only if it is relevant for reuse.
- The importance and the value of reuse on the one hand and the costs and feasibility of data storage on the other hand should be in reasonable balance with each other and have a bearing on the volume of the data to be stored.
- Not every research project yields reusable data.
- Access to raw data is important for follow-up research and for replication and integrity studies.
- Samples are stored only for the time of the project. Sample storage for a longer period for samples that can be reused should be specified in the DMP of the specific project.
- If a third party (like NWO or company) has specific data management wishes we will adapt them.
- Other data is only stored after consultation of the PI of the group.

#### Nonlinear Solid Mechanics (NSM)

#### Chair-specific roles and responsibilities:

- General questions related to RDM within the chair: Ton van den Boogaard.
- Linux administrator: Herman van Corbach. In his absence Axel Lok and Semih Perdahcioğlu can perform basic administration tasks.
- P-drive administrator: Axel Lok.

#### Data collection:

In general, no personal data is collected in projects within NSM that would be subjected to privacy rules and legislation.

Data that has to be managed include typically:

- Input files for computer simulations and selected output data.
- Computer programs and other types of codes.
- Measurements of forces, displacements, temperatures etc. evolving over time.
- Measurements of strain and temperature fields.
- Microscopic images.
- Reports and other publications.

Quality of data is assessed directly after generating/creating the data by the researcher and daily supervisor. Data from experiments or simulations that are demonstrated to be invalid will be deleted. Data from experiments or simulations that are suspected to be incorrect will be marked as unreliable but are not deleted during the project. They will not be archived after the project. The primary researcher should not delete research data without approval of the daily supervisor.

#### Data storage:

- Data management plans (DMPs):
  - Data management plans are stored in the main project map, that should have access rights for researcher(s), daily supervisor and chair holder.
- Software, source code and other codes:
  - Software and codes are maintained in a version control system. The preferred version control systems is 'Git', running repositories on our own Linux servers or at the <u>UT Gitlab server</u>.
  - Manuals and test suites for these codes are also maintained within the same version control system.
  - The software that is developed within the group that is contributing to a number of projects (e.g. Dieka, Feature, Dipp, Dixy, etc.) is stored under version control on the group's Linux fileserver.
  - Programs and codes that are not made for the purpose of one single project are stored at group level, i.e. not in an individual's home or specific project directory.
- Other research data:
  - Data is primarily stored and archived on project level as defined in the project's Data
     Management Plan. Preferred storage locations are the Linux home directory and the P-drive
     which both have a centralized backup scheme. Appropriate access rights should be set for
     both so that at least the daily supervisor can access all the data related to a specific project.
- Students' data from internal bachelor/master assignments are preferably stored as part of the overarching research project, according to the same rules as above. Alternatively, they are stored as separate project.

#### Data sharing:

Data sets will only be made openly and unrestrictedly available if it is anticipated that the data is useful for other researchers, e.g. because it requires considerable effort to create the data, it can become a benchmark for validation and only if the data if not subject to confidentiality agreements.

Data sets that are the basis of published journal articles will in principle be made available on request to other researchers if it is not restricted by confidentiality agreements. It will be requested that the source of the data is acknowledged in publications of these researchers. If possible, small data sets are published within the article. The decision to supply other researchers with data is taken by the chair holder.

#### Data archiving:

- Data is archived on the Areda system of the UT, after consulting the ET Faculty Data Steward.
- The daily supervisor is responsible that upon end of the project, the data is archived. Accessibility for the group should be assured for the duration of the archival.
- Students' data from internal bachelor/master assignments are archived at the same place. Data from external bachelor/master assignments are not part of our regular research program and are not archived by the research group (NSM).

#### Additional rules/remarks:

#### Backup-strategy Linux fileserver

Data storage on the Linux cluster is implemented through a dedicated file server with redundant storage (RAID5) hostname nsm03, located in the Seinhuis. The server is under a maintenance contract with a 'next business' day response time. Maintenance is performed by the NSM system administrator. Basic system maintenance will be performed by LISA while specialized system maintenance such as backup configuration is performed by the NSM Linux administrator.

The backup strategy is as follows:

 The server's filesystem is synced once a day with a Normal Quality Storage at LISA. (LISA syncs this NQS between storage in the Seinhuis and Teehuis twice a day. Snapshots are made once a day and kept for 28 days).

## Precision Engineering (PE)

#### Chair-specific roles and responsibilities:

- P-drive administrator: Axel Lok

#### Collection:

- In general, no personal data is collected in projects within PE that would be subjected to privacy rules and legislation.
- Data that has to be managed include typically:
  - o Input files for computer simulations and selected output data.
  - Computer programs and other types of codes.
  - Measurements of forces, displacements, temperatures etc. evolving over time.
  - Measurements of strain and temperature fields.
  - Microscopic images.
  - Reports and other publications.
- Quality of data is assessed directly after generating/creating the data by the researcher and daily supervisor and coauthors.

#### Storage:

- All data is stored on the project and organization drive, also called P-drive, in the following folder:
  - P:\ET\MS3\PE\Archive with read and write permission arranged per project in sub folders.
     The data is collected per publication in subfolders of the project. E.g.
     P:\ET\MS3\PE\Archive\2015 Vidi.
  - PE group members (permanent staff, PostDocs, PhD students and PDEng students) have read and write permission.
  - Dannis Brouwer is responsible for who has read and write permission, where and when. The
    project disk has a centralized backup scheme executed by Library, ICT Services & Archive
    (LISA).

#### Archiving:

Each publication will be archived in a separate folder. The format for the folder name is: year, month
(of publication), first author surname, publication title, name of journal or conference (acronym). E.g.
P:\ET\MS3\PE\Archive\2015 Vidi\2016 08 Naves Multibody-based topology synthesis method for
large stroke ASME IDETC.

A researcher from outside the UT should be able to reproduce the results of the specific publication. This requires to additionally archive a small 'readme' document, how to obtain the exact results, and to archive the required raw data, data processing method (specify software version), modelling method (archive the specific SPACAR version), etc. Publications are:

- Journal articles
- Conference contributions (abstract, extended abstract or full)
- Professional publications (e.g. Mikroniek)
- o Technical publications, non-refereed conference publications and workshops
- Patents
- Thesis (PhD, PDEng, MSc)
- For the software that is developed within the group (e.g. SPACAR) that is contributing to publications the used version has to be archived with the publication in the specific folder.
- In each publication or a supporting document the related raw or processed data should be identified and the location of that data should be indicated.
- Data is archived on the Areda system of the UT.

- Unpublished experimental data that is considered accurate is also archived. Unpublished simulation results are probably easily regenerated and are not archived. Executable versions of simulation software (commercial or not) with the exception of SPACAR are not archived because it would not be useful without also storing operating systems and hardware.
- Accessibility for the group should be assured for the duration of the archival. At least the chair holder and the daily supervisor should have access to the data and management of the access rights. Access rights should be passed to another member of the group when the access holder leaves the group.
- Master students' data will be archived at: P:\ET\MS3\PE\Archive\MSc Theses.