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# UNIVERSITY OF TWENTE POLICY ON INFORMATION SECURITY



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Wim Koolhoven, Jan Evers, Henk Swaters

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The University of Twente policy on information security has its basis in the Model Information Security Policy of Higher Education drafted by SURFibo<sup>1</sup> and published under the Creative Commons<sup>2</sup> licence.

## SUMMARY

Great importance is placed on the availability, integrity and confidentiality of the information provided. This policy establishes how these aspects are guaranteed at the University of Twente. The importance of information security is also reflected in the SURF report 'Cyber threat assessment'.

The University of Twente complies with the law and therefore handles information about students and staff as carefully as possible. A proactive attitude on the part of each employee is crucial to this, however no more measures are taken than strictly necessary to avoid frustrating the University of Twente's entrepreneurial and creative nature.

Data security is everyone's responsibility and constitutes a line responsibility. Managers bear primary responsibility for properly securing data in their department/unit. All information systems are classified on the aspects Availability, Integrity and Reliability. This classification determines the level of security measures.

The responsibilities of all officials involved will be described, in particular those of the Security Officer, Security Manager, System Custodians and managers. The importance of regularly drawing attention to security risks and measures will be detailed further. The role of CERT-UT (Computer Emergency Response Team of the University of Twente) are laid down.

To create awareness and to influence the behaviour of staff and students regarding information security and privacy, a working group will be set up by University Information Management.

The appendices detail relevant legislation, provide an overview of the other policy documents and codes of conduct in the area of information security and formulate the security rules (operational guidelines).

<sup>&</sup>lt;sup>1</sup> Information security officers and privacy officers employed in higher education confer in SCIPR (SURF Community for Information Security and PRivacy, previously SURFibo). The objective is to improve information security and privacy at universities of applied sciences and traditional universities. SCIPR does this through the development of policy and guidelines, for example.

<sup>&</sup>lt;sup>2</sup> See www.creativecommons.org/licenses/by/3.0/nl/deed.en

## 1 INTRODUCTION

Information security means that a cohesive set of measures is taken and maintained to safeguard the availability, integrity and confidentiality of the information provided. It also relates to how to verify the measures that were taken to guarantee these quality aspects.

Information security is a policy responsibility of the Executive Board of the University of Twente. Operational management, but also education and research are increasingly dependent on information and computer systems, which may be subject to vulnerabilities and risks. It is therefore important that effective measures are taken. After all, insufficient security of information could lead to unacceptable risks in education and research and in the institute's business operations. Incidents and breaches of these processes could lead to financial losses and have a negative impact on the university's reputation.

First and foremost this current policy document aims to fundamentally raise the University of Twente's information security to a higher level and maintain it at that higher level through governance, legislation and regulation, and secondly, this document aims to clearly describe and establish how to organize the university's security position and information security policy, including their interrelationship. Privacy also receives a lot of attention at the UT, especially with the more stringent legislation (GDPR – General Data Protection Regulation) since May 2018. A separate UT privacy policy<sup>3</sup> has therefore been drawn up.

## 1.1 SCOPE OF THE POLICY

At the University of Twente, the protection of information is interpreted broadly. A close relationship and partial overlap exists with other policy areas such as safety (working conditions legislation and environmental legislation), physical security and business continuity. Integral security requires proper harmonization between these other policy areas.

The information security policy at the University of Twente concerns all staff, students, guests, visitors and external relations (hired/outsourced) as well as all organizational units. The information security policy also includes all devices that provide authorized access to the institute's network.

The Information Security Policy emphasizes the information and applications that fall under the University of Twente's responsibility.

### 1.2 READER'S GUIDE

The different sections of this policy document can be read independently of one another. It describes the standards that require implementation by the relevant responsible parties. All readers are recommended to read at least subsections 3.1 Basic rules and 3.2 Policy Principles of Section 3 Principles. Section 4 concerns Governance and explicitly states how the responsibilities for information security have been assigned at the University of Twente. The roles of Security Officer, Security Manager and CERT-UT (Computer Emergency Response Team) are laid down in this section.

The appendices detail relevant legislation and outline the security rules (operational guidelines). Relevant LISA staff are closely involved in the assessment of and adjustments to these rather technical security rules. By appending these security rules, the link between the security rules and the policy is clear. The security rules have been worded in such a way that they can be understood by people without a technical background. As regards LISA staff who are only interested in the impact on their own work, it may suffice to just read the relevant security rules.

<sup>&</sup>lt;sup>3</sup> https://www.utwente.nl/en/cyber-safety/cybersafety/legislation/

## 2 OBJECTIVE OF THE INFORMATION SECURITY POLICY

The objective of the University of Twente's Information Security Policy is to safeguard the continuity of operational management, education and research and to limit loss by preventing security incidents and mitigating any consequences.

The objectives of the University of Twente's Information Security Policy can be specified as follows:

- *Framework*: the policy offers a framework to assess current and future measures in information security against a set standard and to allocate the tasks, powers and responsibilities within the organization.
- Standards: the basis for the set-up of security management is ISO 27001.<sup>4</sup> Measures will be taken on the basis of 'best practices' in higher education and on the basis of the ISO 27002 standard<sup>5</sup>. In addition, ISO 27017<sup>6</sup> is used as a basis for the information security aspects of cloud services.
- *Explicit*: the principles and organization of the information security positions have been established and are supported by the Executive Board and indirectly by the entire organization.
- *Decisive*: basis for clear choices in measures, active monitoring of policy rules and their implementation.
- Compliance: the policy offers a basis to comply with statutory provisions.

<sup>&</sup>lt;sup>4</sup> In full: NEN-ISO/IEC 27001: Requirements of management systems for information security

<sup>&</sup>lt;sup>5</sup> In full: NEN-ISO/IEC 27002: Code for information security

<sup>&</sup>lt;sup>6</sup> In full: NEN-ISO/IEC 27017: Information security controls applicable to use of cloud services

## 3 PRINCIPLES OF INFORMATION SECURITY

### 3.1 BASIC RULES

General strategy documents of the UT do not provide a sufficient basis for an Information Security Policy, or in other words, a basis on which to formulate a risk acceptance appropriate to the University of Twente. To prevent a lack of awareness of the policy and thus support for it across our organization, it is important that we clearly express what is important to us.

- 1. As a public-law organization, the University of Twente abides by the law. Many consider this to be self evident. Even though the University of Twente is an entrepreneurial university, it does not subscribe to the view that an organization's decision on whether or not to abide by the law should be based on a cost-benefit analysis. Having said that, of course, it should be pointed out that the university is not law enforcement either.
- 2. Information about students and staff is handled as carefully as possible. Staff and students must be able to rely on the university to handle their information as carefully as possible. Careful handling of privacy is one of the challenges we face as a university.
- 3. All University of Twente staff are expected to adopt a proactive attitude, particularly with regard to information security in all processes and activities. There are many aspects to information security, which touches on virtually all processes and activities. Taking risks is part of the University of Twente's entrepreneurial spirit. Part of this involves exploring potential consequences in advance and taking steps to mitigate any unacceptable risks.
- 4. The Information Security Policy in no way interferes with the University of Twente's entrepreneurial and creative nature. All necessary security precautions must be taken, of course, even though some individuals may not be particularly happy about it, but only after the matter has been carefully considered. Proportionality is called for here. No radical or restrictive measures that are disproportionate to the actual risk reduction involved will be taken.

### 3.2 POLICY PRINCIPLES

Security management will be organized as a process. That means that the annual planning and audit cycle is based on ISO 27001 (Plan, Do, Check, Act). The annual plans are drawn up and executed along these lines. The results are assessed and translated into new annual plans.

The following aspects of information must be ensured by the security:

- Confidentiality: the extent to which the access to information or functionality is limited to those who are authorized;
- Integrity: the extent to which information or functionality has been correctly specified;
- Availability: the extent to which information or functionality is available to users at the right times and in the right locations.

The University of Twente respects the following policy principles:

- Information security is **everyone**'s **responsibility.** Communicate to staff, students, lecturers and third parties that they are expected to contribute actively to the security of the computerized systems and the information stored in them. This could be communicated in, for example, the letter of appointment, during annual performance appraisals, with an institutional code of conduct, through periodic awareness campaigns, etc.
- Information security is a **line responsibility.** This means that managers bear primary responsibility for properly securing information in their department/unit. This also includes the choice of measures and their performance and enforcement.
- Information security is a continuous process. Regular policy and audit reviews, technological and
  organizational developments within and outside the institute make it necessary to periodically
  review whether the University of Twente is still on the right course to safeguard security. Audits
  make it possible to check the policy and the measures taken in terms of their effectiveness and
  efficiency (verifiability).

• Valuation of information. Everyone should be aware of the value of information and act accordingly. This value is determined by any damage resulting from loss of availability, integrity or confidentiality. Classification may be useful in this respect; see the next subsection.

### 3.3 CLASSIFICATION

Handling information is essential to the proper operation of the University of Twente. Students and staff should be able to trust that information is accessible when and wherever necessary, that it is correct and complete and only available to authorized persons.

Not all information is confidential. Protecting non-confidential information to the same strict degree as highly confidential information is not user-friendly. Proportionality is key, also in the interest of using the available financial resources efficiently. It makes sense to differentiate levels of protections. A useful way to do this is by classifying information.

At the University of Twente, all information to which the Information Security Policy applies is classified on the basis of the quality aspects *Confidentiality, Integrity and Availability*.

The level of security measures appropriate for a certain information system depends on the classification of the information processed by the system. A three-grade scale (*Standard, Sensitive, Critical*) is used for the classification for each quality aspect.

The classification must be determined by or on behalf of the owner of the relevant information or of the relevant information system. The Executive Board has appointed custodians (directors of service departments) to fulfil the role of owner for the University of Twente's institutional systems. A description and elaboration of the security levels can be found in the Classification Guideline Information and Information Systems of the University of Twente,<sup>7</sup> which also includes a description of the classification methodology.

<sup>&</sup>lt;sup>7</sup> https://www.utwente.nl/nl/cyber-safety/cybersafety/wetgeving/

## 4 INFORMATION SECURITY POLICY GOVERNANCE

The good, efficient, and responsible leadership of an organization is often referred to with the term *governance*. This primarily covers the relationship with the most important stakeholders of the institute, such as the students, staff members, and society as a whole. Good governance ensures that all stakeholders know their rights and obligations and act accordingly.

### 4.1 HARMONIZATION WITH ADJOINING POLICY AREAS

One aspect of governance is that all sorts of risks and their interconnectedness are awarded appropriate attention. This is referred to as Integral Safety. Physical security, occupational and environmental safety are not taken into consideration here.

The issues concerning privacy — the proper processing of personal information — form part of information security. At the same time, it entails so many specific elements that a separate policy has been drawn up on this topic.

Operation continuity partly falls within the domain of information security but is primarily a line responsibility. Units must draw up plans for operational continuity of the operational processes for which they are responsible.

### 4.2 DOCUMENTS

An (incomplete) overview of current policy documents in the area of information security has been included in Appendix B. All established policy documents will be published on the Cybersafety website.<sup>8</sup>

To set the necessary security requirements and procedures requires specific security rules in subareas. The security rules are listed in Appendix C. Through the formal establishment of these security rules, the implementation of the Information Security Policy is made verifiable.

General information about information security is provided by LISA. Specific work instructions are given to the personnel by the line organization based on the role of the employee.

All contracts with suppliers include a subsection on information security.

### 4.3 ORGANIZATION OF THE INFORMATION SECURITY POSITION

In order to address information security in a structured and coordinated manner, the University of Twente recognizes a number of roles that have been assigned to officers within the UT.

#### 4.3.1 THE EXECUTIVE BOARD

The Executive Board has final responsibility for information security within the University of Twente and establishes policy and basic measures in the field of information security. Substantive responsibility for information security has been mandated to the Information Security Officer. This officer is tasked with ensuring the security of information across the whole institute.

#### 4.3.2 INFORMATION SECURITY PORTFOLIO HOLDERS

The portfolio holder for information security is the member of the Executive Board tasked with IT. He/she has final responsibility for information security within the University of Twente.

<sup>&</sup>lt;sup>8</sup> www.utwente.nl/en/cyber-safety

#### 4.3.3 INFORMATION SECURITY OFFICER

The Information Security Officer forms part of University Information Management and operates at strategic and tactical level. In conjunction with the head of Information Management, he/she advises the Executive Board and the director of LISA. The Information Security Officer draws up Information Security Policy, helps to convert this for the institute's units, monitors compliance (harmonized) and reports on gaps, inconsistencies and deficiencies.

#### 4.3.4 INFORMATION SECURITY MANAGER

The Information Security Manager works within LISA and fulfils a role in converting strategic plans to tactical and operational plans. He does so in consultation with the Information Security Officer. He coordinates the CERT (Computer Emergency Response Team) of the University of Twente. In addition, he advises on specific information security measures in projects. A management report is drawn up each quarter.

#### 4.3.5 SYSTEM CUSTODIAN

The System Custodian<sup>9</sup> is responsible for ensuring that the application provides adequate support to the business processes for which the system custodian is responsible. This means that the System Custodian ensures that the application continues to satisfy the requirements and wishes of the users as well as the demands of legislation and regulations and of the Information Security Policy, both now and in the future. The security of information systems is an integral part of responsible management of the relevant information system.

The System Custodian can be supported in this task by the Information Security Officer.

#### 4.3.6 SUPERVISOR

Compliance with Information Security Policy forms part of the integrated operational management. Every supervisor has the duty to:

- ensure that his staff members are aware of security policy and the aspects of the security policy that are relevant to them;
- ensure compliance with the security policy by staff members;
- periodically bring the issue of information security to the attention of staff members during work discussions;
- be available as point of contact for all staff-related information security matters.

The System Custodian can be supported in this task by the Information Security Manager and the Information Security Officer.

#### 4.3.7 INTERNAL IT-AUDITOR

The internal IT auditor annually checks the IT control measures of the IT organization in accordance with a previously drawn up annual IT audit plan.

#### 4.3.8 DATA PROTECTION OFFICER

Within the University of Twente, the Data Protection Officer supervises the application of and compliance with the privacy legislation (GDPR – General Data Protection regulation). The statutory duties and powers of the Data Protection Officer give this official an independent position within the organization.

<sup>&</sup>lt;sup>9</sup> See also the memorandum 'Houderschap van een instellingssysteem', reference SB/UIM/15/2801/EVS, www.utwente.nl/uim/it-governance/houderschap-van-een-instellingssysteem.pdf (only available in Dutch)

#### 4.4 CONSULTATION

In order to properly express the cohesion in the organization of the information security function and to coordinate the initiatives and activities in the field of information security within the various components, structured consultation is held at various levels about information security.

At a **strategic** level, directional discussions are held about governance and compliance, as well as about goals, scope and ambition in the field of information security. This is done in the board, advised by the Information Security Officer.

At the **tactical** level, the strategy is translated into plans, standards to be used, evaluation methods, etcetera. These plans and instruments guide the implementation. This tactical consultation is carried out by the Information Security Officer, Information Security Managers and other stakeholders.

#### 4.5 COMPLIANCE AND AWARENESS

Compliance is guaranteed by general supervision of the daily practice of the security management process. It is important in this respect that managers take responsibility and call staff members to account if they fall short.

The Information Security Officer monitors the extent to which the organization has implemented the Information Security Policy. The SURFaudit standards framework<sup>10</sup> is used as a starting point for internal and external audits. It can be decided to perform certification on certain parts of the information landscape.

Policy and measures are not sufficient to exclude risks in the field of information security. In practice, people often prove to be the most significant risk factor. That is why security risks and measures are periodically brought to everyone's attention, to increase the awareness of risks and encourage safe and responsible conduct. Awareness campaigns regularly organized for staff, students, and third parties are an important part of the implementation of information security policies. These campaigns can converge with national campaigns for higher education, where possible in coordination with safety campaigns for occupational safety, environmental and physical security.

Increasing awareness for security is the responsibility of the managers and the Information Security Officer and the Information Security Manager.

To raise awareness and to influence the behaviour of staff and students regarding information security and privacy, a permanent working group is set up. The working group consists of at least the following members:

- Information Security Officer (LISA)
- Information Security Manager (LISA)
- HR Policy Officer (HR)
- Communications Officer (Marketing & Communication department)

<sup>&</sup>lt;sup>10</sup> The SURFaudit standards framework is based on ISO 27002.

## 5 REPORTING AND HANDLING INCIDENTS

The management and registration of incidents involves the manner in which information security breaches, detected or suspected by staff and students, are reported and the way in which these are subsequently handled.

It is important to learn from incidents. Incident registration and periodic reports on incidents that have occurred is part of a mature information security environment. For that reason a reporting centre has been set up at the University of Twente and information has been published on how to reach it: CERT-UT, het Computer Emergency Response Team UT.

Each unit bears responsibility to detect and report incidents and information security breaches. The line manager, staff member or student must report incidents and breaches immediately to cert@utwente.nl or via the central ICT service desk.

There is a responsible disclosure policy, established by the Executive Board. In this policy, the University of Twente offers possible reporters of security gaps in our information systems the guarantee that the University of Twente will, under certain conditions, not take legal steps against them.

Incidents are handled and are discussed in the relevant operational meetings and with the Executive Board if the business process, finances or good reputation are at stake. If disturbing trends are detected, immediate action can be taken in response, for example by taking additional measures or holding an awareness campaign.

The purpose of CERT-UT is to prevent information security incidents where possible and to counter them as soon as they appear and thus to support the continuity of the University of Twente and protect its reputation. CERT-UT also deals with security incidents outside the University of Twente if its own staff or students are in any way involved. In these cases, the SURFcert services, which are globally connected to other CERTs, will be used.

The members of CERT-UT are appointed by the director of LISA and operate on his instructions. CERT-UT may, in the event of serious incidents, escalate to the portfolio holder of information security through the LISA director. CERT-UT is led by the Information Security Manager.

CERT-UT is authorized to order a temporary isolation of system/network users, computer systems or network segments in order to be able to carry out its task.

These matters are further detailed in the specific security rules for Security Incident and Event Management.

## 6 ADOPTION AND CHANGES

This policy was established by the Executive Board of the University of Twente on March 1, 2021. This policy will be evaluated after two years at the initiative of the Information Security Manager, including a check on the effectiveness of the measures.

The policy has been evaluated in the first quarter of 2023. No changes were proposed. The next review will be in the second quarter of 2025.

If you have any questions or comments regarding this policy, please contact the Information Security Officer.

## Bijlage A Legislation

At the University of Twente, the relevant legislation and regulations are dealt with in the following manner. This list is not exhaustive.

#### i. Higher Education and Scientific Research Act (WHW)

The University of Twente has a quality assurance system, assuring amongst other things that data in the student administration records are handled carefully, along with the course results. In addition, the integrity codes for scientific research are also applied and adhered to.

#### ii. Personal Data Protection Act (Wbp)

Through the information security policy, the University of Twente has implemented the legal privacy requirements (correct and accurate data and adequate technical and organizational measures against loss and wrongful processing).

#### iii. Public Records Act

The University of Twente adheres to the provisions relating to the retention periods as set out in the Public Records Act, for example, and the Public Records Decree regarding the manner in which information recorded in documents (digital or otherwise), information systems, websites, etc. must be handled. It is a periodic part of external accountants' reports.

#### iv. Copyright Act

The University of Twente does not distribute original works without first having obtained the approval of the owner of the copyright. This means that the University of Twente opposes the use of software without the correct licences.

On its website, the library provides practical information on how to deal with copyright. LISA manages the software licences.<sup>11</sup>

#### v. Telecommunications Act

The University of Twente does not have a public section in its network. UT-net is available for a closed group of people involved in education and research and provides access to relevant services. Most legislation from the Telecommunications Act is therefore not applicable. Legislation on net neutrality is applicable where it concerns student accommodation.

#### vi. Intelligence and Security Services Act

The Dutch parliament adopted an amendment to the Wiv in 2018. Services such as AIVD and MIVD are hereby given the right to tap data traffic from the Internet. Service departments such as the General Intelligence and Security Service and Military Intelligence and Security Service will be granted the right to intercept data traffic from the Internet. The impact on the University of Twente will have to be examined, preferably at SURF level.

#### vii. Computer Crime Act III

The third version of the Computer Crime Act entered into force in 2019. The law focuses on the criminal law problem areas in relation to computer use. It makes a number of cases more explicitly punishable. The third version mainly concerns changes in the rights and associated obligations of investigative services, such as the police. For example, the new version offers them the possibility, in certain cases, to hack back criminals.

<sup>&</sup>lt;sup>11</sup> www.utwente.nl/nl/cyber-safety/cybersafety-map/Wetgeving-map/softwarelicenties-en-de-ut.pdf (only available in Dutch)

In addition, the handling of computer data is now punishable as an independent offense. This can be used to deal with someone who has data from others, even if it cannot be proven that he himself has taken over that data.

Compliance with this information security policy and the implementation of the security rules ensure that the UT has a basic level of security. If there are attacks on the UT that significantly breach this security and that fall under the Computer Crime Act, the UT will in principle report this. Reporting is done by the Information Security Manager. If possible in consultation with the Information Security Officer and director of LISA. The information security portfolio holder is notified of a declaration. Both the director and the portfolio holder are kept informed of the progress.

## Bijlage B Policy documents

In addition to the Information Security Policy, a number of policy documents and codes of conduct in the field of information security have been drawn up. All established policy documents will be published on the Cybersafety website.<sup>12</sup>

A selection from these documents:

- 1. Classification Guideline Information and Information Systems of University of Twente. The classification of information provides an estimate of the level of sensitivity and importance of the information and the corresponding degree of security. It concerns protection at the level appropriate to the risks posed for the information in question.
- 2. Codes of conduct for IT and internet use at the University of Twente for staff and for students. The codes of conduct indicate the way in which the University of Twente expects IT and internet facilities to be used. The codes regulate the responsible use of IT and internet facilities and the way in which checks take place.
- 3. University of Twente Code of conduct for ICT officials. On the basis of their position, IT officials often have far-reaching powers in the information-processing systems. They are often able to collect privacy-sensitive information quite easily using the tools available to them.
- 4. University of Twente Password Policy. In drafting the Policy Rules for Identity Management at the University of Twente, the decision was taken to draw up a separate password policy in which all aspects would again be considered carefully and developed further. The different viewpoints are detailed in this document.

<sup>&</sup>lt;sup>12</sup> www.utwente.nl/en/cyber-safety

## Bijlage C Security rules

Specific security rules are required in sub-areas to establish the necessary security requirements and procedures. By formally establishing these security rules, the implementation will be verifiable. LISA employees can generally limit themselves to the security rules that are relevant to them.

The security strategy is based on the "Zero Trust" model. The premise of this is that all resources reside on the public internet and devices, users and networks should never be simply trusted. The basic principle of Zero Trust is therefore "never trust, always check"

Specific security rules have been established for the following areas:

- 1. Means of authentication, management and use of passwords, software and / or hardware keys.
- 2. Basic ICT facilities, such as email, data storage, telephony and chat.
- 3. Data centers including the servers installed in them.
- 4. Hardware, the entire lifecycle from acquisition to phase-out.
- 5. Information systems, the entire life cycle from acquisition to phase-out.
- 6. Network, including the active network components such as routers, switches, hubs, access points, etc.
- 7. Security Incident and Event management, CERT-UT working practice and handling of security incidents.
- 8. Workplaces for users.

## **Security rules – Means of authentication**

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to management and use of means of authentication. In order to gain access to certain IT facilities, authentication requires, besides a username, the use of a password, software and/or hardware key.

Related relevant statements are made in the Code of Conduct for IT and Internet Use, Identity Management Policy rules, Password Policy and Authorization Policy<sup>13</sup>, which will not be repeated here.

#### Responsibility

- 1. LISA bears responsibility for the means of authentication.
- 2. For all types of authentication, an auditable procedure is in place relating to providing, use, replacement, withdrawal and loss.

#### **Purpose limitation**

- 3. Means of authentication are personal, device-specific or application-specific.
- 4. Personal means of authentication are private and cannot be transferred.
- 5. One person is always responsible for all device-specific and application-specific means of authentication. He or she manages the relevant means and monitors its use. LISA registers who is responsible for which means of authentication.

#### Passwords

- 6. Personal passwords require a certain level of complexity. The Information Security Officer periodically evaluates the guideline and adopts the Directive. LISA will publish a guideline that further details this requirement and will ensure its application.
- 7. Device-specific and application-specific passwords are highly complex and have a high entropy. LISA will publish a guideline that further details this requirement and will ensure its application.
- 8. Default passwords as set by the supplier must be changed before the device is connected to the network.

#### Additional means of authentication

9. Information Security Officer periodically evaluates and adopts Directives for additional authentication means, such as MFA. LISA is responsible for the application thereof.

<sup>&</sup>lt;sup>13</sup>See the Cybersafety website for the documents mentioned www.utwente.nl/en/cyber-safety

## Security rules – Basic IT-facilities

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to basic IT facilities such as email, data storage, telephony and chats. These rules are set down in this document.

#### Responsibility

- 1. LISA is custodian for the basic IT facilities provided centrally and is responsible for compliance with the security rules.
- 2. On the website, LISA offers information on the safe use of the IT facilities.

#### Provisioning

3. When an account is provided, the user is immediately informed about security, including by being notified of the *Code of Conduct for IT and Internet Use*.

#### Data

- 4. Access to a user's data, including messages, configuration and metadata, is only permitted on the approval of the user in question or on the written instructions of the Executive Board, as set down in the Code of conduct. This access will be registered in all cases.
- 5. All data transport must comply with the encryption measures as set out in the Classification Guideline.

#### Email

- 6. All senders (whether person or application) of emails sent by the University of Twente must be traceable.
- 7. Incoming or outgoing emails are checked for malware and spam and where necessary the email is partly or entirely deleted or set apart.
- 8. The number of addressees and the size of the emails are limited to a reasonable maximum. The details are published by LISA on the website.

## Security rules – Data centres

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to the data centres including the servers installed in them. These rules are set down in this document.

#### Responsibility

- 1. LISA is responsible for the data centres, including emergency power, cooling, etc.
- 2. LISA enters into conclusive agreements with suppliers such as CFM and SURFnet.
- 3. LISA is responsible for its own servers in the data centres and enters into conclusive agreements with the owners of the other servers.

#### Access

- 4. Access to the data centres is only permitted to install, repair, replace or remove hardware and to carry out maintenance to the data facility itself.
- 5. LISA will set further guidelines for access to the data centres in accordance with the Authorization Policy.
- 6. All access to the data centres is logged.

#### Servers

- 7. LISA logs all servers installed and registers the purpose, administrator and substitute of each server. A clearly legible registration number is attached to the server.
- 8. Processes and ports not necessary for the server's use are disabled.
- 9. Any server which disrupts the UTnet or other IT service, or otherwise causes a security incident, will be disabled or isolated by order of CERT-UT.

#### Management

- 10. The technical management of applications and servers is conducted on a network that is obviously separate from the user network.
- 11.Separate personal management accounts are used for this management.
- 12. The use of management accounts is logged.
- 13. The management of management accounts adheres to the Authorization Policy.

## **Security Rules - Hardware**

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to hardware life cycle, from purchase to phase out. These rules are set down in this document.

#### Responsibility

- 1. LISA is ultimately responsible for compliance with the security rules.
- 2. When an information system runs on LISA infrastructure or if LISA carries out the technical management, LISA is responsible for compliance with the security rules.
- 3. When the custodian or owner or owner of a system carries out the technical management, the holder or owner is responsible for compliance with the security rules.

#### Purchase

- 4. All hardware that can be connected to the UT network requires a certain degree of security. The Security Manager manages these minimum requirements and publishes them on the LISA website.
- 5. In the event that a lot of hardware or important hardware is to be purchased, the Security Manager will be involved in the purchase process in a timely fashion.

#### Management

- 6. Default passwords as set by the supplier must be changed before the device is connected to the network.
- In the event of incidents, the party responsible must be accountable. To this end, LISA logs all hardware connected to the UT network, or logs the account with which the UT network is accessed.
- 8. If a firmware update would resolve a security issue, it must be carried out within a reasonable period.

#### Phase-out

- 9. When data carriers such as hard discs, tapes, mobile devices, USB sticks etc. are put out of operation or disposed of, the data on them must be adequately destroyed by or on behalf of the owner. Through the website, LISA offers information about the way in which this can be done for each type of data carrier.
- 10. Phasing out overcomplete electronic personal equipment takes place according to the e-waste scheme of the UT (*Regulations for redundant personal electronic equipment*).

## **Security Rules - Information Systems**

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to the information systems' life cycle, from acquisition to phase out. These rules are set down in this document. Not bound to these rules is software that has been purchased for individual users, where Availability, Integrity and Confidentiality is not relevant.

#### Responsibility

- 1. The custodian or owner of an information system is responsible for compliance with the security rules.
- 2. When LISA conducts the technical and/or application management, agreements regarding security and compliance with these rules will be laid down in the Service Level Agreement with the custodian.
- 3. Access to an information system is regulated in accordance with the Authorization Policy.

#### Acquisition

- 4. Before or at the start of the project, a classification takes place in line with the Classification Guideline Information and Information Systems so that the results can help determine the requirements for the information system.
- 5. When using cloud services, the SURF Legal standards framework for cloud services in higher education is applied.
- 6. Each project plan for the purchase or development of software will include a section on security. The Security Manager manages a generic overview of key issues for these sections and publishes them on the LISA website.

#### Management

- 7. Security issues are resolved in software developed by the University of Twente.
- 8. Patches and updates from suppliers are carried out systematically.
- 9. Where appropriate, roles are separated; for instance, developers have no rights to the production environment.
- 10. Applying adequate password protection, encryption of data carriers, timely security patches, antivirus software and a properly configured software firewall are minimum requirements for the management of an information system.

#### Logging

- 11.Logging is kept to a minimum.
- 12. The custodian logs the objectives and retention periods of the log files of all information systems under his responsibility.

#### Phase-out

- 13. Software no longer supported is phased out, unless this is not possible and only if appropriate measures sufficiently limit the security risks.
- 14. The conversion, archiving and destruction of data is also considered during phase-out.

## Security rules – Network

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to the network, including the active network components such as routers, switches, hubs, access points, etc. These rules are set out in this document.

#### Responsibility

- 1. LISA is responsible for the network, including all active network components such as routers, switches, hubs, access points, etc.
- 2. Where possible, active network components are placed in an enclosed room.
- 3. LISA logs all active network components.
- 4. The University of Twente starts from the basic premise of an open network, in principle without restrictions to internet traffic.
- 5. The University of Twente complies with the agreements made with SURFnet.

#### **Own equipment**

- 6. In principle, LISA only ensures the installation of network equipment. LISA logs the exceptions including the written agreements made.
- 7. LISA logs third party connections, including the agreements made.
- 8. Any equipment which disrupts the UT-net or other IT service, or otherwise causes a security incident will be disabled or isolated by order of CERT-UT. This also applies to equipment that disrupts the use of the wireless network.

#### Campus

- 9. Campus residents may install their own routers, etc.
- 10. If a campus resident's router disrupts one of the systems behind the UTnet router, disrupts another IT service, or otherwise causes a security incident, it will be disabled or isolated by order of CERT-UT.

#### Management

- 11. The network components are managed through a separate management network or as a minimum, through a secure connection.
- 12. Access to network components is regulated in accordance with Authorization Policy.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> See www.utwente.nl/uim/informatiebeveiliging/autorisatiebeleid-universiteit-twente.pdf (only available in Dutch)

## Security rules - SIEM (Security Incident and Event Management)

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to the working practice of CERT-UT and the handling of security incidents. These rules are set down in this document.

#### Responsibility

- 1. LISA is responsible for the installation and operation of CERT-UT as laid down in the Information Security Policy.
- 2. The Security Manager bears responsibility for Security Incident and Event Management.

#### Incidents

- 3. Incidents are immediately reported to CERT-UT directly or through the ICT-Servicedesk.
- 4. CERT-UT uses standard procedures to log and remedy incidents.
- 5. A specific procedure applies to security emergencies.
- 6. Reports are dealt with confidentially.

#### **Events**

7. Any actions, acts or events that could influence the security of information are identified and recorded. If an event influences operational management it will be reported as an incident.

#### **Preventive measures**

- 8. The Security Managers provides information to users, developers and administrators to prevent security incidents.
- 9. The Security Manager may provide solicited and unsolicited advice on possible security issues.

#### Reports

- 10. Each quarter, the Security Manager provides the Security Officer with a management report about the incidents and events identified and the advice issued.
- 11. This report contains in any case all security emergencies and identified trends.

## Security rules – Workplaces

#### Introduction

The Information Security Policy indicates that specific security rules are necessary in subareas. One of these subareas relates to users' workplaces. These rules are set down in this document.

#### Responsibility

- 1. LISA is responsible for the security of the workplaces in so far as these are managed by LISA.
- Users are responsible for the security of their own workplace in so far as this is not managed by LISA. Security information and resources can be found through the LISA website.

#### Management

- 3. Separate personal management accounts are used for management by LISA.
- 4. The use of management accounts is logged.
- 5. The management of management accounts adheres to the Authorization Policy.
- 6. Application of password protection, encryption of data carriers, timely security patches, anti-virus software and a properly configured software firewall are minimum requirements for the management of a workplace.

#### Users

- 7. Staff will never ask users to provide their password. If necessary, users will be asked to log on.
- 8. Users are periodically informed by LISA about security, and they are notified of the *Code of Conduct for IT and Internet Use*.
- 9. If any equipment used has encryption features, these must be enabled.

#### **Malfunctions**

10. Any workplace which disrupts the UTnet or other IT service, or otherwise causes a security issue will be disabled or isolated by order of CERT-UT.