Principles of functional reporting of information systems (IT/IS) in the EPFL matrix organization

Translation; the French version is authoritative.

VPSI is responsible for the EPFL computing infrastructure. It continuously adapts it according to the needs of its clients (students, teachers, professors, researchers, administrative and technical employees, partners, as well as the general public). It acknowledges the permanent state of change in professions and technologies, while adapting to technological developments and the resulting needs. VPSI guarantees the integrity of EPFL’s information system: this includes ensuring confidentiality, availability, sustainability, functioning/efficiency, legality and auditability. More generally, VPSI guarantees the governance of information systems across the whole of EPFL (Lex 1.1.1, art. 11).

VPSI is enabling EPFL’s transformation into a genuine digital administration. It supports initiatives in connection with the digitalization of teaching, research and innovation. VPSI provides a common base (platform) for distributed computing services (faculties, other vice-presidencies and centers). Our objective is to strengthen them in fulfilling their local assignments and the use of applications specific to their professions. VPSI continually identifies risks associated with IT security and technological debts. It also identifies technological opportunities (such as the use of “cloud” computing) and potential areas of added value.

VPSI offers a catalogue of services and projects of general interest to the School. These are the centralized services.

In contrast, EPFL’s decentralized IT services are responsible for the local support of employees and the equipment in the faculties and laboratories, as well as applications and those services specific to a given faculty.

Decentralized IT services have a functional reporting to VPSI.

This document explains the rationale of this reporting, as well as the roles and responsibilities of each player.

Motivation behind functional reporting

Functional reporting is important in guaranteeing the integrity of EPFL’s’ information system; that is, its confidentiality, availability, sustainability, functioning/efficiency, legality and auditability.

Functional reporting does not imply hierarchical (line) reporting. The line manager is responsible to allocate resources, HR-related questions, internal organizational models, as well as priorities.

Functional reporting on two levels

Certain functions (notably IT) are matrix-based and on two levels. In fact, the IT function is implemented by employees reporting hierarchically:

- to VPSI – for centralized services
- to a Dean – for services organized by a faculty, managed by the Head of IT of the faculty
- to a unit, e.g. a laboratory. These assigned employees are IT professionals who work under the instruction of the laboratory manager.
Roles

Head of IT

VPSI delegates functionally the responsibility for a given area (level 2 or 3) to an IT person responsible for a faculty, college or center that reports hierarchically to a Dean or Director. VPSI remains accountable for this delegation.

IT Administrator (IT-Admin)

The Head of IT can delegate functionally the responsibility for a smaller area (level 3 or 4) to an IT Administrator (IT-Admin). This person is responsible for the performance of all tasks delegated functionally by the appointed Head of IT.

Where an organization under a deanship manages the IT of a given unit, the Head of IT (as the representative of his/her organization) is de facto the IT-Admin of that unit.

A unit can have several IT-Admin people, who are jointly responsible for the smooth functioning of their department.

An IT-Admin person cannot delegate responsibility for operations to a third party. He or she must be in a position to perform the delegated tasks (in particular concerning IT security) on all the devices that make up the EPFL information system.

The functional reporting of these two roles therefore implies two hierarchical responsible persons and two functionally responsible persons. These relationships are validated and managed using the ACCRED system. The hierarchical relationship is represented by accreditation in the unit, whereas the functional relationship is represented by the functional delegation of the role for a given unit.

Responsibilities

Dean

- Support his Head of IT in his functional relationship with the IT-Admin people, with whom the latter has no hierarchical relationship.
- Communicate the roles and responsibilities of each employee to the unit managers of his/her faculty, in particular the directors of institutes, centers, and laboratories who have their own IT-Admin people.
- Determine, together with the Vice President for Information Systems (VP-SI), the annual objectives of his/her Head of IT, and to conduct the performance review for the latter, with the help of the VP-SI.
- Define, together with the VP-SI, the job description of the Head of IT of his/her faculty.

Head of IT

- Ensure, in his area, the integrity of the EPFL information system; that is, its confidentiality, availability, sustainability, functioning/efficiency, legality and auditability.
- Link to VPSI across all its areas.
- Respect standards, and implement the directives and regulations defined by his function.
- Promote standards, directives and regulations to enable the personnel within his functional responsibility to perform high-quality work in conformance with the demands of his/her function.
- Report, without delay, any problem or risk that impacts or may impact the information system to the VP-SI or to other ad hoc bodies (duty of alert)
- Ensure the correct performance of the function as defined by the VPSI.
- Approve the job descriptions of the IT-Admin people and evaluate how well the job description fits the profile of the employee.
- Together with the line manager, determine the annual objectives of his/her IT-Admin person and perform performance reviews.
IT-Admin

- Ensure, in his area, the integrity of the EPFL information system; that is, its confidentiality, availability, sustainability, functioning/efficiency, legality and auditability.
- In particular, the IT-Admin person must have all the access rights and privileges necessary to the performance of its function. This includes system access to devices, web sites etc. that are part of the EPFL information system or whose good functioning is essential in guaranteeing the security of the system.
- Report, without delay, any problem or risk that impacts or may impact the information system to the VP-SI or to other ad hoc bodies (duty of alert).

Continuous training

A continuous training program on various topics (e.g. IT security, creating awareness of the management of software licenses) will be coordinated by VPSI within the framework of its meetings with the Heads of IT (CSI, OSB).

Scope

Not all computers are part of – in the sense of the functional responsibility of the information systems – the EPFL information system.

The EPFL information system includes, within the responsibility of the Head of IT, all IT systems that are the property of EPFL or a part of a system containing data owned by the School.

The following list provides examples:

- all the applications (and their databases) that manage employees’ or students’ personal information, and that should be listed in the inventory of EPFL databases (GDPR mandatory)
- all the web applications accessible from the internet
- all the systems that enable linking to the internet (via DIODE), while being part of the EPNET network
- all the servers used for software subject to floating licenses

The Head of IT, his/her direct reports, and/or the delegated IT-Admin person must have the technical access rights required to perform their functions, including system access to the devices concerned.

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