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Vice-Chancellor

Decision on responsibility for data communication and telecommunications

Introduction

A number of strategic IT projects are at present being carried out at Lund University based on the requirement that all operations within Lund University must be guaranteed data communications characterised by high availability, security and capacity. These projects are also based on a changed view of the infrastructure required for data communication and telecommunications. In this context, a shift is necessary from the present model of decentralised primary responsibility to centralised responsibility for IT infrastructure. One prerequisite for these projects is good cooperation between the faculties and relevant administrative units, especially the IT Unit, the Division of Buildings, the Service Unit (the telephone switchboard) and the Computing Centre.

Present rules

For campus-wide data communication, Lund University has a backbone network – LUNET – consisting of a passive network with fibre cables and active equipment to manage data traffic. The active equipment is placed in node rooms located in central on-campus buildings and in rooms in each building which is connected to LUNET. These buildings contain building data networks, starting from LUNET connection points, to distribute data traffic within the buildings to data outlets in rooms used for activities. LUNET is centrally owned and operated within the University. It is the responsibility of the IT Unit, and it is operated by the Computing Centre. The building networks are owned and operated by departments (or equivalent) as part of 'decentralised primary responsibility for IT operations'.

The University's joint telephony services, which are based on the joint switchboard, are distributed mainly through the separate telephone-cable system. Responsibility for telephony and cable systems rests on the switchboard services of the Service Unit.

New rules

The starting point for work in this field at Lund University should be that all users

must be guaranteed high-availability and high-security data communication regardless of which organisational unit bears operational responsibility for the data network. 'Users' include computer-equipped workspaces for students, laboratories and other places where students are to have access to data communication. This means that, regardless of physical location within the University, the availability of applications requiring data communication should be high and stable everywhere within the University. To obtain this, the persons with central operational responsibility must have physical access to data communication and telecommunications in a long-term and cost-effective manner. This, in turn, requires the introduction of new rules for data and telecommunications networks.

Right to use data-network infrastructure

Regardless of the structure and ownership status of building networks, the availability and quality of building networks must be guaranteed to ensure that applications common to the entire University can reach users. The aim should be for all building networks eventually to be owned and operated centrally and for all users to be guaranteed access at a specified level of quality.

Local networks within departments (or equivalent) intended for special purposes in fields such as research, testing, development and laboratory activities are exempt and may be connected to LUNET if the technical requirements for such connection are met.

Access to premises in order to ensure the quality of the data-network infrastructure

The infrastructure for data and telecommunications networks includes secure spaces in buildings where cable connections and active data and telecommunications equipment are located. Access to such spaces must be guaranteed. Identifying suitable such spaces should be the duty of the planning officer of the Division of Buildings in cooperation with those who are responsible for data communication and telephony and with those who use the buildings.

Any construction work required to adapt the premises should be planned and ordered by the Division of Buildings in consultation with the IT Unit, the Computing Centre and the switchboard services. The cost of such work should be included in the rent and should be considered necessary to ensure that the buildings meet the necessary operational requirements.

Operational costs of technology spaces relating to LUNET and of centrally owned and operated building networks should be charged to the IT Unit as the organisation responsible. When technology spaces are used for multiple purposes, the department (or equivalent) will pay a usage fee for its share of the technology spaces.

Availability and quality

The availability and quality of points of access to data networks should be governed by mutual service-level agreements (SLAs) defining the commitments of the University at the central level and those of the owner of the building network, unless this is also the University at the central level.

Responsibility for ordering and performance

The IT Unit should be responsible for ensuring that building networks with central responsibility for functionality are procured and installed as well as for the progressive assumption of responsibility for existing building networks which are at present owned by departments (or equivalent).

Operational responsibility

To ensure the best possible levels of availability, security and service for data networks intended for data communication and telephony, it is necessary to coordinate the operation of data and telephony networks. The operation of building networks for which the University bears central responsibility and the operation of telecommunications networks should be the duty of the Computing Centre, similarly to the operation of the LUNET backbone network. As a result, the IT Unit will assume the role of ordering entity in relation to the Computing Centre for such operation.

Fees for the use of data networks

The use of the LUNET backbone network, which is connected to SUNET, should remain free of charge for end users.

Users should not pay a fee to use building networks owned by departments (or equivalent). The department will then assume all costs in relation to networks, equipment and operation. Requirements as to standards, capacity, availability and skills will be determined in SLAs.

For the use of building networks owned and operated by the University at the central level, each user should be charged a fixed fee per data-network outlet. The fee for an outlet will be based on depreciation and direct costs of components and the installation of the passive network and communications equipment as well as the cost of operating the building networks (administration, maintenance, troubleshooting, repairs, etc.). All costs pertaining to the building networks will be allocated among all data-network outlets, so that the fee will be the same regardless of what building the outlet is located in. Temporary reductions may be granted for building networks for which the central level has assumed responsibility but for which the department has residual costs or where quality and availability levels do not yet meet the applicable standards.

Telephony costs should be financed, as previously, through subscription costs for telephone connections and call charges. It is assumed that the building networks for data communication can be used to connect telephones to the telephone switchboard in such a way that telephony is an application or a service in the existing data network which is separately paid for as described above.

Build-up of joint infrastructure for data communication and telecommunications

During a build-up phase to implement the changes described above, the building networks will progressively be transferred to central ownership and operational responsibility. The build-up phase should be concluded by 2008.

Some elements of the implementation are the following:

- Installation of centrally owned and operated building networks in new and rebuilt buildings as well as when existing building networks are replaced;
- Cost-neutral take-over of department-owned building networks to be centrally owned and operated;
- Agreements with owners of building networks on access to such networks, taking into account levels of operation and quality for applications common to the entire University.

The implementation work should be led by a project group, established by the Head of the University Administration, which should include representatives of the IT Unit, the Division of Buildings, the Computing Centre, the switchboard services and two representatives of the faculties.

Decision

The following shall apply to the University's infrastructure for data communication and telecommunications:

- The University assumes central responsibility for the provision of data-communication and telecommunications facilities to data and telephone wall outlets in all workspaces at the quality levels specified in SLAs.

The principal method to be used in this context is the extension of the joint LUNET backbone network by centrally owned and operated building networks.

The long-term strategy is for the building networks connected to the LUNET backbone network in all University buildings to be centrally owned and operated.

- The use of the LUNET backbone network, which is connected to SUNET, will be free of charge for end users.
- For centrally owned and operated building networks, users will pay a fixed uniform fee for each datanetwork outlet. This fee will be based on actual costs.
- For its joint network services, including telephony, the University will have access to physical building networks, i.e. cables, main distribution frames and outlets at computer-equipped workspaces, which are owned and operated by departments (or equivalent).
- Technology spaces in buildings which are necessary to build and operate infrastructure for data and telecommunications networks will be made accessible to the central level of the University.
- The technical operation of communication networks for the University's telephony will be coordinated with the operation of the University's joint data network in order to achieve technology integration and operational efficiency.
- Given the ongoing work to install a new telephony system, which requires access to data networks, and the time pressure to modernise the LUNET backbone

network (GigaLUNET Project), the above decisions are to be implemented with immediate effect.

This decision was made by the undersigned Vice-Chancellor in the presence of the Head of the University Administration, University Director Peter Honeth, subsequent to a presentation made by the IT Manager, Arne Sundström. The Head of the Division of Buildings, Lars Lavesson, also participated in the preparation of the matter.

Göran Bexell

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