

Abstract

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University participation in technology transfers

- making research results and innovations available for business use

The term technology transfers refers to the process by which a university makes research results and innovations available for business use. This is one of the main forms of universities' external activities.

The present audit investigated technology transfers in project form which the Helsinki University of Technology conducts in cooperation with businesses and other outside sources of finance. The audit focused on the transfer of research results and innovations created mainly as part of research conducted with the university's basic resources. This is referred to as university- or research-based technology transfers.

To give some idea of the economic significance of the subject, in 2000 the Helsinki University of Technology's total financing amounted to FIM 1,041 million, with 51.5% coming from the state budget in the form of basic financing and 48.5% coming from outside financing. It should be noted that most of this outside financing also comes ultimately from the state budget (through the National Technology Agency, the Academy of Finland etc).

The audit investigated how participation in technology transfers is managed before and after the fact and how resources are used. With regard to management the audit investigated the setting of objectives for technology transfers and the information system.

The audit indicated that the university considers technology transfers one of its objective-oriented tasks. Definitions of the desired benefits of technology transfers were quite vague, however. According to planning and agreement documents, technology transfers should support the achievement of the university's main tasks. It remained open whether technology transfers should be directed so as to produce direct benefits for the university's basic education and research or whether it is enough for technology transfers the support the achievement of the university's main tasks financially.

The university does not direct technology transfers by its units. Performance agreements between the university and its units do not specify technology transfers in the form of concrete objectives.

In technology transfers different parties' obligations and objectives are defined in project documents. These do not show clearly how different parties are meant to benefit from the project. The audit indicated that the benefits to the business party are defined more clearly than the benefits to the university.

The university does not have a special information system to collect and forward information on technology transfers. Certain parts of the information system do produce this kind of information, however, such as the HUT Research Register.

Technology transfers have been defined as one of the university's tasks. The university's information system should therefore be able to distinguish technology transfers from the university's other tasks, although drawing a line between technology transfers and other tasks may sometimes be open to interpretation. On the basis of the audit, however, no attempt has been made to use the HUT Research Register to distinguish technology transfers from the university's other tasks.

The research register does not give a reliable picture of technology transfers in project form. Projects with a budget of less than FIM 100,000 are not recorded in the register at all, and the recording of certain key information is voluntary.

The research register's classification of resources used in projects on the basis of the type of research (basic and applied research and product development) to some extent describes the nature of participation in technology transfers and the interested parties. Classification principles vary according to who records information, however, and criteria for the division have not been specified. Information produced by the register does not give a clear idea of interested parties in technology transfers.

The resources used in technology transfers were investigated on the basis of project documents. These did not give a full account of the resources used for technology transfers. Furthermore, different parties' resources were not distinguished. The university participates in technology transfers mainly with operational resources, which are used at the same time to carry out the university's other tasks. In the opinion of the State Audit Office, distinguishing resources used for technology transfers is especially necessary.