

## Report from the study visit to the University of Turku, 28<sup>th</sup>-29<sup>th</sup> June 2011

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### 1. University of Turku: overview

#### 1. 1 History, structure and key numbers

The University of Turku was established in 1920 in Southwest Finland as the first Finnish-language university. It is the second largest university in the country as measured by student numbers. There are approximately 21,000 students studying at the university, of whom 16,000 are degree students, 2,500 are postgraduate students and 2,500 are visiting students from over 85 countries. The University awards 1,000-1,500 Master's and Bachelor's degrees and 140 Doctoral degrees per year. It employs 3,500 staff (31% teachers, 27% researchers and 42% other staff), and it is the third largest employer in Turku. It holds the 221<sup>st</sup> position in the *THES – QS World University Rankings* and it is ranked as the second University in Finland.

In 1920, two faculties were founded at the University of Turku: Humanities, and Mathematics and Natural Sciences. Throughout the years, other faculties were added: Medicine (1943); Law (1960); Social Sciences (1967); and Education (1974). In 1950, the Turku School of Economics (TSE) was established as a separate entity and, in 2007, a decision was made to merge the School with the University. Currently, the University of Turku has seven Faculties, including Turku School of Economics. The overall organisational structure is shown in Figure 1.

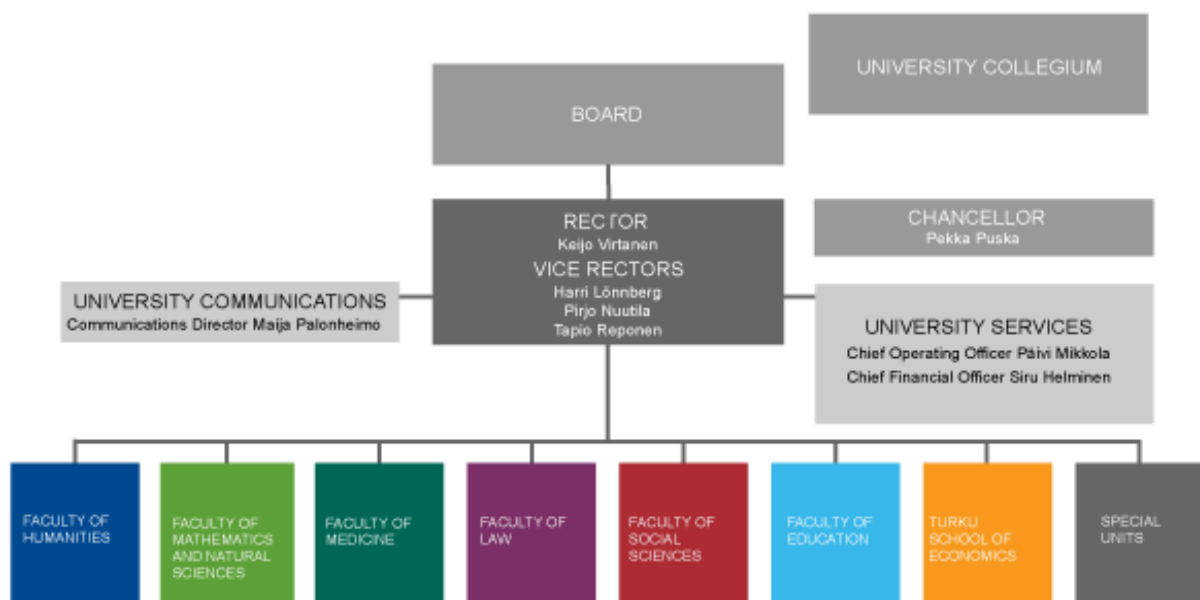


Figure 1. Organisational structure of the University of Turku

The University has twelve special units, which are funded externally either from fees or research grants. These include:

- Business and Innovation Development (BID), visited by the report authors
- Centre for Extension Studies
- Centre for Maritime Studies
- Finnish Centre for Astronomy with ESO
- Finland Futures Research Centre
- Functional Foods Forum
- Environmental Research Centre
- Language Centre
- Research Unit for the Sociology of Education RUSE
- Turku Centre for Biotechnology
- Turku Centre for Computer Science TUCS
- Turku PET Centre

The main areas of strengths in research include: molecular biosciences; cardiovascular and metabolic research; ecological interactions and ecological genetics research; learning and education research; future studies; research on institutional design and social mechanisms. The University produces around 3,000 publications per year, 77% of which are international publications.

The University has 16 Graduate Schools, which are nominated and funded by the Ministry of Education. It also participates to a number of other graduate schools.

The University has a strong interest in Life-Long Learning. It has an Open University (part of Turku School of Economics), runs Courses for Professional Development and provides tailored training for organisations and enterprises. It is also the first Finnish university to have arranged an event called 'Children's University' with lectures, workshops and science camps.

## 1.2 National and regional context

The recent merger of the University of Turku with the Turku School of Economics is a result of changes introduced in the Finnish education system. The government works towards establishing an education system, which by 2012 will have no more than fifteen universities and eighteen polytechnics. Mergers of universities and the creation of strategic alliances with polytechnics aim to aggregate resources and strengthen research capability. Ultimately, mergers are seen as a way to improve the international visibility of universities, aiming to secure higher ranking positions, to cumulate funding for research as well as to lower barriers that hamper smaller universities to participate to research competitions due to high administrative costs. It is hoped that recent changes will allow Finnish universities to be more competitive and successful in the international market.

The 2009 University Act gave universities an independent legal status. Its main aim was to balance public and private funding to universities in the future. In 2008, core funding allocated by the Minister of Education accounted for nearly 60% of the total universities expenditure. The changes introduced by the Act aim to enhance university autonomy in order to supplement basic funding with donations and business activities.

The Finnish education system applies a dual model, comprising universities and polytechnics. The 1997 University Act defined the four main tasks of universities: 1) promotion of free research; 2) scientific and artistic education; 3) research based higher education; 4) education of students to serve their country and humanity. The legislation was amended in 2004 so as to include the responsibilities of the universities' Third Mission.

The University of Turku is active in developing Southwest Finland as well as the Finnish scientific and cultural domain. Its regional role and commitment to the city was strongly emphasized in almost all meetings we had in Turku.

## **2. People met during the study visit**

### **2.1. Program Schedule**

#### **Tuesday, 28<sup>th</sup> June 2011**

12am-2pm: TAPIO REPONEN (Vice-Rector -

[http://www.utu.fi/en/university/administration/vice\\_rectors.html](http://www.utu.fi/en/university/administration/vice_rectors.html)) and PETTERI SIIKA-AHO

(Planning Officer from Central Administration -

[http://www.utu.fi/en/university/administration/university\\_planning\\_and\\_development.html](http://www.utu.fi/en/university/administration/university_planning_and_development.html))

2-4pm: ANTTI PAASIO (Business and Innovation Development - BID:

<http://www.tse.fi/EN/units/specialunits/bid/Pages/default.aspx>)

4-6pm: MAUNO KANGASAHO (Innovation Manager -

[http://www.utu.fi/en/research/research\\_contact.html](http://www.utu.fi/en/research/research_contact.html)) and ELIISA SARKILAHTI (Project and

Innovation Services - [http://www.utu.fi/en/research/research\\_contact.html](http://www.utu.fi/en/research/research_contact.html))

#### **Wednesday, 29<sup>th</sup> June 2011**

9-11am: PIRJO VUOKKO (Director of Turku School of Economics -

<http://info.tse.fi/staff.asp?id=488374>), SANNA MAKI (Lecturer from Department of Geography -

<http://www.sci.utu.fi/maageo/en/personnel/>) and ARI KOSKI (Project Manager from Brahea

Centre for Training and Development -

<http://brahea.utu.fi/yhteystiedot/tiedot.html?numero=117>)

### **2.2. Departments represented in the Study Visit**

First Meeting: University Administration through the Vice-Rector and the Planning Officer interviews (<http://www.utu.fi/en/university/>).

Second Meeting: The centre from the previous institution Turku School of Economics that merged the University of Turku (<http://www.tse.fi/EN/units/specialunits/bid/Pages/default.aspx>).

Third Meeting: Debate about the functions of the Project and Innovation Services that resulted from research (<http://www.utu.fi/en/research/>).

Fourth Meeting: Presentations from three different centres: Turku School of Economics (<http://www.tse.fi/EN/Pages/Default.aspx>); Department of Geography (<http://www.sci.utu.fi/maageo/en/>); and the Brahea Centre for Training and Development (<http://brahea.utu.fi/en/>)

All these departments and centres are interrelated with the three dimensions of the Third Mission as defined by the E3M project. The degree of involvement varies according to the case analysed and, probably, there are more cases that could have not been identified.

### 3. Comprehensive features of the Best Practices

#### 3.1 Description of the Best Practices and of the most successful projects

**(a) Business and Innovation Development (BID)** is located at the Turku School of Economics. The centre aims to combine the newest expertise with successful business development. Its clients and partners include companies and other organisations. BID is also connected to domestic and international network of experts. BID carries out research in innovations, entrepreneurship, new business models and business environment of tomorrow. It offers educational programmes and conducts business development and commercialisation projects within the knowledge and research intensive businesses. Its main goal is to achieve excellence in innovation and entrepreneurship.

BID started as Business Research Centre in 1986 and has been essentially involved in Third Mission activities since its inception. In early 2000s, it employed 60-70 people and had 200 partners in 60-70 countries. At the time, the activities have been spread between many small departments. Thanks to the merger of the Turku School of Economics and the University there has been a concentration of activity. In the past faculties, professors and students were living in silos. BID was instrumental in creating linkages between people in different departments within the University as well as with the outside world, be it a region, a country or an international community.

BID is involved in the **Turku Innovation Platform (TIP)**, which is a collaborative project of universities in Southwest Finland that aims to:

- increase knowledge in entrepreneurship;
- increase general business know-how;
- improve the quality of innovations and the performance of company start-ups.

The purpose of the project is to enhance the regional innovation system and the research-to-business activities of universities, along with developing a platform for different types of coordinated activities that enables the realisation of the aforementioned goals. The outputs of the projects to date include:

- Technology Entrepreneurship Programme (TSE and UTU)
- Business Development Laboratory and other business development activities
- Open source software for developing countries (TSE and UTU, funded by the UN/FAO)
- Nordic Master's Programme in ICT (Innovation & Entrepreneurship module, 20 cr.; The Nordic Council of Ministers)
  - Turku Centre for Computer Science (TUCS)
  - Kungliga Tekniska Högskolan (KTH), Stockholm
  - Technical University of Denmark
  - University of Oslo
- A project for forming the Turku Innovation Platform (Regional Council of Southwest Finland)
- International openings (KTH, Karolinska, EIT, MIT and others)
- Conference papers and presentations.

More information on BID at: <http://www.tse.fi/EN/units/specialunits/bid/Pages/default.aspx> and on TIP at: <http://www.innoturku.com/>

**(b) BioCity and The Turku Science Park** is a business incubator providing modern facilities and bringing together academic and business expertise in a shared location. It is owned by the City of Turku and hosts the biotechnology and ICT clusters of the Southwest Finland. BioCity was created in 1984 by two universities, the University of Turku and Abo Akademi University, as an umbrella for biosciences. The idea behind it was to share location and facilities as well as to create a bioscience hub in Turku. BioCity comprises research units of the two universities, and its campus also hosts Turku University Central Hospital, VTT's Medical Biotechnology Unit, the National Public Health Institute and many businesses active in biosciences.

More information at: <http://www.turkusciencepark.com/default.asp?viewID=389>

**(c) Business Development Laboratory** is a joint project of the Turku Science Park, Turku School of Economics and University of Turku. The Laboratory combines the business, law and technology skills of students and researchers under the guidance of university teachers and industry experts. The law students act as legal consultants or corporate lawyers of a high-tech company or new venture, and they participate in developing a business plan in a team with business students that typically involves the commercialisation of an invention. The aim is to produce a business development plan in cooperation with the business students and under the guidance of university teachers from the Faculty of Law and the Turku School of Economics, as well as mentors from a law firm and consultancy.

Some ideas are being funded using strategic project funding from the University. The goal is to fund ten ideas every year.

More information at: [http://www.law.utu.fi/en/international/tls/business\\_development\\_laboratory.html](http://www.law.utu.fi/en/international/tls/business_development_laboratory.html)

**(d) Boost Turku** is a student-based network for young entrepreneurs and entrepreneur-minded people sharing knowledge among the universities of Turku. Boost Turku strives to be an 'easy-access' open society for any kind of academic entrepreneurial matter. The underlying reasons for being involved in this society vary in large scale. It can be anything from just being interested in entrepreneurship as a concept to aiming to establish a global business changing the world. The core idea of Boost Turku is to match active people and create motion both within and outside of the society.

The network has been set up by students. More information at: <http://www.boostturku.com/>

**(e) Project and Innovation Services.** The unit is responsible for assisting researchers by providing information about funding opportunities, helping researchers with the development of funding applications, dealing with legal and administrative issues related to projects, negotiating terms and conditions of the funding, and other legal and financial affairs. They are also responsible for commercialisation and technology transfer activities, as these issues are considered at the beginning of the process when the application is being developed.

It is primarily a research support unit, with some functions related to TTI. They have on staff a patent information officer, who is employed not by the university but by the Foundation for Finnish Inventions. His position is shared between two universities in Turku. The Foundation for Finnish Inventions is a government funded independent foundation. It supports and promotes the development and exploitation of Finnish inventions. Legal advice and financial support for patenting inventions is an important part of the activities of the Foundation.

The Unit also receives funding from TECES (Finnish Innovation Authority) for actions and projects aiming at the commercialisation of the research results, such as patent searches.

TTI activities are seen as horizontal activities being inherent parts of the research activity.

**(f) HEI Partner.** The HEI Partner is a joint service channel of six higher education institutions located in the City of Turku. The University Partner brings together all the services the HEIs provide for SMEs and other regional stakeholders by providing information on the services and expertise of the HEIs, and by creating partnerships between SMEs and HEI experts. As part of the services channel, the customer oriented internet portal has been opened at [www.korkeakoulukumppani.fi](http://www.korkeakoulukumppani.fi).

The aim is to allow regional actors and SMEs in the Southwest Finland easy access to the knowledge and expertise of the local HEIs by acting as a single point of contact or service channel to all HEIs. It was created to make the information about HEI services more easily accessible. The operational model of the University Partner Service is based on a single point of contact in the HEIs but also closer to the SME, in the sub-regions. The involvement of six institutions in the programme allows access by SMEs to a much broader pool of expertise. The programme is also

encouraging the change of culture within the university towards a more business and collaboration oriented approach.

The project was implemented during the years 2008-2010. The total budget of the three-year project was €200,000 and covered the costs of three part-time project workers, travelling, events and material production. Since 2011 it has been run as an established service with the annual estimated costs of €50,000. Provision of appropriate resources is necessary to maintain the same level of services, which is a key point for the success of the programme. If the level of services deteriorates, SMEs or the university participants may lose trust, therefore, interest in getting involved.

**(g) Services offered to external partners by University.** The University offers a broad range of services to external partners:

- contract, commissioned research and development activities;
- participation in collaborative, joint national or international projects;
- use of the facilities of the University, including testing, measuring and analysis equipment and laboratories;
- educational and development services for enterprises, organisations, and national and international public authorities;
- in-house development and training programmes and seminars for enterprises;
- provision of state-of-the-art knowledge and expertise;
- adult education;
- alumni services;
- recruitment services.

These examples include a special unit that conducts research into learning with disability, which also diagnoses various disorders for reduced fee; service for cancer patients in the PET centre; selling lab services to pharmaceutical companies; and commercial activities for environmental studies. PhD students' projects, where appropriate, are connected with commercial research.

**(h) Students' interaction with society.** As part of the courses taught by the Department of Geography, 'sponsoring companies' offer projects for students. These projects are part of the course and usually imply conducting research relevant to companies. Companies do invest time and energy in these projects, but do not provide any funding. At the moment, there are about 20 students working for these companies. These projects are part of personal study plans, which allow students to reach potential employers. Students and teachers also get involved with local communities (mainly in developing countries) through research projects.

### 3.2 Creation of Third Mission activities

In Finland, the term used to describe Third Mission is 'societal interaction'. The University of Turku has integrated Third Mission into its strategy. The strategy sees 'societal interaction' as "part of the University's basic mission integrated into research and education. All university units and

members of the university community take part in it with different emphases. The results are taken into account in the allocation of resources and in career development.”<sup>1</sup> There is also a specific Action Plan, namely “Integrating societal interaction into research and education”, which outlines specific aims and actions in this area. Although societal interaction is well represented in the official documents, there is no specific funding for it. The people we met regarded the strategy as a good one, especially considering the fact that it aims to create a model for the whole university.

The first Third Mission activities can be traced back to the 1980s, when BID was set up in its original form. They spread across various university departments in the 1990s and 2000s.

### 3.3 Positive and negative components affecting the raise and the development of the Best Practices

The University has a strong commitment to developing Third Mission activities, as it is recognised in the strategy and promoted by the action plan.

From the interviews we conducted, it is difficult to establish how many staff are directly involved in facilitating Third Mission activities. We have identified two full-time staff, who are funded from external sources. On the TTI side, there is one person employed by the Foundation for Finnish Inventions – this provided a good opportunity for the university to explore TTI services without any financial risk. According to data collected so far, the initial results are very good. Another staff member is employed by the HEI Partner programme.

The main problem for advancement of Third Mission activities is the lack of resources, both human and financial. This is an obstacle to activities in general, not only the Third Mission activities but also the research support ones. It has been a problem for 20 years.

The interviewees recognised that support services need good quality in order to motivate staff to get involved in these activities.

In the past two years, many departments and units have become interested and involved in Third Mission activities. These departments are trying to organise these activities in institutional capacity to reduce dependence on single person activities. In addition to this, TESEC funds a project that aims to develop a model for the whole university.

Some staff are already involved in the Third Mission; in fact, the University focuses on those who are not involved. It is mainly an issue of communication. Many staff perceive the Third Mission as an additional burden, while our interviewees observed that it is not about taking on more responsibilities, but about doing things in a different way.

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<sup>1</sup> University of Turku, Strategy 2010-2012 (unofficial translation).

Most of Third Mission activities would generate some revenue for the university; however, there are two problems associated with it. Even if companies pay for the services, the staff, who would be the most qualified to get involved, could not do it due to lack of time. Another issue is dealing with payments. At this regard, the university structures are not prepared to operate in an outside world. In fact, they are usually much slower than companies in processing payments and dealing with other administrative matters, a fact that can cause problems when working together.

#### 3.4 Characteristics of the relationship between the specific structure enquired and the university

What is interesting about the Finnish case is that TTI activities are based on local and regional networks. The City of Turku has one incubation centre, which most universities are connected to. Universities also share resources and people, which is evident in programmes like HEI Partner and TIP. The City of Turku is an important partner in many of these activities. It could be said that TTI activities in Turku are taking place at the city level, rather than at HEI level. This is typical of the entire Finland, where there are no TTOs, but TTI activities are based on networks between universities, incubation centres and other stakeholders. All of them use existing national structures like the Foundation for Finnish Inventions, TECES, PROMOTO and others. They are trying to make the best use of the few resources they have.

Among the analysed structures, BID took on a challenge to create networks within the university between academics from different departments by organising a series of meetings.

#### 3.5 Relevance of public institutions attitude towards the University Best Practices

The Finnish Universities Act recognises the role of the Third Mission and promotes its development. There is also a working group at the Ministry of Education working on indicators for Third Mission. The University of Turku has also been doing some research in this respect.

#### 3.6 Future perspectives for Third Mission activities in the institution

The University is collecting successful examples of Third Mission activities from different departments in order to show them to the whole university. It is felt that communicating examples of the best practice will help staff to better understand what Third Mission is about and to encourage inactive staff to get involved in these activities. It was pointed out that finding cases is sometimes difficult.

It was also pointed out that the university needs to better understand the needs and expectations of the society they are trying to serve for example as companies. It also requires a good understanding of what the university can and cannot offer.

Finally, it was highlighted the importance of collaboration between departments to address different societal problems. Many societal problems are multifaceted and require different

disciplines to come together so as to solve them; therefore, it is fundamental the creation of networks within the university.

#### **4. Measuring and evaluating Third Mission activities**

##### 4.1 Presentation of the project

All participants had received the Delphi report in advance and were aware of the project goals and preliminary outputs.

##### 4.2 Application of chosen indicators to specific cases

The major debate was with the administration. This considered the effort put in human resources and information structures to obtain most data not compatible with the value of possible gains. Some already existed, though in forms that could not be used for indicators. The administration would like to see examples of implementation of some indicators in order to assess practical aspects and processes. For what concerns other sectors visited, some indicators have already been used by LLL and TTI while they were also using others. It was requested to send, when possible, suggestions to be added to the list or to improve it. For instance, the LLL department monitors, as representative of UTU, the societal interaction through public appearance; development projects; *studia generalia* ('open courses'); participation in the NGOs decision making; services for external clients, cooperation agreements; and involvement of external groups in unit development work.

##### 4.3 Point of view of interviewed members

The general impression is that information to define indicators may be retrieved, but not at the current stage, because the information system is not ready. Bureaucracy also seems a menace since the procedures may imply extra efforts and financial burden to comply with the requirements necessary to obtain the indicators. The main question for the administration is to know what the value added of third mission indicators is and what to do with the results. It was also mentioned that the denomination 'social interaction' was preferable when compared with the term 'Third Mission'.

The number 'three' seemed a classification of importance that placed the activities after research and teaching. It has also been difficult to know what departments do in that area. Remarks were also made upon the interpretation of the Delphi report indicators like SE4, I2 and I4. These two have no activities since they are covered by other indicators at the University of Turku. The general impression got from the administration is that 'one' or 'two' may be used in each dimension. It is necessary to find appropriate indicators in order to motivate the units to promote the Third Mission. It will be helpful to have some indicators to be used in the government financing formulas. It is difficult to have the same set of indicators for the diverse units. These

have specialised activities with different performances. It is expected that growth and funding may influence third mission activities.

An area of third mission that was mentioned was 'social innovation', which could result from combining business investment and sociological sciences. With respect to technology transfer, it has to be said that the process is supported by the financial department. Therefore, either external or internal financing is needed to innovate outside the university. There are services provided for advising, patenting, risk analysis and commercial exploitation.

The supporting elements that are considered essential are: proper computer software, databases, networks, and human resources. At present, the number of personnel is below the ideal for the possibilities and opportunities in technology transfer. There is a significant activity in the health sector that supports the community, such as support for cancer patients, pharmaceutical studies, virology, nursing in psychiatric hospitals and helping to cope with learning disabilities. The fact that there may be an insufficient response may compromise the emergence of new projects.

The university or units should have a single contact point to SMEs to facilitate technology transfer and continuing education activities. The challenge for third mission structures is to adapt to the structure of a public university. As far as the indicators are concerned, it was mentioned the issue of measuring the impact of continuing education on competences and productivity in society. Stakeholders have a crucial role in the third mission activities. One example is the influence that external experts, representatives, regional council and alumni have over the choice of majors for students. The former are invited to sessions where they can openly discuss with prospective graduates the circumstances related to careers and companies. Another initiative is the local network, where students meet companies to find jobs. Another attempt is to gather information for funding and development of the archipelago inhabitants in the Turku area.