

LOT 1 : Preparation

REPORT OF THE FIELD VISIT TO TUNISIA UNIVERSITIES OF SOUSSE AND SFAX

April 17-18, 2017

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Having been invited to Sousse on the 19th and 20th of April 2017 to take part in a conference organized as part of the Erasmus + RESUME project, I proposed to the referents of the SATELIT project of the Universities of Sousse and Sfax to carry out the on-site visit during the same trip. The visits took place, but unfortunately no colleague of the "North" side could join us.

The visits

The visits to the Tunisian universities were carried out in the following order:

April 17th, 2017 - University of Sousse

Morning - Meeting at the Presidency University

Mr. Morthada Graa - Director BUTT (Technology Transfer Office)

Ms. Latifa Kechiche - Director of International Relations at the University of Sousse

Afternoon

Visit of the National School of Engineers

Visit of the laboratory of Pr. Najoua Ben Amara Essoukri

• April 18th, 2017 - University of Sfax

Meeting with Mr. Mohamed Belhaj - Administrator BUTT (Technology Transfer Administrator Office) at the Golden Tulip Hotel, where the selection of projects took place as part of the National Competition for Innovation.

It was not possible to visit the premises of the University, because of an official visit in which the official of BUTT was involved.

State of university research and autonomy

During the two days I was able to have in-depth interviews with the staff engaged in technology transfer. Less time has been dedicated to visiting the scientific structures and to the opinion of the teacher-researchers. However, my impression is that the two universities can boast a vital and motivated faculty of researchers in various fields of scientific research, leading interesting research projects, rich in potential spin-offs on the territory.

As we know, the effectiveness of technology transfer depends on the quality of scientific research and it seems to me that, from this point of view, the potential is high.

During the interviews, it became apparent on several occasions that the university research system is conditioned by national legislation, in particular the level of university autonomy seems insufficient, even when speaking about the possibilities of imminent progressive openings (it is expected that the universities change of status soon).

Some examples:

- The research is organized in laboratories and research units, with annual budgets. Funding comes from the state: few grants come from responses to calls for tenders or private sources.
- All expenses must be preventively approved by the "Public Financial Controller", a procedure that significantly slows the flow of scientific research.
- Teachers-researchers can not officially benefit from research revenues and expertise on behalf of companies: only foreign teaching hours are allowed, with annual individual limits.



• Even SATELIT's budget has serious limitations on the ability to spend, particularly on missions and the purchase of equipment.

The prospect of a relaxation of the normative framework makes it possible to identify three areas in which SATELIT could intervene at the level of training:

- The assembly of H2020 projects,
- Project management,
- Internal regulations at the university and guidelines in the field of technology transfer. Examples: how to make a patent regulation, a spin-off regulation, the regulation of research and collaboration in service ...)

Technology transfer structures

Both universities have a BUTT - Technology Transfer Office. BUTTs have been established in Tunisian universities following an agreement with the National Agency for the Promotion of Scientific Research (ANPR). It is important to emphasize the role of the Agency as it has a significant effect on the action (and existence) of BUTTs.

The Agency is an offshoot of the Ministry of Higher Education and Scientific Research and enjoys administrative and financial autonomy. It is expected to play a primary role in the promotion and transfer of research results and appears to have been created to go beyond the limits set by the legislation in force. It has a staff of about 40 employees and its own budget.

It seems that the Agency has had a positive impact on the transfer of technology from universities, but the critical points remain numerous.

The BUTT, in fact, are offices to which only one person is assigned, helped by unstable collaborations:

- Sousse's BUTT also has a part-time legal expert;
- The BUTT of Sfax currently has a second unit.

In the beginning, this staff depended on the Agency, he was then supervised among the staff of the universities concerned. These are colleagues who, over time, have accumulated considerable experience and had the opportunity to participate in several training programs.

Formally BUTTs perform a number of truly remarkable tasks. In practice, however, the impact of BUTT is limited by the uncertain legal status, lack of staff and a specific budget. These strengthened structures would be able to bring considerable benefits to the universities visited and their territories. Now, the BUTTs look like the small shops of the mountain villages (if the comparison is permitted): we find all the necessary, but in limited quantities.

BUTTs are also affected by fluctuations in the policies implemented by their home university and by the ANPR itself. The ANPR's orientations depend significantly on the director in charge, who generally expresses a different point of view from that of his predecessor. In addition, BUTTs are directly influenced by the ideas of the incumbent university president on technology transfer and its actual support.

In this respect, the University of Sfax presents an emblematic experience. A few years ago (between 2006 and 2012), the BUTT staff was increased and the results came soon. This depended on the fact that the president of the university had assumed responsibilities that went beyond the legal limits. With the next president, the BUTT returned to the previous situation.

To conclude on this point, it has not been possible to know whether the BUTTs will be strengthened, at least from the point of view of the staff.

Business creation and incubators

The corporate culture is strongly supported in Tunisia, at the level of university education and by events and awards for business ideas. It is remarkable that students from the Universities of Sousse and Sfax are required to attend two training modules for entrepreneurship, forty hours each.

Business project support, incubators, creation assistance competitions are mostly managed by other public institutions, in particular the Ministry of Industry or its manifestations, which activate programs involving universities as partners.



Universities do not have incubators:

- Sousse: the university does not have an incubator, but would like to create one. A project is under study. Near the engineering school there is an incubator that depends on the Ministry of Industry: it houses businesses of all origins, not limited to those from the university. The spaces are free, but insufficient to accommodate all candidates.

Occasionally, BUTT supports innovative projects.

- Sfax: in Sfax there are 6 incubators, but none belong to the university.

Patents

The Tunisian patent does not guarantee sufficient protection, because it is granted without prior art search: to obtain an adequate coverage, one must therefore resort directly to the international patent. Moreover, there are no agents in the country.

Researchers are entitled to 50% of the revenues of the exploited patents.

- Sousse. Currently the university holds two patents.
- Sfax. The university holds more than 90 patents.

Conventions with the socio-economic world

Both universities have a number of active conventions with subjects from the socio-economic world: Sousse - Nearly 40 conventions. Sfax - About 40 active contracts.

Conclusions

The achievement of the objectives of the SATELIT project requires, at this stage, the following passages:

1. Universities on the "South" side should indicate the names of the persons to be trained, in number of three plus editors, to which should be added the persons designated by the ministry.

The opinion of BUTT colleagues is that it is easy to identify available teacher-researchers, possibly through an internal advertisement. Nevertheless, experience leads them to think that it would be better to train staff to insert in the BUTTs. In fact, it is not certain that teacher-researchers will make themselves available to train others and, moreover, they will not be directly involved in the work of the BUTT; they consider that this does not fall within their functions (unless additional remuneration is not provided for).

The Universities of Sousse indicated the following colleagues:

- Mortadha Graa (engineer doctor in charge of the BUTT and temporary teacher)
- Latifa Kechiche (International Relations Director)
- Saber Jamali (teacher at the National School of Engineering of Sousse) The University of Sfax has communicated the following names:
- Mohamed BELHAJ (in charge of BUTT Sfax, temporary teacher)
- Héla Baklouti (BUTT Sfax, in charge of relations with companies and coaching start-ups)
- Dorra Mahfoudh (Teacher at the National School of Engineering of Sfax) The listeners must still between indicated.
- 2. Identify the type of training to be done.

During the visit we made different assumptions:

- Patents, search for anteriority:
- Support of innovative projects;
- Project mounting H2020;
- Project management (teacher-researchers are not used to working on projects);
- Scouting: how to identify innovations to value;
- Training in legal matters: university regulatory autonomy formulation of internal regulations for technology transfer;
- Contracts
- Marketing with companies

It would be nice if the universities on the "North" side lead the development and support of a specific project, in collaboration with the staff to be trained, until concrete results are obtained, which can be communicated externally. Indeed, we feel the need for a cultural awareness campaign that can convince faculty researchers and departmental decision makers that technology



transfer is possible and that brings good results.

It would be necessary for the training to be certified, possibly through collaboration with the ministry, which is a partner of SATELIT.

A critical point that needs to be highlighted is that BUTT staff and universities have been involved in several international projects (Tempus Porfire, PASRI, PEI-GIZ, FP4BAT1W) through which they have received the necessary training. The training is always welcome, nevertheless the priority urgencies for the reinforcement of the BUTT remain the staff, the budget, definite and stable strategies of action.

SATELIT aims at training, but it would also be necessary, as far as possible, to act at the ministerial level and the presidents of the two universities, to promote a more solid structuring of the TT offices of the two universities.

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