

# Technology transfer offices: a boost to licensing in Mexico

A drive towards establishing organised technology transfer offices in universities has obvious benefits for domestic companies, but may also encourage multinationals to locate their R&D activities in Mexico

By **Héctor Chagoya**, Becerril, Coca & Becerril, SC

In June 2009 the Law on Science and Technology was amended. The aim of the policy changes and incentives was to improve Mexico's innovation dynamics. Among other things, the law mandated the National Council of Science and Technology to support Mexico's linkage and knowledge transfer units (*unidades de vinculación y transferencia de conocimiento* (UVTCs)). These entities were intended to take charge of instigating and executing projects related to technological development and innovation, encouraging the integration of innovation into the manufacturing and service sectors.

However, the biggest failing of this well-intentioned law was to limit the scope of UVTCs to a single model. Article 40bis of the law stated that UVTCs must be private entities. Moreover, it prevented them from accessing government funds to cover their operational costs, such state support being available only for projects. Mexico's main R&D centres are owned by the government; Article 40bis effectively limited their ability to participate in a UVTC scheme, as they would be compelled to put their technology in the hands of an independent third party – any form of control over the activities of a UVTC would result in that unit failing to comply with the law.

Furthermore, the vision that had inspired the UVTCs was of entities that would be

capable of taking 'raw' technologies that were a long way from being marketable and developing them at least to proof-of-concept stage. Unfortunately, this vision did not include certain IP and technology transfer-related activities that are typical of a technology transfer office.

## A step in the right direction

As soon as the law was enacted, several attempts were made to form UVTCs. However, these attempts were hampered by the legal complexities of the process and by the fact that the UVTC concept failed to address the main issue: academic institutions, from universities to public research and development centres, lacked the specific organisational structure needed to transfer technology.

It took more than two years from the enactment of the amendments for the National Council of Science and Technology to issue a new programme. This pledged to support what were now termed 'knowledge transfer offices'. These were envisioned as entities with the administrative capacity and formal authority to manage intellectual property and technology and their transfer from the sphere of academic institutions. The council had finally moved towards a model of promoting technology transfer offices.

## Development stages

The programme that was launched in August 2011 identified three development stages at which the council would provide academic institutions with funding.

The first was a pre-certification stage, at which academic institutions were required to describe their activities in the field of technology transfer. On the basis of these

activities, institutions were invited to propose projects that would foster their technology-transfer capabilities. Even if an institution could not show prior experience in this field, the programme offered the possibility of funding to cover up to 70% of the cost of consultancy for:

- Developing IP management capabilities.
- Developing a business plan for a technology transfer office.
- Enhancing the existing capabilities of a technology transfer office.

One of the main eligibility requirements for funding was proof that the institution was prepared to buy into the success of the project at the highest level, as evidenced by a commitment letter from the rector or principal.

Around 60 projects were accepted at pre-certification stage and remain in development, with funding capped at around US\$120,000. The projects were selected with the intention of favouring technology transfer office projects that were comparatively closer to achieving results at the subsequent certification stage.

The certification stage of the programme involves an evaluation of the technology transfer office's capabilities – irrespective of whether it participated in the pre-certification stage. Certification is a prerequisite for the final stage of consolidation.

Certification will be given to organisations which fulfil the criteria described below.

### **Certification requirements**

#### **Innovation generation or linkage**

This certification requirement is understood as the capacity to secure innovation projects from universities or R&D centres with a view to transferring them to companies. As a bias remains towards technology transfer offices that are independent of academic institutions, certification requires that an independent technology transfer office have a connection to a knowledge-generating institution. Furthermore, the technology transfer office must be a formal entity which is fully recognised institutionally, or have an independent corporate structure that expressly identifies knowledge transfer as the entity's main objective.

In order to demonstrate its innovation generation or linkage function, the technology transfer office must clearly indicate:

- The budget devoted to R&D, both in absolute terms and as a proportion of the budget of the academic institution to which the technology transfer office is linked.
- The number of dedicated researchers working on R&D projects.
- The number of R&D projects being pursued.
- The office's technology transfer instruments (granted or pending).
- The number of R&D projects that have been the object of a technology transfer in some form.

#### **Single point of contact**

One of the main difficulties in transferring technology from academic institutions to companies is ultimately a problem of organisation – a number of different negotiations must take place, involving various stakeholders within the university or R&D centre. Both public and private institutions face this problem.

Therefore, an entity cannot obtain certification unless there is one clear point of contact for the technology transfer office's main users: the academic community and third parties. This point of contact must be clearly identified on the technology transfer office's website and in any policies or documentation supporting technology transfer.

#### **Standardised policy for knowledge management**

A technology transfer office must document and describe the procedure that the academic institution must follow in order to commercialise a technological asset. This policy must span the entire process, from concept to end use. The purpose of this requirement is to ensure that researchers and inventors are given clear guidance on the course to take if they have knowledge which they believe has transfer potential.

The procedures must include clear steps for IP management, including a formal policy. They must also cover steps for technological services (eg, consultancy) for licensing and start-ups.

Where applicable, a timeframe should be given for activities and services.

The policies and supporting documents must be generally available.

### **Conflict of interest policy**

As part of the certification process, a technology transfer office must demonstrate that it has devised (and is prepared to implement) a policy for managing conflicts of interest. In light of the previous requirement that UVTCs be established as private entities, and in view of a bias towards commercialisation through start-ups, the council has sought to maintain a balance by promoting the creation of new companies in which researchers can be shareholders.

A policy must address at least four general concepts: conflict with the university's mission, economic conflict, R&D integrity and a conflict of loyalty or commitment.

### **Standard form agreements**

While recognising that negotiating tailor-made agreements should always be an option, the certification criteria state that technology transfer offices must develop model contracts that can generally be used with little or no involvement of the academic institution's legal department. If a standard form agreement exists, the technology transfer offices will be able to allow an interested third party to sign the standard agreement or negotiate different terms.

### **Performance evaluation and monitoring**

Technology transfer offices are requested to report certain indicators, based on short-term and long-term expectations. This is intended as a requirement for certification, but also as a way of obtaining data with which to evaluate the programme itself.

In the short term, the technology transfer office must report its net income per professional, operating cost per professional and net profit per professional. It must also record the number of:

- Invention disclosures.
- Start-ups.
- Licences.
- Consultancy contracts.
- Training sessions for the academic community.

- Clients that become frequent users of its services.

In the long term, technology transfer offices must report on the intellectual property that has been subject to technology transfer, as well as the office's income per consultancy, licence and start-up, and the number of companies that have collaborated in a technology transfer process.

These indicators are one of the main targets for the programme's critics, as some academic institutions are likely to find them difficult to report on, or simply inapplicable.

### **Mandatory implementation of policies and procedures**

Evidence will be required to show that all compulsory procedures and policies under the certification programme are implemented within the institution.

### **Business plan**

The previously mentioned bias towards a private basis for technology transfer offices, operating separately from the university to which they are attached, is reflected in a need for a business plan. The main requirement of the business plan – which might more accurately be called a development plan – is to demonstrate the activities of an entity that is dedicated to knowledge management. The business plan must include:

- Knowledge transfer precedents.
- An organisational model, including profiles of the personnel required.
- Strategies for the commercialisation of knowledge.
- A proposed annual budget.

### **Aiming for consolidation**

The essence of the programme is to develop skills and organisational capacity within academic institutions. This will enable an effective technology transfer system to develop, based on transparent and robust relationships between academic institutions and companies. The National Council of Science and Technology has announced that funding for technology transfer projects will be provided only if such projects are handled by a certified technology transfer office during the

consolidation stage.

The main obstacle to consolidation is that Mexico does not have enough IP professionals with the necessary IP business skills to run the technology transfer offices. Advances in learning and experience will be needed if there are to be enough Mexican technology transfer professionals to meet the needs of all of the country's academic institutions. However, the programme seems to be on the right track.

The availability of financial backing for innovation projects has already had an impact on the university-industry interface, raising awareness of intellectual property and technology transfer within the corporate environment.

Mexico boasts many highly skilled and world-renowned researchers, but the emphasis within academia has traditionally been on the publication of research, rather than its application. However, the years to come are likely to bring significant changes. Statistics show an increase in patent filings by Mexican applicants, which is already galvanising the IP market. As Mexican universities and R&D centres move closer to establishing a system for managing their intellectual property and technology transfer, they will stimulate the market for such technology. This will undoubtedly have a positive economic effect and may finally put the country on the map as an international centre of innovation. The drive towards organised technology transfer offices in universities has obvious benefits for Mexican companies, but may also encourage multinationals to locate R&D activities in Mexico. As a whole, the country's IP system provides a good environment for protection and foreign companies will have incentives to invest in Mexican R&D centres, potentially on more favourable conditions.

### Opportunities and challenges

The technology transfer office project is likely to yield measurable results in between three and five years. However, in the short term, two major problems stand in its way: a shortage of skilled IP business professionals and the difficulty in building a critical mass of projects with intellectual property secured to a level that incentivises investment.

In the first few years, the need for IP services in Mexico will grow, with a

corresponding improvement in the standard of skills available to operate a technology transfer office that is capable of achieving certification. Only after these first few years will the real growth and innovation opportunities present themselves. However, it is to be hoped that they emerge into a technology transfer environment that will make the process easier and faster, thanks to the organisational framework and the skills of its professionals.

The incentives are already in place, and industry stakeholders should be ready to track the organisations which achieve certification in order to capitalise on this policy change regarding intellectual property and technology transfer. The risk remains that changes in Mexico's political landscape after December 2012 could lead to the cancellation of the programme. However, many consider that the need for reorganisation in universities and R&D centres has reached a point of no return – even if government funding were withdrawn, universities and R&D centres would continue to apply best practices and the technology transfer market would continue on its course of development. If the framework for technology transfer offices reaches maturity, this will only accelerate the market's evolution. *iam*

**Becerril, Coca & Becerril, SC**

Leibnitz 117, 6th floor, Col. Anzures,  
Del. Miguel Hidalgo, 11590, Mexico City, Mexico

**Tel** +52 55 5263 8730

**Fax** +52 55 5263 8731

**Web** [www.bcb.com.mx](http://www.bcb.com.mx)



**Héctor Chagoya**  
Partner, Director of IP value  
extraction  
[hchagoya@bcb.com.mx](mailto:hchagoya@bcb.com.mx)

Héctor E Chagoya is a chemical engineer. He joined Becerril, Coca & Becerril, SC in 1997 and became a partner in 2010. He is in charge of the firm's technology transfer activities and provides advice on patent strategies, patent litigation and licensing.

Mr Chagoya is the international vice president of LES Mexico. He is also the first lawyer in Mexico to achieve the CLPTM (Certified Licensing Professional) certification and is recognised as a leading patent practitioner.