Sustainability of National Technology Development & Transfer Systems

Regional Forum « National Knowledge and Technology Development and Transfer Systems

UN-House, Beirut-Lebanon, 27-29 November 2017
SUMMARY

- Brief historical overview of the NIS
- Description of the ANPR
- Main Transfer Technology (TT) projects managed by ANPR
- Advantages for establishment an NTTO in ANPR
- How can we make (TT) a sustainable system for the development of the society through NTTO?
# BRIEF HISTORICAL OVERVIEW OF THE NIS

## 2001 -
- Technoparks creation
- Creation of ANPR, CNEAR, and DGVR (2010)

## 1995
- **Orientation law** for Scientific Research, Creation of Scientific Research Structures

## Before 1995
- Higher Education and Research capacity building
- Creation of INNORPI (1982)
- APII Creation (1972) ...
DESCRIPTION OF THE ANPR

- A public scientific and technical establishment with a financial and administrative independence.

- Under the authority of the Ministry of Higher Education and Scientific Research (MHESR).

- Established in 2008 and started its activities in 2010.
DESCRIPTION OF THE ANPR: MISSIONS

- Contribute to the implementation of **national research programs**;
- Support the creation of **transfer technology offices**,
- Attend public structures in the fields of **intellectual property**, promoting the results of research and technology transfer;
- Contribute to the establishment and animation of **research consortia**,
- **Financial management** of research projects,
- **Intermediation** between research structures, companies and foreign partners,
- Disseminating **mechanisms** related to the valorization of research results, technology transfer and **the promotion of innovation concept**;
- The exploitation of results related to **scientific and technological scouting**,
- Give opinion in which concern the acquisition, the maintenance and the exploitation of heavy scientific equipments.
## National Partners

- **Ministry of Higher Education and Scientific Research:** public and private universities, research structures, Doctoral schools, CNEAR...
- **Sectoral ministries:** Agriculture, health, Industry...
- **Ministries:** MAE, MDICI, MF...
- **Agencies:** APII, APIA, FIPA...
- **Central Bank of Tunisia**
- **Sectoral technical centers**
- **INNORPI**
- **Technoparks, Clusters and competitive clusters**
- **Inter-professional groupings**
- **Chambers of commerce**
- **Employers’organizations:** UTICA, CONECT...
- **Public Companies:** STEG, SONEDE, GC, CPG...
- **Private Companies:** TELNET, POULINA, Orange...
- **Acteurs de Financement de l’innovation:** Business Angels, SAGES, Wiki Start-Up, BFPME, CDC, BMN...
- **Civil Society**
- **Tunisian Diaspora**

## International Partners

- **European Union:** DUE, CE, JRC, ETF...
- **United Nations:** Economic and Social Commission for Western Asia (UN-ESCWA), UNESCO, UNIDO
- **World Intellectual Property Organization (WIPO)**
- **OECD**
- **The World Bank:** PROMESSE
- **Regional association:** FEMIA
- **France:** MENESR, MEIRIES, CNRS, INRIA, ANR, ANRT, Agoranov, Instituts Carnot, IFT, AMU, ProtisValor, UPMC, CNAM, UM, UPVD, UNICE
- **USA:** Ministère du Commerce / Commercial Law Development Program (CLDP)
- **Germany:** GIZ, DLR Project Management Agency
- **Belgium:** ARES, EBN
- **UK:** Europe For Business (EFB)
- **Italy:** CESIE, U. Trento, U. Catane, Innova Bic...
- **Spain:** UIB
- **Japan:** Japan International Cooperation Agency (JICA)
- **Corea:** KOICA, STEPI, IICC
- **Ireland:** WIT
- **Algeria:** MESR, CDER, ENP, U. Tlemcen, U. Ouargla, U. Constantine,
- **Marocco:** MESRFC, UCD, UMS, UMI
ROLE OF ANPR IN TT AND INNOVATION

- Communication and technology scouting: tunisie Innovation
- Capacities building for/by R&I
- Mobidoc: Mobility of researchers
- Technology transfer: TTOs
- Creation of innovative entreprise
- Intellectual property
- Technical assistance
- Financial Management of projects
The MOBIDOC is a mobility device (MOBI) for doctoral and postdoctoral researchers (DOC) to carry out applied research in the socio-economic environment according to two models and against remuneration payable as follows: 80% by the ANPR and 20% by the Beneficiary Organization (OB).

**Results 2012/2013 sessions MOBIDOC (243 conventions, Doc & post doc)**

- **UN PROJET H2020 ACCEPTE**
- **PLUS DE 200 ARTICLES SCIENTIFIQUES**
- **5 START-UPS CREES**
- **11 BREVETS DEPOSES**
- **12 PROJETS AYANTlecROCHE DES PRIMES VRR, PNRI ET PIRD**

**2017 Session MOBIDOC**

- **Session 2017 - Doctorants**
  - **129 submitted files**

- **Session 2017- Post-doc**
  - **129 submitted files**

**2018 Session MOBIDOC**

- **Session 2018- Post-doc**
SUPPORT FOR THE CREATION AND MONITORING OF TECHNOLOGIE TRANSFER OFFICES (TTOs)

Signatures de 17 conventions avec:

1- U. Tunis
2- U. Tunis el Manar
3- U. Manouba
4- U. Carthage
5- U. Jendouba
6 U. Kairouan
7- U. Gafsa
8- U. Monastir
9- U. Sousse
10- U. Sfax
11- U. Gabes
12- INRAP
13- IPT
14-DGET
15- IRESA
16-CRTEn
17-CITET
SUPPORT FOR THE CREATION AND MONITORING OF TECHNOLOGIE TRANSFER OFFICES (TTOs)

Implementation of TTOs in 17 institutions with technical and financial assistance

Acquisition of Materials

Research / Industry Days
- National and international

Networking and Development of skills

Marketing search results

Visit / internship abroad for 8 presidents of universities and 32 innovation actors

2 workshops with INSTM for the realization of a technological offer
- 2 Directories of Research Structures and Competence

Evaluation of Innovative Projects

Participation in the innovation contest with IRESA

Advice and guidance

3 conseil au Profit de l’UM

General or specific training on TT

Coordination of international projects

ESCWA project

Financing of the University of Gafsa

4 national days
- U. Carthage, U. Gafsa
- U. Tunis el Manar

5 international days
- CLDP and ESCWA

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Coordination of international projects

ESCWA project
Creation of innovative companies

- Identification of the opportunity
- Development of the business plan - Identification of financing mechanisms.
- Accompaniment and technical assistance in the implementation of the company.
MAIN TT PROJECTS MANAGED BY THE ANPR

**CLDP**
Partner (2012-2016)

Promotion to the Development of an ecosystem of TT throughs TTOS

**UN ESCWA**

Establishing a National Transfer Technology Office NTTO

**World Bank Project**
Partner (2017-2021)

Accreditation of the ANPR for training Mobidoc Spin Off Support of the TTO

**Coordinator (2011-2015)**

✓ Mobidoc: 243 contracts and 5 start ups and 67 research contract employment
✓ Creation of TTOs
✓ Trainings in TT
✓ Initiation for the création of 4 clusters
✓ Guides for the négociation of contrats and IP

**Program for supporting Education, Mobility Research and Innovation (EMORI)**
Partner (2017-2021)

Mobidoc
Establishing a National Transfer Technology Office NTTO

- Evaluation of the projects
  - Contracts
  - Patent

Experts

ANPR

TTOs

Compagnies

Detection of the opportunities of TT

Evaluation and benefits

coordination

Reaserch structures
ANPR has a large experience in projects financial management for the benefit of research institutions, in accordance with the Tunisian and European legislations.

About 80 projects indifferent research programmes
MAIN TT PROJECTS MANAGED BY THE ANPR

CLDP

Partner (2012-2016)
Promotion to the Development of an ecosystem of TT throughs TTOS

PASRI

Coordinator (2011-2015)
✓ Mobidoc: 243 contracts and 5 startups and 67 research contracts employment
✓ Creation of TTOs
✓ Trainings in TT
✓ http://www.anpr.tn/portail-tunisie-innovation/
✓ Initiation for the création of 4 clusters
✓ Guides for the négociation of contracts and IP

UN ESCWA

Establishing a National Transfer Technology Office NTTO

World Bank Project

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Program for supporting Eductaion, Mobility Research and Innovation (EMORI)

Partner (2017-2021)
Mobidoc
ADVANTAGES TO ESTABLISHMENT OF AN NTTO IN ANPR

- **GOVERNMENT**: Best service for the enduser
- **RESEARCHERS**: New contracts, applied results, patents, publications, training, programs
- **COMPAGNIES**: Good Position in the Market, visibility, national and international promotion

- **Innovative services for Citizens between countries**
- **New jobs creation and new opportunities**
- **Networking**
- **Presence or creation of the needs from compagnys**

**ESCWA Project**

- **Mobility of TTOs in the region**
- **Technology Transfer at national and international level**
- **Developpement of skills in TT**

**WESTERN ASIA COUNTRIES**

**ANPR**
HOW CAN WE MAKE (TT) A SUSTAINABLE SYSTEM FOR THE DEVELOPPEMENT OF THE SOCIETY THROUGH NTTO?

All this points are noted by the national commission of valorization and internationalisation in the Ministry.

- Develop a legal framework for TTOs
- Professional Committee for TT with Experts
- IP Policy and patenting process
- Define the environment of TT: Technology needs, technology Markets
- Organisational and operational procedures for TT
- Incentives for researchers
- An accreditation for Laboratories
- Communication plan to promote all the Financial mechanisms
- Encourage practical research which solve problems in the society
MERCI!
THANK YOU!