WORLD
TECHNOPOLIS
ASSOCIATION
TECHNOLOGY
MARKET WITH GLOBAL
BUSINESS ENVIRONMENT
www.wtanet.org
ADVANCING SCIENCE, SHARING PROSPERITY GLOBALLY
WTA
1. INTRODUCTION TO WTA

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UNESCO-WTA TECHNOLOGY DEVELOPMENT CENTER

Advancing Science
Sharing Prosperity Globally!
# 1. INTRODUCTION TO WTA

## Background

### 21st Century: The Era of Knowledge-based Societies

The Development of science and technology leads directly to the welfare and prosperity of mankind. Only countries, cities and enterprises that excel in cutting-edge science and technology will be able to take leading roles in this new era.

### Regional Competitiveness

In particular, regional competitiveness is crucial to national competitiveness in the age of localization and globalization. Therefore, local governments are implementing a variety of developmental strategies to enhance regional competitiveness by fully exploiting regional potential for locally generated growth and innovation.

### Technopolis

Technopolis (Science City) is a means to develop good places to live by attracting high-tech industries, universities, research laboratories, pleasant dwellings, and public services into a city which has a good natural environment and convenient living conditions.

### International Networks for Mutual Cooperation among Technopolis

Technopolis, co-operatively competing with each other to enhance their competitiveness in an era of knowledge-based society, recognizes the importance of the exchange of information and experiences among advanced science cities to establish international networks dedicated to the mutual cooperation of such cities.

### Daejeon, launching an international organization

Daejeon, with the Daedeok Innopolis, a city representative of Asian science and technology, established the WTA in cooperation with other science cities that share a common interest. This acknowledged the need to launch an international organization in which science cities share their experiences and cooperate with each other.

## History of WTA's Establishment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Event</th>
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<tr>
<td>1st</td>
<td>International Symposium (1996)</td>
<td>Representatives from 20 science cities in 9 countries discussed various ways to link scientific and technological advancements to regional development.</td>
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<tr>
<td>3rd</td>
<td>International Cooperation with UNESCO (2005)</td>
<td>WTA and UNESCO signed a mutual understanding to encourage close cooperation between the two organizations for sustainable development of science cities in a global context.</td>
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<tr>
<td>5th</td>
<td>5th WTA General Assembly (2008)</td>
<td>The 5th WTA General Assembly marked the official launch of the World-wide Technopolis Network - 63 Members in 30 countries from 5 regions: AMERICAS (7), EAST ASIA (26), ARAB States (10), EUROPE (11), The PACIFIC (9).</td>
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<tr>
<td>6th</td>
<td>Operational Relations with UNESCO (2006)</td>
<td>The formal cooperation between UNESCO and WTA were finally approved at the 174th Session UNESCO Executive Board in April 2006.</td>
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## The 1st WTA General Assembly (1998)

- Marked the official launch of the WTA with 23 WTA members from 10 countries: Daejeon, Rep. of Korea, September 16-17, 1998
Goals
WTA aims to
Connect science and technology with regional development
support establishing cooperative infrastructure among local governments, research institutions, universities and businesses among WTA members.
Share prosperity by promoting mutually beneficial cooperation and exchanging their experiences among science cities in a global context.
Contribute to the prosperity of human kind
through the advancement of science and technology.

Offering an opportunity to share experiences on development strategies of advanced science cities and to explore further ways to maintain sustainable development through closer cooperation among them.
Helping the development of local industries by creating strategic models to science and technology development.
Including the IPR (Trade/Mark) in order to transfer new technology to school and small research institutes.
Gradually and business-related member cities participate but also other sectors and member cities as to link technological advancement to regional development.

WTA intends to contribute to the globalization of local government through cooperation with other international organizations and the advancement of local capacities for sustainable development in terms of technological advancement and regional innovation.

Major Objectives and Missions
MISSION to be an international organization
Supporting international exchanges between member cities and creating ways to promote sustainable development in Technopolis by enhancing regional competitiveness in this era of localization and globalization.
- International Cooperative Project, Workshop, Conference, Symposium etc.

MISSION to be an association among city governments
Accelerating regional development and activating regional economies through practical exchanges of high-qualified human resources, information and goods among member cities.
- General Assembly meeting, Mayors’ Forum.

MISSION to help businesses in member cities
Enhancing technological competitiveness of businesses through international cooperation and activation between business, research institutes and universities.
Hosting exhibitions in which new technology and products will be exhibited.
Helping the development of small and medium businesses.
- Techno-Mart (Technology Exhibition & Transfer), University President Forum.
Structure and Major Activities

WTA has the main structure of triangle approaches by local governments, universities, and business. This structure of triangle members of WTA play the role of international organization to promote the development of science cities in terms of active partnerships among local governments, universities and industries.

Three main activities of WTA are summarized within structural framework as below.

Local Governments - Mayors’ Forum and General Assembly to provide opportunities for exchanging advanced experiences in terms of regional development policies.

University - University Presidents Forum to facilitate cooperation networks among core universities located in technopolises.

Business - Techno-Mart to enable SMEs, academia and R&D centers to exchange new technologies, to display hi-tech products and to promote investment contracts.

Local Governments

Businesses

Universities

Mayors’ Forum

General Assembly

University Presidents Forum

Techno-Mart

- Strengthening cooperative ties among member cities.
- Mapping out strategies for future development of the city.

- Cooperation network among core universities located in scientific technopolis.

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Local Governments

Businesses

Universities

Mayors’ Forum

General Assembly

University Presidents Forum

Techno-Mart

- Strengthening cooperative ties among member cities.
- Mapping out strategies for future development of the city.

- Cooperation network among core universities located in scientific technopolis.
Building capacities of the developing countries in the management of technopolis, with a view to marshalling science technology and innovation for sustainable development.

UNESCO-WTA International Training Workshop

Capacity building

Technical Assistance

Pilot Project

Annual UNESCO-WTA International Training Workshop.

Professional Technical assistance and policy advice in Science & Technology Park (STP) development and management for developing countries.

The implementation of technical assistance and policy advice in Science & Technology Park (STP) development in each region in the world.
Background
UNESCO and WTA have been working closely during the last several years on the development of science cities. This cooperation is based on the framework of UNESCO and WTA that there exist important synergies and complementary elements that may be enhanced for the benefit of their respective missions. Both organizations express their intention to render assistance to each other with the goal or improving their service and functions. This project was designed as a novel approach to resolve the problem of technology transfers facing many developing countries that require new technologies to implement the goals of sustainable development. In April 2006, WTA and UNESCO established an official relationship at the 174th Session of the UNESCO Executive Board. WTA can henceforth be described as “NGO in operational relations with UNESCO” and starts a five-year cooperative project entitled “Capacity Building and Technical Assistance on Technopolis Development”.

Activity-Financing Contract for cooperative projects between UNESCO and WTA
May 6, 2005 at UNESCO, Paris, France

November 1-7, 2005 Information and Communications University, Daejeon, Rep. of Korea
In April 2006, the 174th Session of the UNESCO Executive Board
WTA is admitted to establish an official relationship with UNESCO
November 6, 2006, Daejeon, Rep. of Korea

Main Activities
Capacity Building

1) International Training Workshop
on Science and Technology Park Governance, in Daejeon, Rep. of Korea

We are organizing one training workshop per year with managers and researchers from 5 different regions: Africa, Arab States, Asia, Latin America and Eastern Europe. The participants of the training are members of a network of technopolis development in their region and will actively participate in the development of a pilot project. The lecturers are invited through WTA’s worldwide network.

Training Programs
Year 2005: “Science City Governance”
November 1-7, 2005, Innoformation and Communications University

Year 2006: “High-tech Clusters in Global Context”
November 6-10, 2006, Daejeon City Hall

Year 2007: “Towards Sustainable Growth of Science and Technology Park Role of Technology Business Incubator & Techno Park”
November 6-10, 2007, Daedeok INNOPOLIS

Year 2008: “Towards Creative Growth of Science Park and Innovative Cluster”
November 6-10, 2008, Daejeon Convention Center
2) Regional Workshop on Science and Technology Parks Development

The regional workshop series aims to assess the state of the development of science and technology parks in each region, to identify the challenges that need to be overcome to develop science and technology parks at regional levels, to identify a science park that can be used as a UNESCO-WTA pilot project. The workshop will consist of five different parts as follows: introductory courses, participant presentations, working group discussions, panel discussions on networking and the development of science parks, and finally conclusion.

- Arab States - Manama, Bahrain, 12-14 September 2006
- Africa - Windhoek, Namibia, 9-11 May 2007
- Asia Pacific - Jakarta, Indonesia, 3-5 September 2007

Technical Assistance / Pilot Projects: policy advice in STP development and management

In the framework of this project, a set of technical assistance will be organized in order to help developing countries develop technopolis. One pilot project will be developed in each of the aforementioned regions. The technical assistance consists of following the activities:

- Preparation of feasibility studies
- Elaboration of technopolis development plans
- Technical advice on networking, fundrasing and establishing technopolis
- Foreign investment promotions
- Preparing a set of model projects
- Policy advice on STP development and management

The pilot project will serve as a laboratory of technopolis development in each region. The experts from donor countries will be mobilized for the implementation of this technical assistance.

The selection of the most promising site for each pilot project will be governed by a rigorous process involving asset mapping, peer benchmarking and opportunity analysis involving interested candidate countries that meet basic criteria needed for the long-term operation of a technopolis. These basic criteria will include a consideration of the following issues in order to ensure an environment attractive to joint ventures and international investors:

- Security; Political stability; Absence of corruption; Government commitment to provide enabling environment;
- Scientific and technological assets; Stable research environment; Infrastructure (for communications, power, water, etc.); Banking facilities; Private sector engagement; Dedicated long-term source of funding;
- Local human and financial resources; Prospects for regional cooperation.

Activities:

- Evaluation of Egypt's capacity to host (four) science parks, including assessment of human resources and research infrastructure, practical questions of the preparation of science parks development and management of cooperation between the university's laboratories and tenants (including)
- Evaluation of knowledge-based business opportunities in Egypt, especially in the fields of biotechnology, information technology, etc.
- Assessment of potential stakeholders of science parks and their role in the science park development
- Selection of a suitable site for each science park to be located

Mission:

- National science park development and management
- Business plan Alexandria Science Park development
- International workshop
The UNESCO-WTA Technopolis Development Center was established in Daejeon, Korea on November 6th, 2006. The center aims to successfully implement the UNESCO-WTA Cooperative Project (2005-2010) and various research supplement with the purpose of facilitating sustainable Science City development in developing countries.

**Organization of UNESCO-WTA Technopolis Development Center**

**Conducting capacity building**

The Centre will conduct international trainings, workshops, and seminars on science and technology park development for stakeholders such as technopolis managers, scientists, and local/national government decision makers from 5 different regions: Africa, Arab States, Asia, Latin America and East Europe.

**Providing technical assistance.**

The Centre will provide developing countries with technical assistance in science and technology park/technopolis governance, which will include: (i) preparation of feasibility study, (ii) elaboration of technopolis development plan, (iii) technical assistance in networking, funding and technopolis establishment, and (iv) foreign investment promotion. The experts on science and technology parks will be mobilized for this technical assistance.

**Developing pilot projects.**

As a part of these capacity building and technical assistance activities, one pilot project will be developed in each of the aforementioned region. They will serve as laboratories of technopolis development in each region.

**Facilitating knowledge transfer**

In order to promote the transfer of knowledge between public and private sectors, the Centre will foster cooperation between government, academia, and industry.

**Supporting research**

The proposed Centre will support the development of science and technology parks/technopolis governance.

**Networking**

The Centre will facilitate network development and collaboration research and development (R&D) as well as training programmes at regional and international levels, including the linkage of designated nodal centres in participating countries.

**Information exchange and dissemination**

The Centre will promote information exchange and dissemination, including the publication of books and journals on science and technology park governance.
3. WTA MEMBERSHIP

Members

- **AMERICAS Board(7)** - 6 Cities, 1 Associate Member
  - Austin, Phoenix, Emerson College (USA), Calgary (CANADA), Bloomfield College (USA), Nuevo Leon State (MEXICO), Petropolis, Pato Branco (BRAZIL)

- **EAST ASIA Board(12)** - 10 Cities, 2 Associate Members
  - Osaka, Tokyo, Nagoya, Osaka National University, National Bank of Agriculture, Faculty of Science, Hitotsubashi University, National University of Defense, Information Tourism University, Seoul National University

- **ARAB STATES & AFRICA Board(10)** - 4 Cities, 6 Associate Members
  - Dubai Technopark (UAE), Royal Scientific Society (JORDAN), Palestine Polytechnic University (PALESTINE), Borj Cedria Technopark (TUNISIA), Ministry of Education (BAHRAIN), Windhoek (NAMIBIA)

- **EUROPE Board(11)** - 9 Cities, 2 Associate Members
  - Guildford, Rotherham (UK), Frankfurt, Heidelberg, Dortmund Technical University (GERMANY), Lille (FRANCE), Uppsala (SWEDEN), Novosibirsk (RUSSIA), Gliwice (POLAND), Urgench State University (UZBEKISTAN)

- **THE PACIFIC Board(9)** - 8 Cities, 1 Associate Member
  - Brisbane, Gladstone, Ipswich, Townsville (AUSTRALIA), Manukau (NEW ZEALAND), Bangalore (INDIA), Kulim Technology Park Corporation, Penang State (MALAYSIA), Quezon (PHILIPPINES)

- **WORLD TECHNOPOLIS ASSOCIATION**
  - Advancing Science, Sharing Prosperity Globally

[Diagram showing distribution of WTA members across different boards and regions]

**WHO CAN BE...**

**CATEGORY**

1. **Science Cities (Technopolises)**
   - These are partly or wholly dominated by science & technology parks, industrial parks, research institutes, universities, businesses etc.
   - Science & Technology based Local governments: commonly entities include state, province, region, prefecture, city, township, town, borough, parish, municipality, shire and county etc.

2. **Government related Organization**
   - Science and technology based organization: Ministry of Science & Technology, Ministry of Education etc.

3. **Science & Technology Parks**: Science Parks, Innovation-based Parks, Incubation Centers, Technology Centers, Research institutes etc.

4. **Universities (HEIs)**: Research oriented Universities, Technical Universities etc.

5. **Businesses**: High-tech Ventures and SMEs, Enterprises etc.

**Full Members**

**Associate Members**

- Individuals or organizations which have an interest in making part of WTA network or intend to participate in the WTA’s activities.

**Discretionary Membership**

(3) The Certificate of membership will be issued after the ratification of the Executive Board’s decision.

**Process of Application & Approval**

1. **1st step** - A candidate should submit application form by email, fax or on-line.

2. **2nd step** - The Membership application will be proposed in WTA Executive Board.

3. **3rd step** - The Certificate of membership will be issued after the ratification of the Executive Board’s decision.
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GLOBALLY

GLOBAL NETWORKING
FOR INNOVATIONAL
TECHNOLOGIES AND
ECONOMIC GROWTH
TECHNOLOGIES