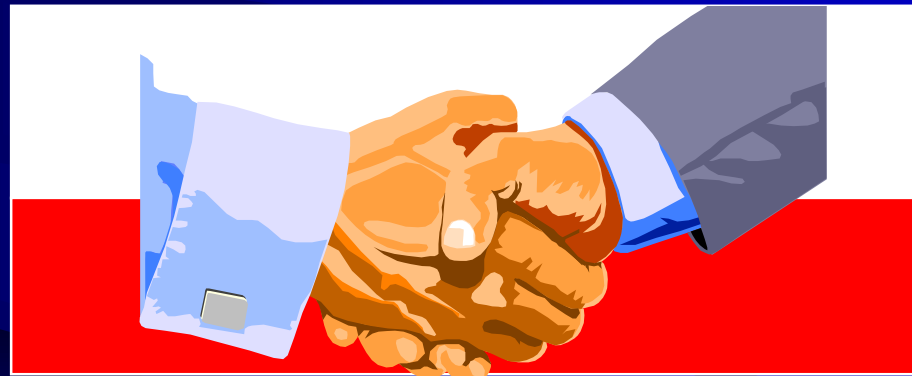


# **A Successful Model of Economic Cooperation between Japan and Thailand through**

**The Japan-Thailand Economic Cooperation Society  
(JTECS)**



**Technology Promotion Association (Thailand-Japan)  
(TPA)**

# **Technology Promotion Association (Thailand-Japan)**

**TPA is a private non-profit organization  
established in January 1973.**

**It is a joint endeavor between  
THAILAND and JAPAN  
to help support  
Thailand Industrialization process.**

# TPA Historical Background

- International situation

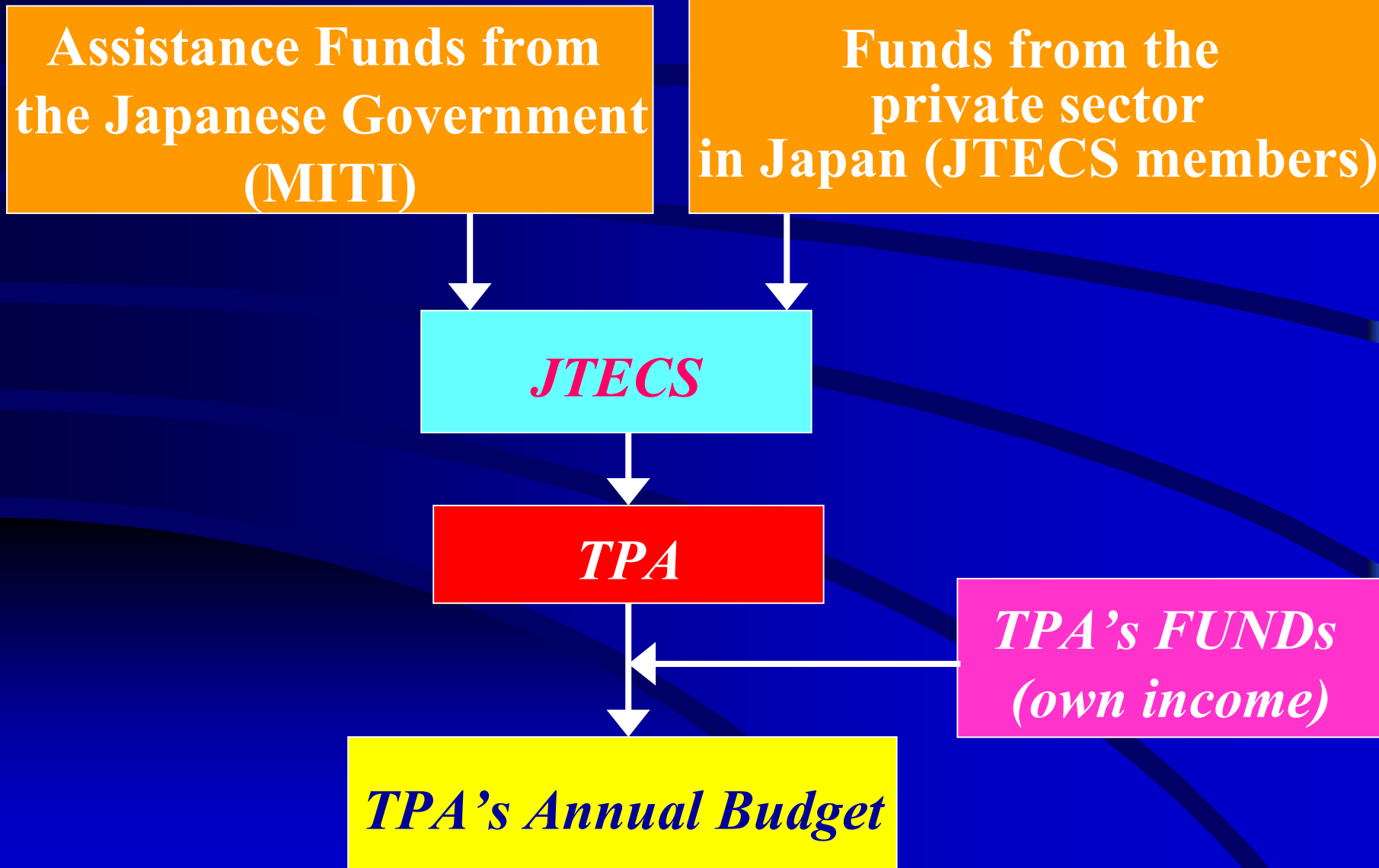
An upsurge of nationalistic movements, particularly in East Asia, i.e Vietnam war, Indochina war

- Domestic situation

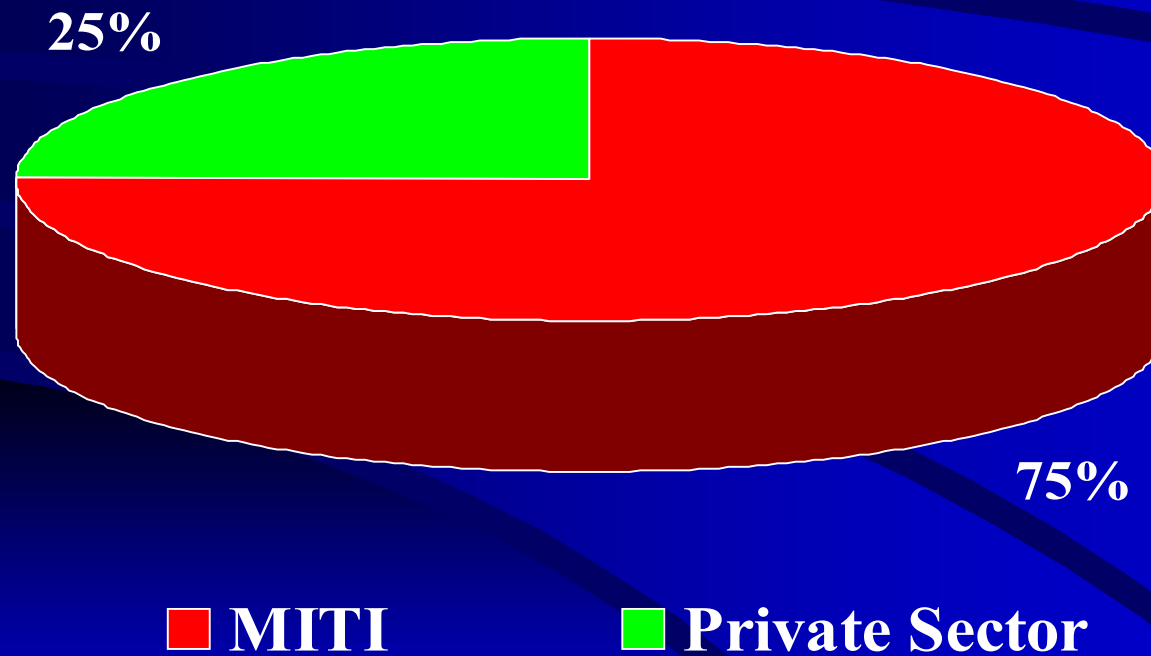
Japanese investment in the region, particularly in Thailand and nationalistic reaction to this, i.e Japanese goods boycott movement.

*The need for genuine economic cooperation that benefits both countries had been widely discussed.*

# Funding of TPA's Activities



# Funds From Japanese Government (MITI) and Private Sector in Japan



# TPA's Mission

TPA's mission is to enhance  
effective technology transfer through  
human resources development

Following the TPA Mission, activities of the Association have been highly concentrated in **training and education** for Thai technical staffs. As a result, TPA has been providing, for decades, **various education-based services** through,

- 1) Training and seminars
- 2) Tele-education
- 3) Textbooks and Journals
- 4) Language School
- 5) Information Center

Besides, TPA also has been providing technical services for Thai industries through Industrial Services Center ; Instrument Calibration Center and Environmental Laboratory

And the recent important activity that TPA has started for Thai industries is Productivity Improvement Service through “Shindan Project”.



# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
<b>1973</b>	<ul style="list-style-type: none"><li>- TPA Language School <i>(Japanese, Thai)</i></li><li>- Seminar Project <i>(Training)</i></li><li>- Industrial Support Project <i>(Textbooks, Journals)</i></li></ul>	<p>This is the beginning of TPA human resources development program .</p> <p>And it is the starting point of the technical cooperation between JTECS and TPA.</p>

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1977	Industrial Instrumentation Project ( <i>Training</i> )	A response to growing Japanese investment in process industries.
1981	Energy conservation Project ( <i>Training</i> )	A timely response to the energy crisis.
1982	Quality Control Project ( <i>Training</i> )	A response to growing need of quality control due to expanding export.

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1983	Industrial Instrument Calibration Center <i>(Service)</i>	An initiative to provide technical service to support quality assurance process in the industrial sector.

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1987	Computer Project <i>(Training)</i>	The beginning of Thailand's microcomputer application.
1988	Technology Information Center <i>(Service)</i>	Response to growing demand for technical information, particularly from Japan.
1989	Productive Maintenance Project <i>(Training)</i>	Growing awareness of importance of machine maintenance in cost reduction.

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1989	Correspondence education Project <i>(Training)</i>	Growing demand for human resource development in industrial sector to cope rapid increase in export.
1991	Energy Project <i>(Training)</i>	Awareness of both energy conservation and new energy developemnt.

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1992	Energy and Environment Project ( <i>Training</i> )	Growing concern of deteriorating environment condition.
1992	Environment Laboratory ( <i>Service</i> )	Response for need in environment testing laboratory

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
1992	Quality Promotion and Standardization Project ( <i>Training</i> )	<ul style="list-style-type: none"><li>- Quality Control Project was renamed to Quality Promotion and standarization project.</li><li>- ISO 9000 and the other standards become an essential standard in the international trade..</li></ul>

# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
<b>1993</b>	Management Technology Project <i>(Training)</i>	Urgent demand for upgrading of medium level management staffs in industrial sector.
<b>1998</b>	New Institute was established at Pattanakarn.	Amidst the worst economic crisis of the country, demand for technical training and services keep on growing.



# Activity Milestones of TPA

<i>Year</i>	<i>Activities</i>	<i>Technology &amp; Economics &amp; Social Incidents</i>
<b>1999</b>	“Shindan” Project <i>(Training &amp; Service)</i>	Thai government developed the SME Bills and announced for implementing in the end of 1999.
<b>2000</b>	Information Technology Project <i>(Training &amp; Service)</i>	<ul style="list-style-type: none"><li>- The world- wide communication network is the key success factor of the business.</li><li>- The e-commerce and e-business play the important role in the modern trade.</li></ul>

# Language School

Since 1973, TPA Language School has been providing more than 4,500 language courses and there are more than 95,000 students graduated from TPA language school.

**Recent record** : In 2000, TPA language school provided 560 language courses and there were 8,256 students participated in these courses.

## **JTECS' s contribution in TPA Language School Activities**

1. To coordinate and made arrangement for the annual TPA's Language School study tour,
2. To inform TPA of new Japanese language and culture books, including novels to be considered for translating into Thai.
3. To coordinate the 1-year Thai Language Course admission for Japanese who want to learn Thai in Thailand.

## **TPA' s contribution through TPA Language School Activities**

1. To provide the Japanese Language education to enable Thais; students, employees, technicians, engineers, executives etc. to communicate with their Japanese counterparts.
2. To upgrade Thais people of their Japanese language skills and provide them with a better understanding of Japanese culture and traditions through the books and study tours in Japan.

# Publishing Department

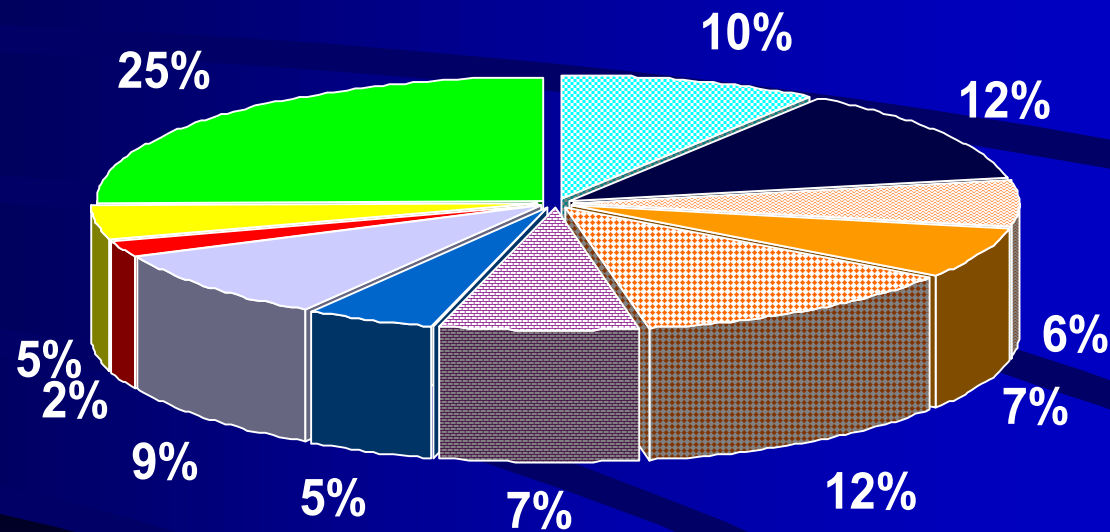
Since 1973, TPA Publication Department has published **more than 400 titles of textbooks or more than 2,500,000 copies** and **more than 227 issues of journals or more than 1,000,000 copies.**

## **The recent record**

In 2000, TPA Publication Department  
has published

- 1) 51 titles of new books (104,000 copies)
- 2) 89 titles of reprinted books (197,000 copies)
- 3) 12 issues of Journals (84,000 copies)

# 338 titles of TPA book are available in Thai technical book market.



## **JTECS' s contribution in TPA Publishing Activities**

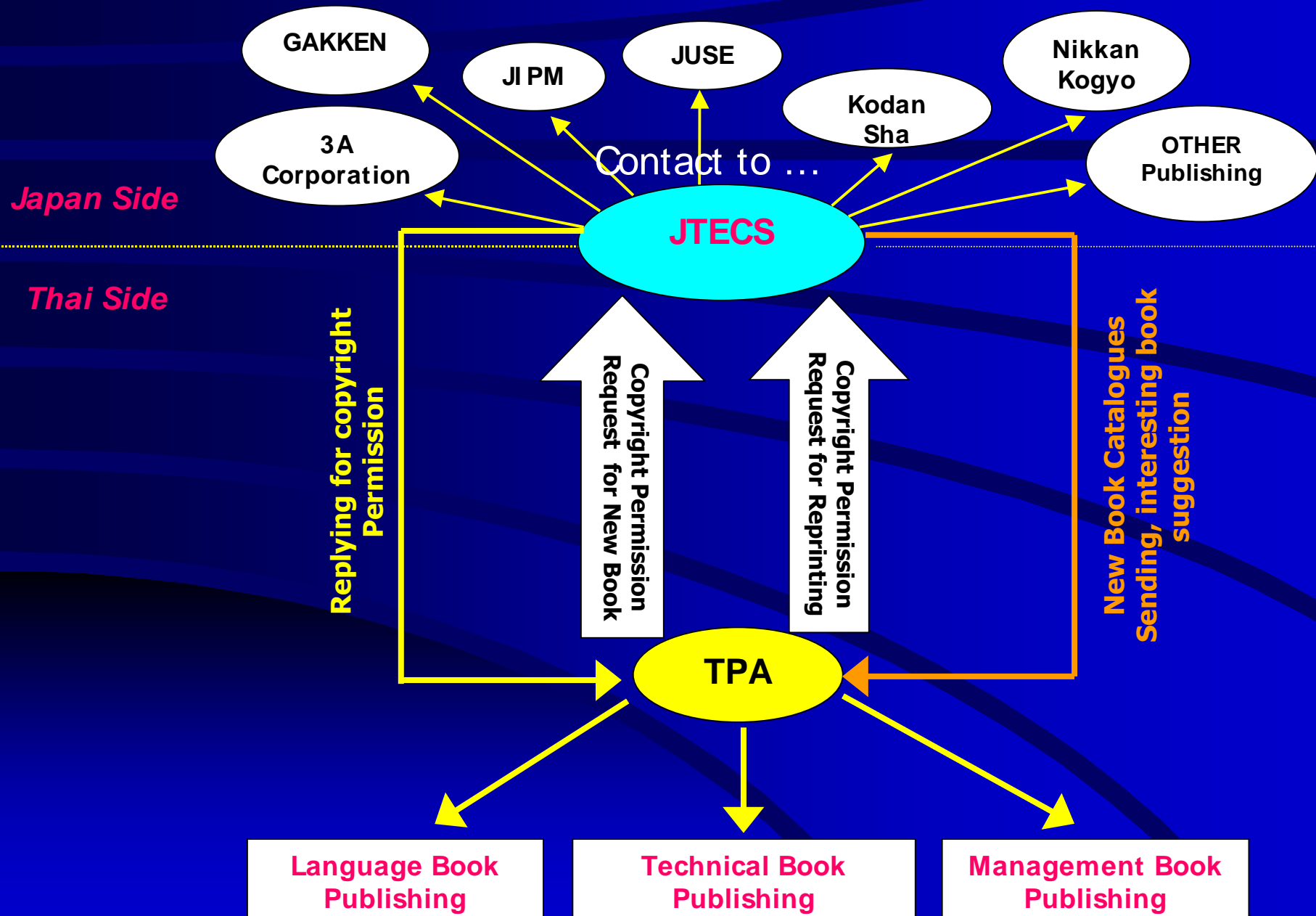
1. To contact the writers or the publishers in Japan for copyright permission, both the new books and the reprinted books.

At the present time, we have 96 titles of books which have been translated from Japanese Language.

2. To inform and send the catalogues of new interesting books, especially in the field of technology and management.



# JTECS's contribution in TPA Publishing Activities



## **TPA' s contribution through TPA Publication Activities**

1. To provide technical publication, especially in the field of science, technology and management, for the general public ; students, technicians, engineers, instructors, industrial mangers, etc.
2. To upgrade Thais' technical knowledge in the advanced technology in order to improve their technical capability.

# Education & Training

Since 1973, TPA Training & Seminar Center has arranged **more than 7,300** training **courses** and there are **more than 270,000 participants** in these training & seminar courses. These people have brought about productivity improvement in their work places.

## The Training & Seminar activities in 2000

<b><i>Project</i></b>	<b><i>Course (s)</i></b>	<b><i>Day (s)</i></b>	<b><i>Person (s)</i></b>
<b>Management</b>	119	171	3,598
<b>Productivity Improvement</b>	87	109	3,166
<b>Manufacturing Management</b>	57	86	1,707
<b>IT and Automation</b>	88	206.5	1,788
<b>Energy and environment</b>	92	247.5	2,481
<b>Instrument &amp; calibration</b>	158	379	3,223
<b>Quality Promotion</b>	209	335	10,015
<b>Total</b>	810	1,534	25,978

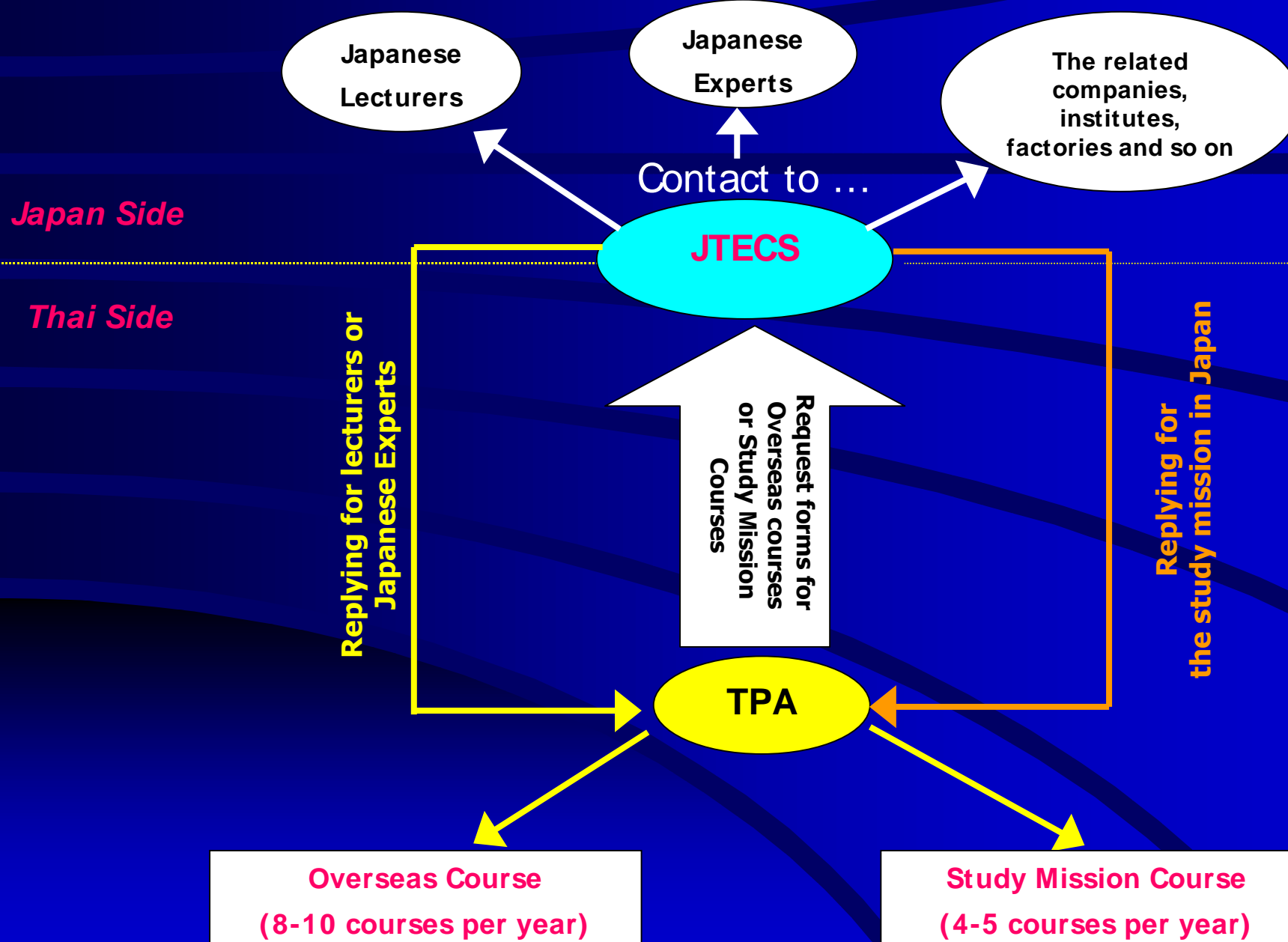
# Tele-education (SANNO)

Since 1989 , TPA correspondence education project or Tele-education project has arranged, both public and in-house, **more than 390** training **courses** and there are **more than 22,000 students** who graduated and received the certificates of these programs.

# **JTECS' s contribution in Training & Tele-education Activities**

1. To contact the lecturers or the Japanese experts for the overseas courses which TPA holds every year ; **about 8-10 courses per year.**
2. To contact the company, the institutes, the factories , etc. in Japan for the study mission that TPA holds every year; **about 4-5 courses per year and visit 4-5 companies per course.**

# JTECS's contribution in Training & Tele-education



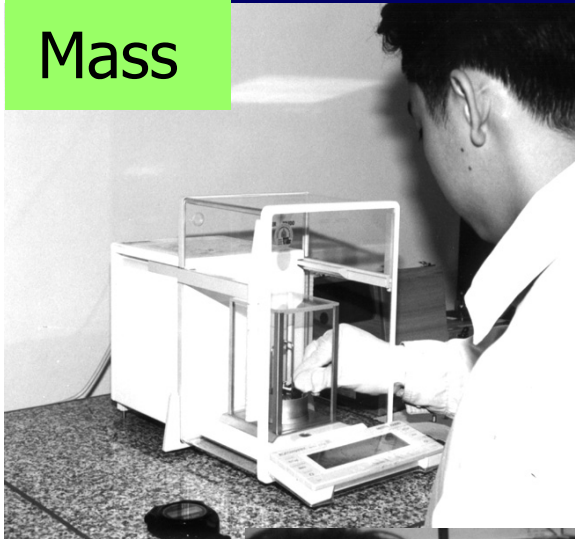
# **TPA' s contribution through TPA Training & Tele-education Activities**

- To upgrade the technical capability and know-how for the industrial sectors.
- To provide the consultancy and advice to industries.
- To transfer new technology from foreign countries, especially from Japan to Thailand.
- To cooperate with other institutes both from the public and private sectors in the development of human resources in various areas.

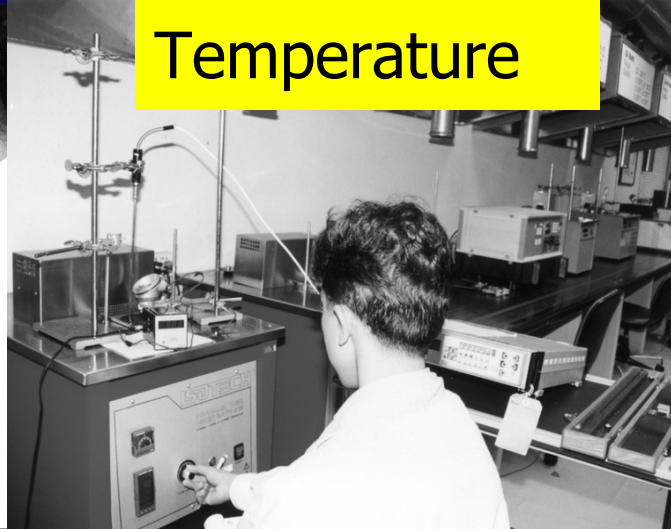


# Calibration Service Center

Mass



Temperature



Electrical



Pressure



Dimension

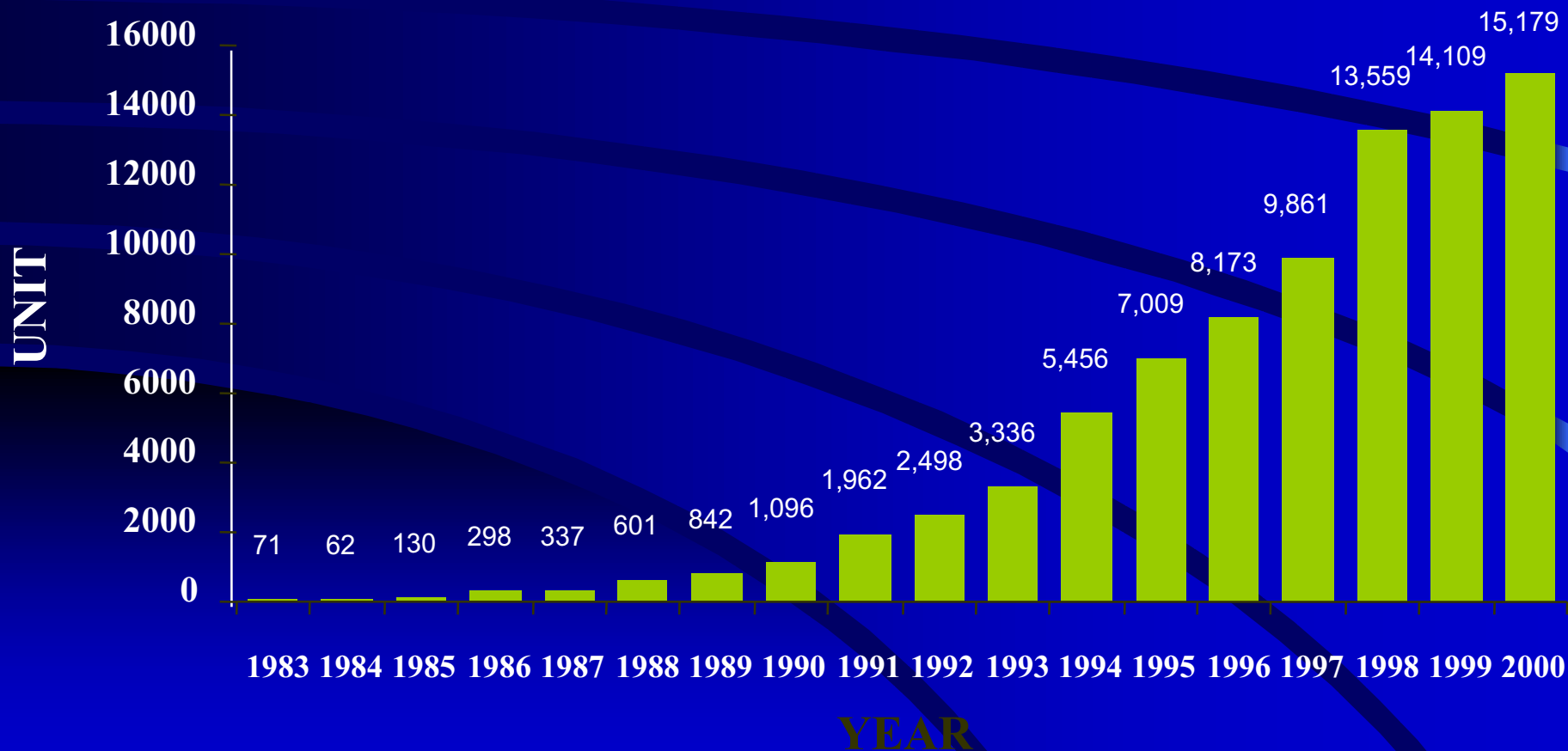


# Calibration Service Center

Since 1983, TPA Calibration service Center has provided calibration for **more than 85,000 units of instruments** and serves **more than 1,700 companies per year,** **most of our customers are the Thai-Japanese joint-venture companies.**

# Calibration Unit of Each Year

April 1983 - March 2001



## **JTECS' s contribution in Calibration Service Activities**

1. To provide support to fund for purchasing the calibration instruments
2. To find other sources of subsidies for supporting this activity, for example  
Nichidoshin, Yogokawa, JEMIMA etc.

# **TPA' s contribution through TPA Calibration Service**

- To provide TPA member and general industries with the instrument calibration services.
- To disseminate the knowledge about industrial instrument calibration technology.
- To supervise factory on industrial instrument subjects.

# Information Technology

This project has just developed last year (year 2000) with the focuses on

- To develop the efficient internal TPA network
- To provide the service in Data Center & E-commerce Development for SMEs
- To provide the IT Consultant Service
- To provide the IT Training Service

# **JTECS' s contribution in Information Technology Project**

1. To contact the lecturers or the Japanese experts for the overseas courses which TPA holds.
2. To contact the company, the institutes, the factories , etc. in Japan for the study mission and for the liaison officers.

# **TPA' s contribution through TPA Information Technology Project**

- To help increase the number of well-qualified IT personnel
- To introduce appropriate IT applications to Thai industries and community.



# Shindan Project

- **Involvement in Thai government's SMEs development scheme.**

**Department of Industrial Promotion → TPA**

1. The training of Industrial Diagnoser (Shindan shi) Project
2. The classification of Industrial Diagnoser Project
3. The registration and ethical management of Industrial Diagnoser Project

# Shindan Project

Phase I  
1999-2000

Training of  
Industrial Diagnosor  
(Shindan shi)

**Elementary Level**  
**209 persons**

**Intermediate Level**  
**99 persons**

**Professional Level**  
**28 persons**



# Shindan Project

Phase I  
1999-2000



**Develop Industrial Diagnosis System**

**Industrial Diagnosis Service 219 companies**

# Shindan Project

Phase II  
2000-2001

Training of  
Industrial Diagnosor  
(Shindan shi)

**Elementary Level  
400 persons (Plan)**

**Intermediate Level  
200 persons (Plan)**

**Professional Level  
100 persons (Plan)**



# Shindan Project

Phase II  
2000-2001

**Review & Develop Industrial Diagnosis System**

**Industrial Diagnosis Service 320 companies  
(Plan)**

At this time present, TPA has already arranged the training for developing the Industrial diagnosors (Shidan Shi) two levels as

- |                       |             |
|-----------------------|-------------|
| 1. Elementary Level   | 412 persons |
| 2. Professional Level | 98 persons  |

Besides, TPA has already provided the Industrial diagnosis services for 81 companies.

## **JTECS' s contribution in “Shindan” Project**

1. To contact the lecturers or the Japanese experts for the “Shindan Shi” training and industrial diagnosis service.
2. To contact the related organization for example JETRO, JODC, JICA, AOTS, IDCJ etc. at the beginning of this project.

## TPA' s contribution through “Shindan” Project

- To strengthen Thai SMEs for survival and being sustainable in their own industries.
- To diagnose the weakness of SMEs for improving their productivity, quality and so on.



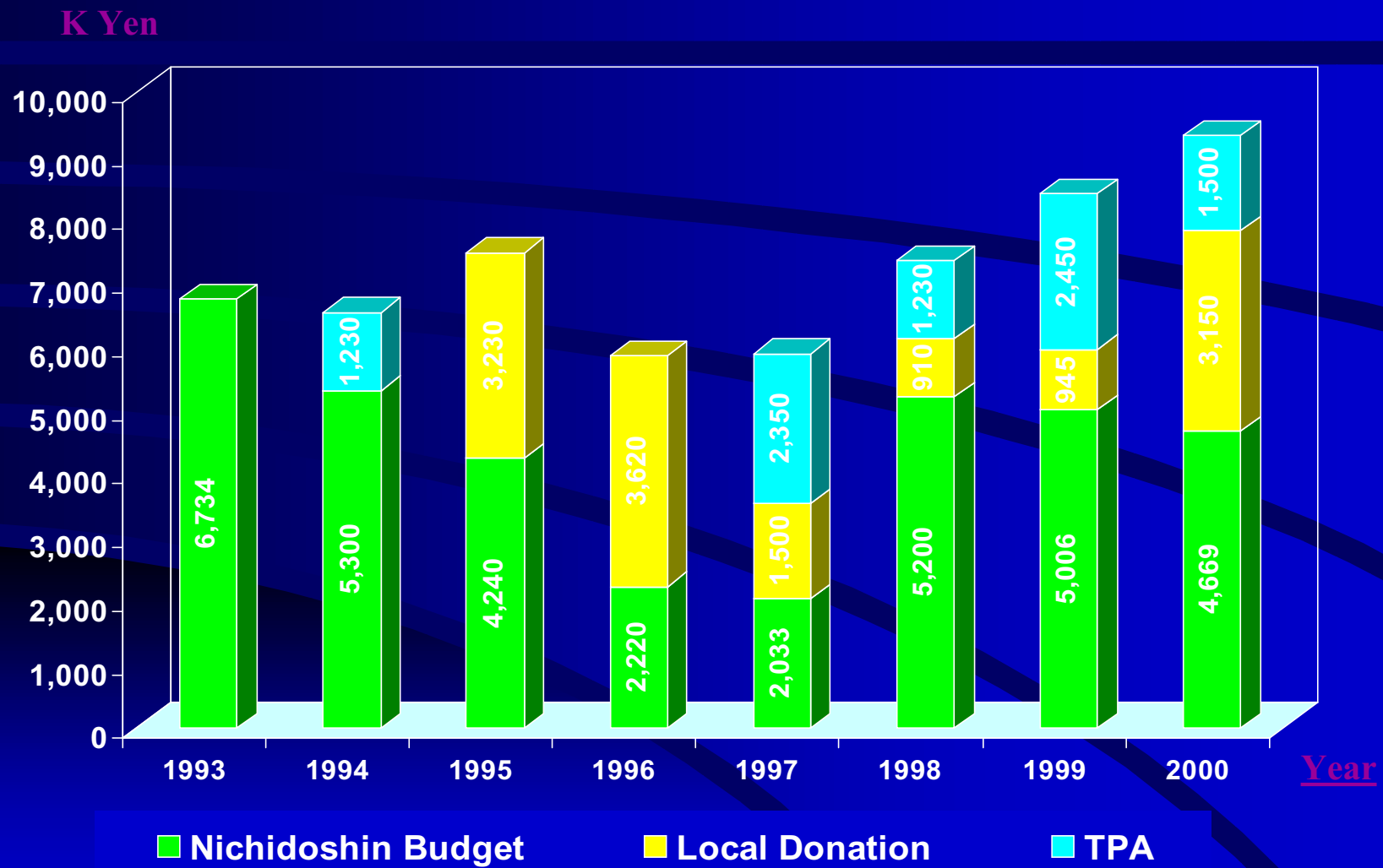
# Robot Contest

1. University League
2. Vocational College League
3. High School League (Robot Grand Prix Contest)
4. ABU Robot Contest (Asean Broadcast Union)

2002 - Japan

2003 - Thailand

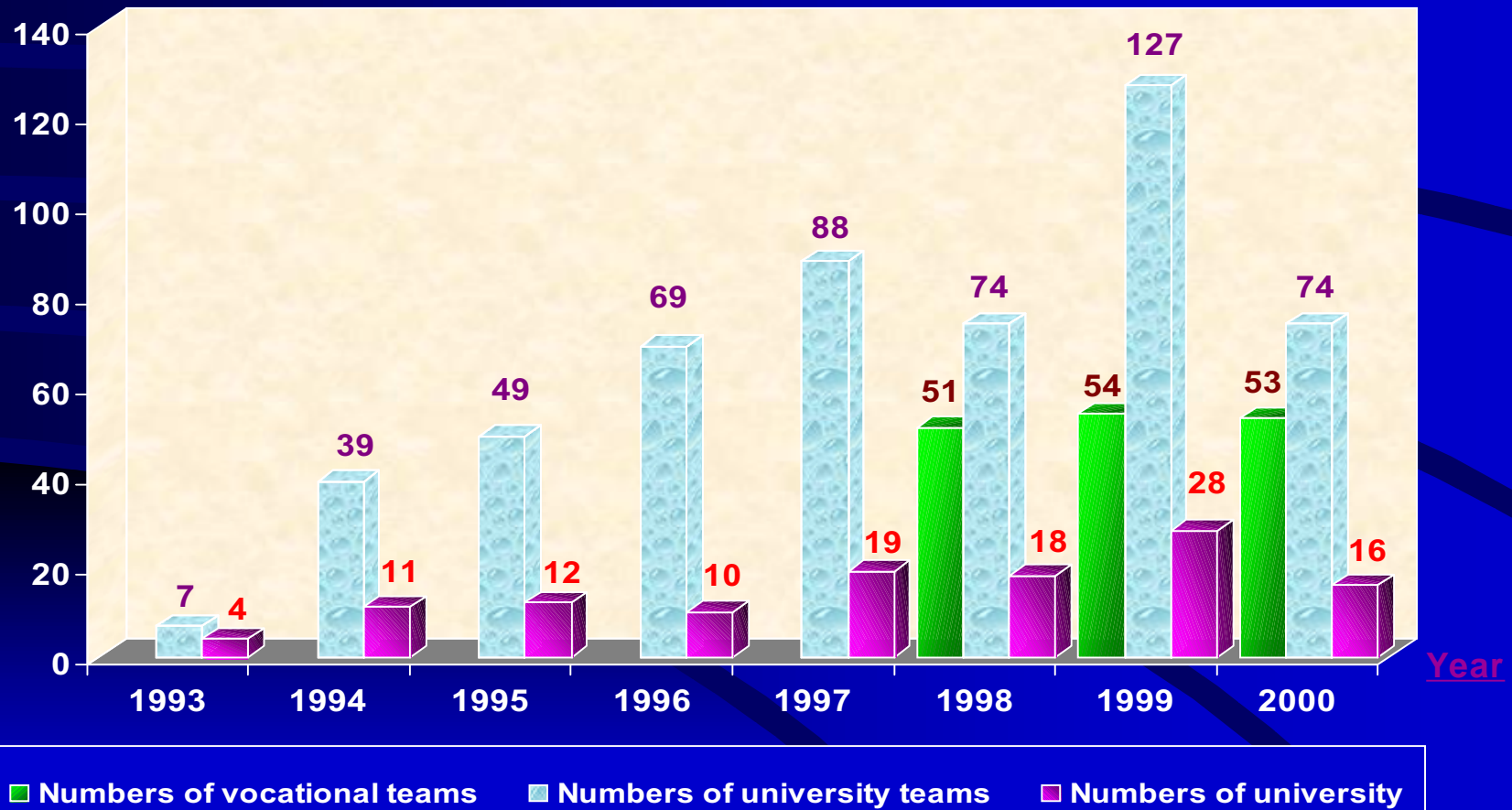
# Budget of Robot Contest



# NUMBER OF ROBOT TEAM

Joining TPA Robocon

Number of Team Application / University



# Thailand Team Records

Year	Game	The Winner Team	University	Robocon's Award
1/1993	Robot Soccer Contest	KONMUENG	Chaing mai University	Best Technical
2/1994	Robot Soccer Contest	SHINKANSEN	KMITL	Best Creativity
3/1995	Robot Rugger Contest	IMPULSE	KMITNB	(2 <sup>ND</sup> PRIZE)
4/1996	Robot Navigater Contest	HELICAL	KMITNB	(4 <sup>TH</sup> PRIZE)
5/1997	Miracle Tower	CATAPULT	KMITNB	(2 <sup>ND</sup> PRIZE)
6/1998	Robosoccer	Mechatronics (WINNER) B.U. Maxspeed (2 <sup>ND</sup> PRIZE)	Patumwan Institute of Technology  Bangkok Unversity	(The First Time)  WINNER & Best Performance
7/1999	Roboshooter	Tomahawk (WINNER) Mechatronics II (2 <sup>ND</sup> PRIZE)	KMITNB  Patumwan Institute of Technology	Best Performance
8/2000	CUBIC BINGO	YUMRUNG	Rajamongala Institute of Technology	-

## **JTECS' s contribution in Robot Project**

1. To contact the lecturers or the Japanese experts for Thailan robot contest that TPA holds every year.
2. To be the coordinators and support the accommodations during the robot contest in Japan.

# **TPA' s contribution through Robot Project**

To make Thai younger generation to be more interested in scientific technological fields and to enhance the friendship between Thailand and Japan through technological exchange.

Throughout TPA history; since 1973, TPA has concentrated on activities which benefit both society and the nation as a whole. As a result it has become well known not only to the private sector but to government organizations and agencies as well.

But our successes will never be possible without close and friendly cooperation and support from JTECS.

All TPA activities are derived upon the foundation of firm trust, mutual respect, close relationship between TPA and JTECS.