



BOI Cluster Policy

Thailand Board of Investment

November 2015

Background

- The government is implementing the Special Economic Development Zones (SEZs) Policy, comprising of 2 parts as follow:
 - (1) SEZs in the border areas for labor-intensive business, business using raw materials locally sourced in the border areas or neighboring countries and logistic businesses
 - (2) Cluster SEZs which are located inland for business not suitable to be located in the border areas and future-industries i.e. research and development, activities using advance technology and minimum labor

Objectives of Cluster Development

1. To strengthen industrial value chain leading to creation of future industry base
2. To build investment competencies to attract value added investment, from both existing and new projects, to invest in Thailand
3. To decentralize developments to regional and local areas, and create business opportunities for SMEs

Investment Incentives for Industrial Cluster

Incentives	Super Cluster	Other Clusters
Tax	<ul style="list-style-type: none"> ✓ 8-year corporate income tax exemption and additional 5-year reduction of 50% ✓ For Future industries with significant importance, the Ministry of Finance will consider granting 10-15 years corporate income tax exemption ✓ Import duty exemption on machinery ✓ Personal income tax exemption for renowned specialists to work in the specified area, both Thai and foreign 	<ul style="list-style-type: none"> ✓ 3 – 8 year corporate income tax exemption and an additional 5-year reduction of 50% ✓ Import duty exemption on machinery
Non-Tax	<ul style="list-style-type: none"> ✓ Consideration of granting Permanent Residence to the leading specialist ✓ Permission for foreigners to own land to implement the promoted activities 	As above

Incentives for Important Basic Infrastructure to Improve Industrial Cluster

Knowledge-Based Industries

- Research and Development (R&D)
- Biotechnology
- Engineering Design
- Scientific Laboratories
- Calibration Services
- Vocational Training Centers

Incentives

Corporate income tax exemption for 8 years (no cap) and additional 50% corporate tax reduction for 5 years

Logistic Industries

- Air Transportation Services
- Rail Transport
- Loading/Unloading Facilities for Cargo Ship
- Inland Container Depot (ICD)
- International Distribution Center (IDC)

Incentives

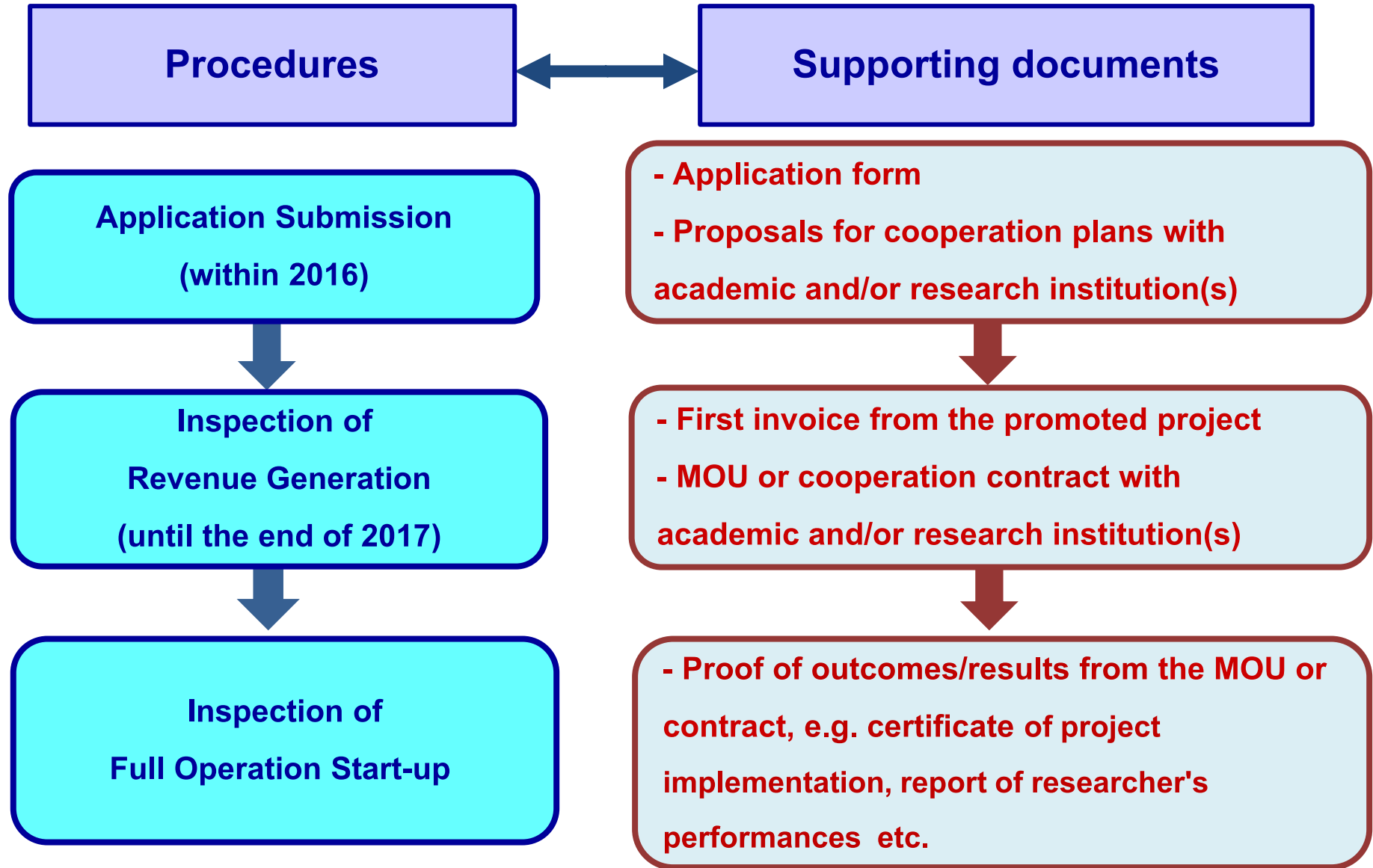
Corporate income tax exemption for 5 – 8 years and additional 50% corporate tax reduction for 5 years

Obligatory Conditions to Receive Cluster Incentives

- **Must have cooperation with academic institution / research institution / Center of Excellence in the cluster to develop human resource and improve the level of technology e.g.**
 - **Cooperation in the Talent Mobility / Work-integrated Learning / Co-operative Education / Dual systems**
 - **Cooperation in development of human resource or technology as approved by the Board of Investment**

- **Must apply for investment promotion within 2016 and must start operation within 2017 to accelerate investment, unless under necessity i.e. large-scale project, the BOI will consider relaxation as deemed appropriate.**

Procedures to Apply for BOI Promotion



Cluster Development Guidelines

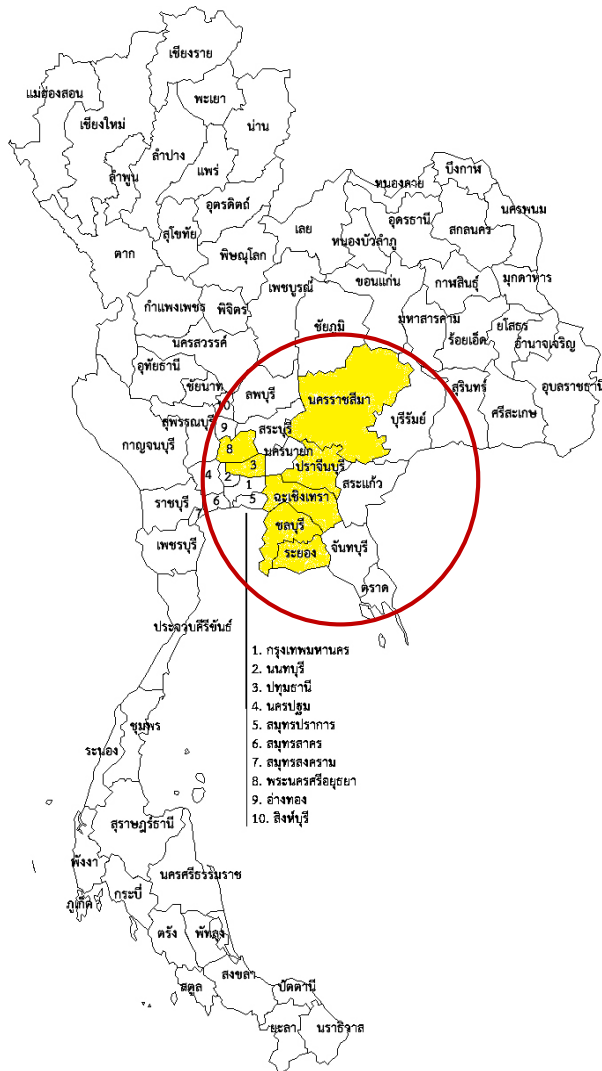
Super Cluster e.g.

- **Automotive and Parts Cluster**
- **Electrical Appliances, Electronic and Telecommunication Cluster**
- **Eco-Friendly Petrochemical and Chemical Products**
- **Digital Industry Cluster**

Other Targeted Clusters e.g.

- **Agro-Processing Industrial Cluster**
- **Textile and Garment Cluster**

Automotive and Parts Super Cluster



7 Provinces : Ayuddhaya, Patumthani, Chon Buri, Rayong, Chacheongsao, Prachinburi, Nakorn Ratchasrima

Target Activities

Manufacture of Motorcycle with engine size \geq 248 CC. (only for projects with forming of engine parts)

Manufacture of Automobile Engines

Manufacture of Important Parts that are not locally produced or are few i.e.

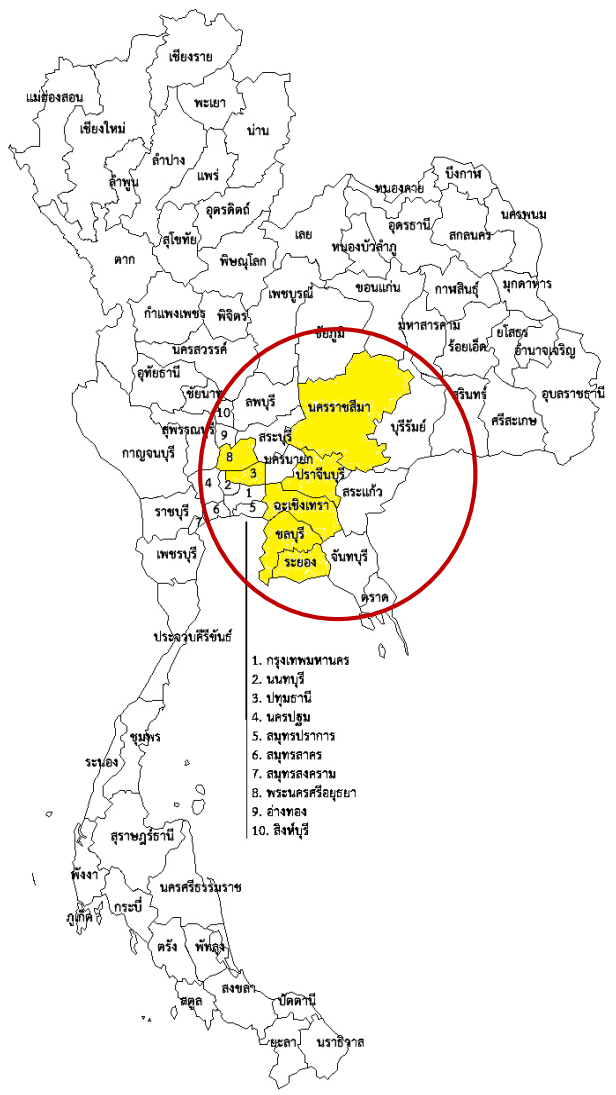
- Parts using advance technology
- Safety and Energy Efficient System
- Equipment for Hybrid, EV, PHEV cars
- Fuel injection parts/ Transmission/ Engine System

Manufacture of Automobile Tires

Measures to Support Automotive and Parts Cluster

	Measures	Responsible Agencies
1	<p>Accelerate the establishment of the National Automotive and Rubber Tire Testing Center in Cha Choeng Sao Province</p> <p>(The Cabinet have approved for part of the budget)</p>	MOIndustry
2	<p>Increase branches of the Automotive Human Resource Development Academy (AHRDA) (The 1st AHRDA branch is located in Samut Prakan)</p>	MOL
3	<p>Exemption of import duty for proto-type cars or imported goods for the purpose of R&D or for testing</p> <p>(The BOI Board have approved on December 25, 2014 to assign the Ministry of Finance for this issue, which is currently under consideration)</p>	MOF

Electrical Appliances, Electronic and Telecommunication Super Cluster



7 Provinces : Ayudhdhaya, Patumthani, Chon Buri, Rayong, Chachoengsao, Prachinburi, Nakorn Ratchasrima

Target Activities

Electronic Design
 e.g. Microelectronics Design และ Embedded System Design

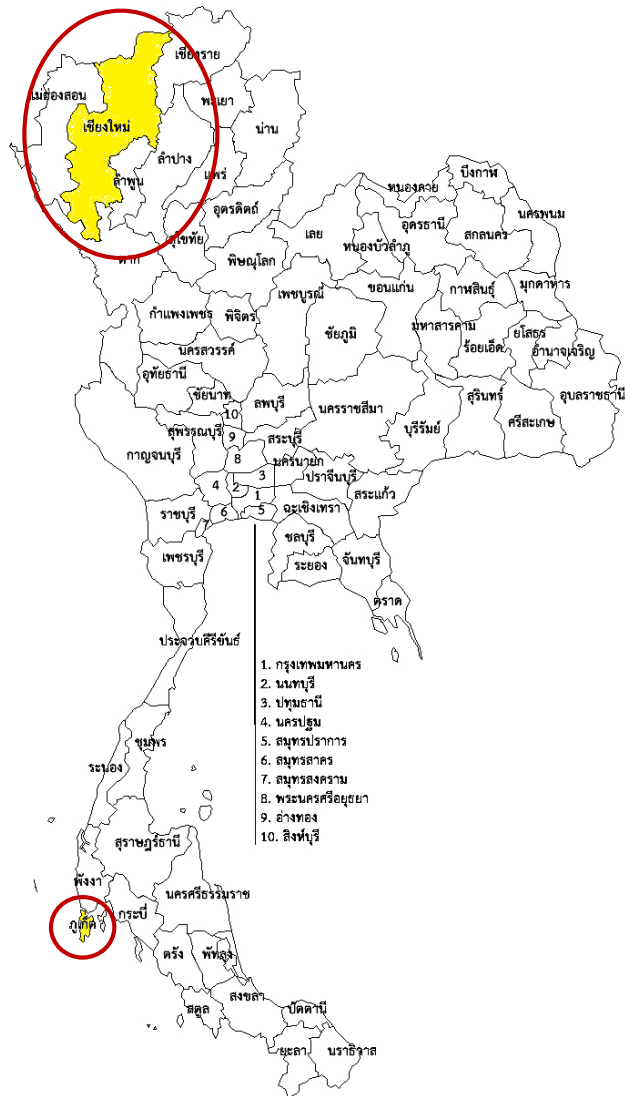
Electronic products and parts using advance technology
 e.g. telecommunication equipment, electronic parts for medical devices / automotive / industrial works, Hard Disk Drive, Solid State Drive

Advanced Technology Electrical Appliances e.g. Internet of Things

Measures to support Electrical Appliances, Electronics and Telecommunication Equipment Cluster

	Measures	Responsible Agencies
1	<p>Accelerate implementation of the water management and flood prevention project</p> <p>(Budget 300,000 MB) urgent concrete resolution to build investors' confidence</p>	<p>Strategic Committee for Water Resources Management (SCWRM)</p>
2	<p>Elevate the standard of electrical appliances and electronics</p> <p>To export to leading markets and prevent importation of low quality products</p>	<p>MOIndustry</p>
3	<p>Expand the Electrical and Electronics Institute (EEI) scope of work to become a testing center and certify for quality assurance by providing EEI capital support to install necessary tools and equipment</p>	<p>MOIndustry</p>
4	<p>Promote an establishment of Micro Mold industry with high precision to produce small electronic parts for Smart Devices</p>	<p>MOIndustry</p>

Digital Industry Super Cluster



2 provinces : Chiang Mai and Phuket

Target Activities

Software (Embedded Software, Enterprise Software, Digital Content)

Cloud Service

Data Center

Software Park

Movie Town

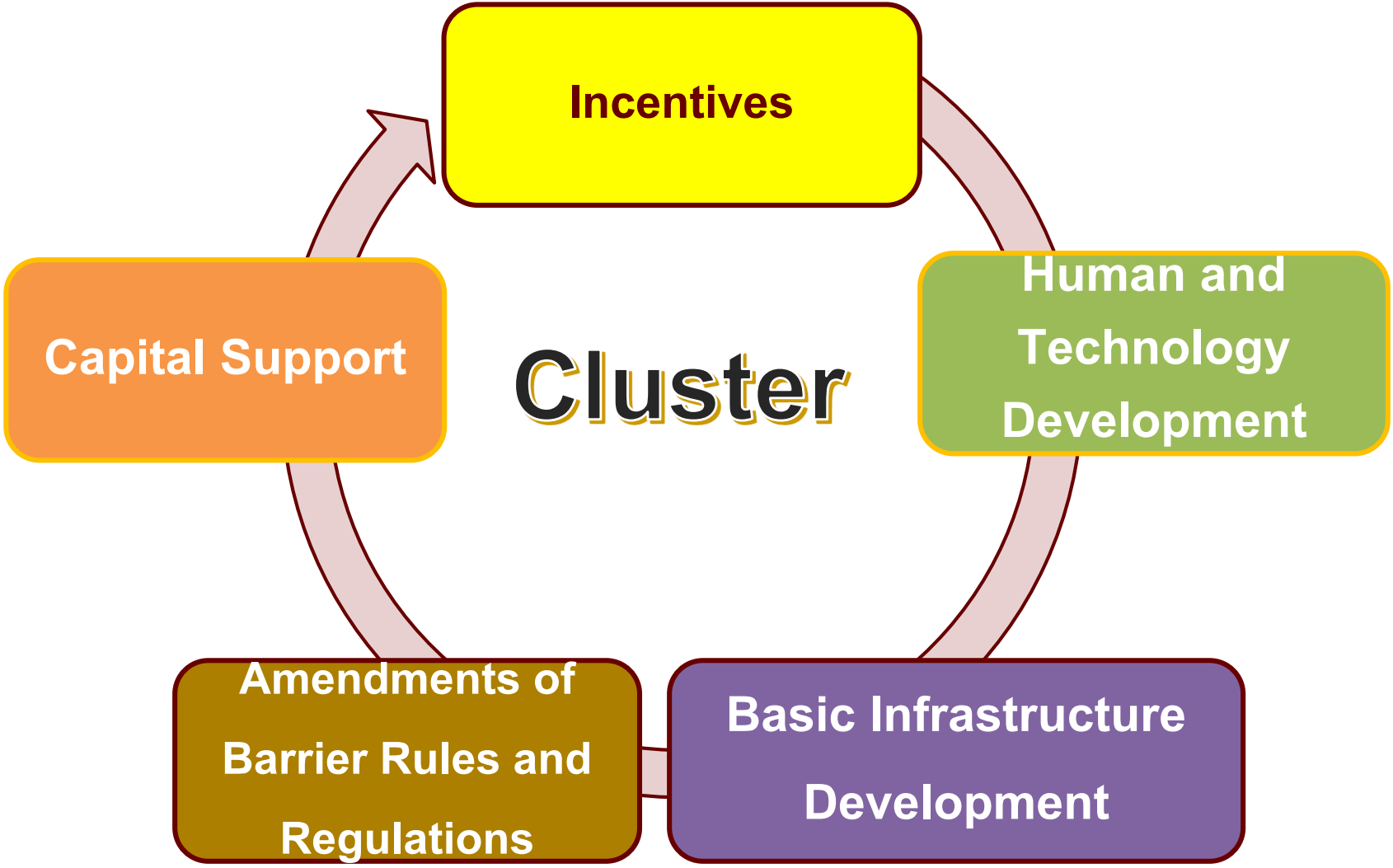
Thai Motion Picture Production and Motion Picture Supporting Services

Measure to Support Digital Cluster

	Measures	Responsible Agencies
1	Development of High Speed Internet System to equivalent the average global speed of 24.4 Mbps (At present, Thailand's Internet Speed is 20 Mbps, Chiang Mai and Phuket is 15 Mbps, while Singapore is 104 Mbps)	MICT
2	VISA and Work Permit Facilitation or Granting of Permanent Residence to foreign IT specialists	MOInterior, Immigration Bureau and MICT
3	Accelerate Digital Government Reform increasing e-Service and Open Data	MICT

**Proposed Measures to Support Cluster Development
and assigned Related Government Agencies**

Measures to Support Cluster Development



1**Incentives Measures**

	Measures	Responsible Agencies
1	10-15 years CIT exemptions for future industries which are highly important in the Super Cluster	MOF
2	Personal income tax exemption for leading international specialists in the Super Cluster field, both Thai and foreign	MOF

② Human and Technology Development Measures

	Measures	Responsible Agencies
1	<u>Talent Mobility</u> : promote government officials to assist the private sector in technology development	MOST, MOE and BOI
2	<u>Cooperation with Academic Institutions and Factories</u> : Work-integrated Learning / Co-operative Education / Dual systems	
3	<u>Education Institutes / Center of Excellence</u> : promote cooperation with Thai institutes located in the cluster area	MOST, MOE
4	<u>Promote private sectors prepared to established specialized education institutions or training centers</u> : e.g. Kamnoetvidya Science Academy, Vidyasirimedhi Institute (PTT), Panyapiwat Institute of Management (CP), Toyota Automotive Technological College (Toyota)	MOST, MOE
5	<u>Established a Center of Excellence / Test Center / Standard Calibration Center</u> : by cooperating with local institutions to elevate standard and quality of the product	MOST, MOE MOIndustry
6	<u>R&D Support</u> : Import duty exemption for goods and equipment used in R&D or for testing	MOF

3 Basic Infrastructure Development Measures

	Measures	Responsible Agencies
1	Expansion of Laem Chabang Seaport and resolve traffic problems around the seaport e.g. road expansion to more than 4 lanes	MOT
2	Expansion of U Ta Pao Airport to support higher air transportation traffic	MOT
3	Improvement of logistic system especially effective rail transportation	MOT
4	Improvement of Internet speed and basic infrastructure entering the digital economy	MICT

4 Amendments of Barrier Rules and Regulations

	Measures	Responsible Agencies
1	Resolve Rayong's City Plan Problem in order to expand some industrial sectors	MOInterior
2	Fast-track approval of Permanent Residence for leading international specialists	MOInterior/ Immigration Bureau

5

Capital Support Measures

	Measures	Responsible Agencies
1	<p>Encourage use of various capital funds set up for technology and human development i.e.</p> <ul style="list-style-type: none"> Innovation Coupon Project by the National Innovation Agency Science and Technology Development fund by NSTDA in cooperation with BOI The Thailand Research Fund by TRF 	<p>MOST and BOI</p>
2	<p>Promote Venture Capital to provide financial support to SMEs</p> <ul style="list-style-type: none"> Extension period of CIT exemption for VC Measure under the Revenue Department (Expired December 2011) and relaxation of conditions e.g. SMEs shareholdings condition as such Accelerate a set up of Fund of Funds under the Ministry of Science and Technology to invest in the private sectors' VC in the form of Matching Fund (annual budget of 500 MB for a period of 4 yrs.) 	<p>MOF</p> <p>MOST</p>

Draft New Super Cluster
BOI not announced yet

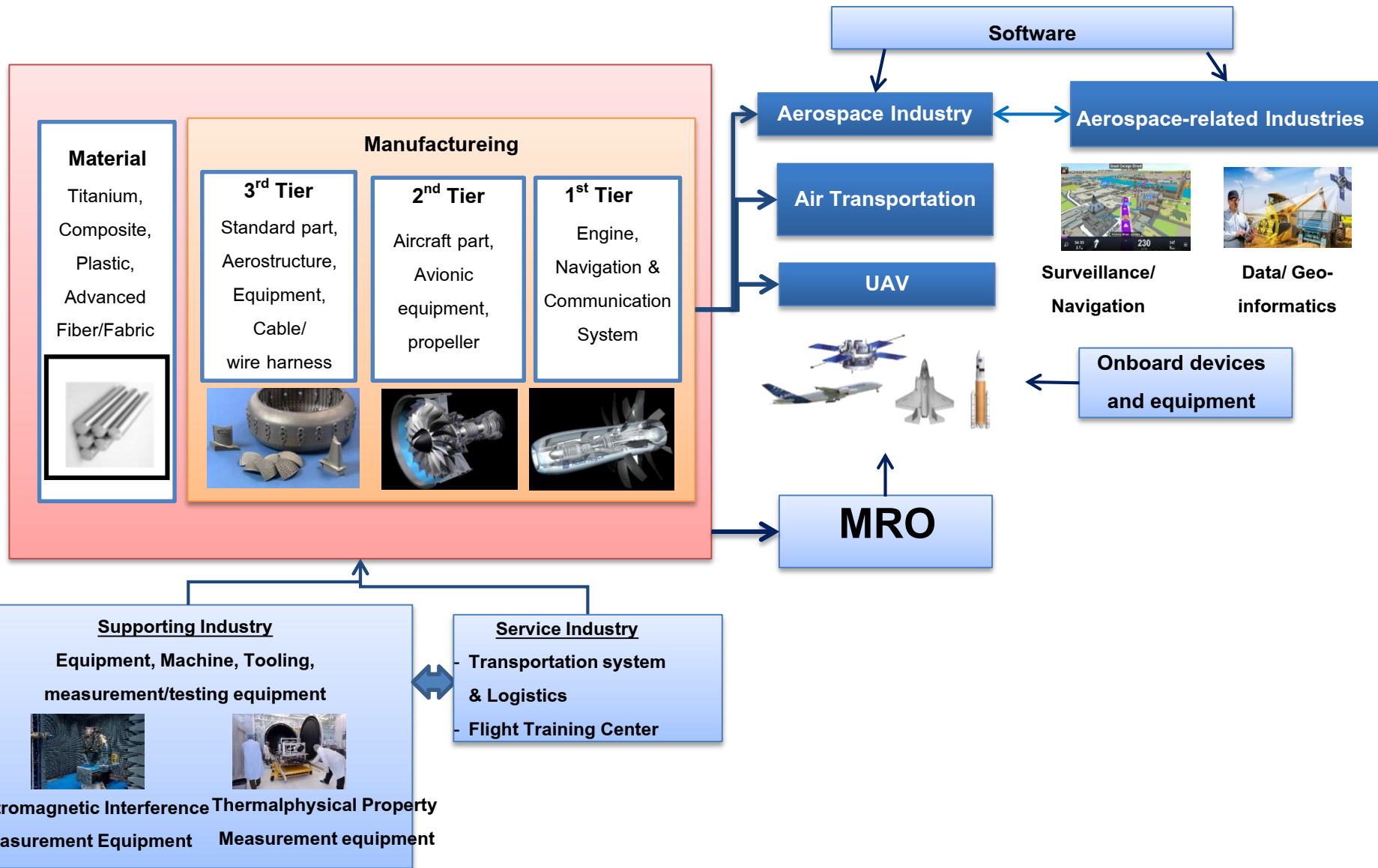
- Aerospace
- Automation/Robotics
- Medical Devices
- Tourism



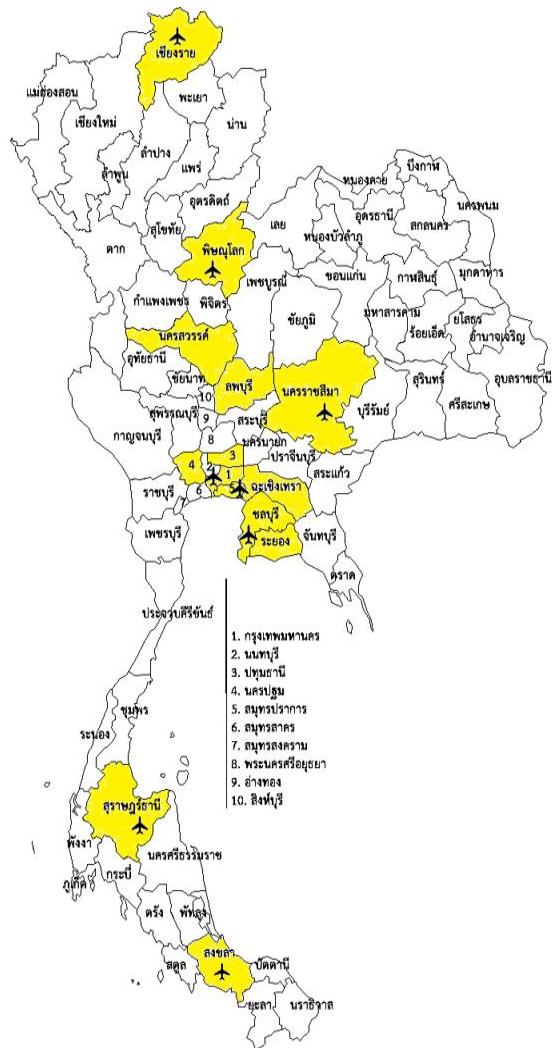
Cluster Development Policy for Aerospace Industry

**Office of Thailand Board of Investment
November 2015**

Value Chain of Aerospace Industry



Cluster Map for Aerospace Industry



Province	Competitive Factors
Bangkok	Presence of key international airport
Samutprakan	Presence of key international airport and large number of industrial estates
Nakhonpathom	Presence of MRO center of TAI***
Pathum Thani	Close to airport and presence of large number of industrial estates
Chachoensao**	Close to airport and large number of industrial estates
Chonburi*	Presence of airport and has sufficient area for developing MRO center and has many industrial estate
Rayong*	Close to airport and has sufficient area for developing MRO center and has many industrial estate
Chiang Rai*	Presence of airport and has sufficient area for developing MRO center
Phitsanulok*	Presence of airport and has sufficient area for developing MRO center
Nakhon Sawan	Presence of MRO center of TAI***
Lopburi	Presence of electronic part manufacturer for aerospace
Nakhon Ratchasima*	Presence of airport and has sufficient area for developing MRO center
Surat Thani*	Presence of airport and has sufficient area for developing MRO center
Songkhla*	Presence of airport and has sufficient area for developing MRO center

Note

* Study conducted by Kasetsart University

** Proposed by GISTDA

TAI stands for Thai Aviation Industries Co.,Ltd.

Aerospace-related Activities Eligible for Additional Incentives

Activities	Current Incentives
<p>Manufacture of Advanced / Nano Materials or Products Produced from Advanced / Nano Materials</p> <ul style="list-style-type: none"> - Manufacture of Advanced / Nano Materials or Product produced from Advanced / Nano Materials with continued manufacturing process from Advanced / Nano Materials within the same project - Manufacture of Products produced from Advanced / Nano Materials 	<p>A2 (8 years)</p> <p>A3 (5 years)</p>
<p>Manufacture of textile products or parts</p> <ul style="list-style-type: none"> - Manufacture of Technical Fiber or Functional Fiber - Manufacture of Functional Yarn or Functional Fabric) 	<p>A2 (8 years)</p> <p>A3 (5 years)</p>
<p>Manufacture or repair of aerospace, including aerospace parts and equipment or onboard equipment</p> <ul style="list-style-type: none"> - Manufacture of airframe, airframe components, major components, e.g. engine, aircraft parts, propeller, and avionic equipment - Manufacture of other aerospace parts including interior (except disposable and reusable - Aircraft, engine and aircraft components MRO 	<p>A1 (8 years no cap)</p> <p>A3 (5 years)</p> <p>A2 (8 years)</p>

Activities	Current Incentives
Manufacture of Telecommunication Products <ul style="list-style-type: none">- Manufacture of emission, transmission and reception devices used in fiber-optic and wireless communication systems- Manufacture of other telecommunication products	A2 (8 years) A3 (5 years)
Manufacture of Parts for Telecommunication Products <ul style="list-style-type: none">- Manufacture of parts for emission, transmission and reception devices used in fiber-optic and wireless communication systems- Manufacture of parts for other telecommunication products	A2 (8 years) A3 (5 years)
Manufacture of Electronic Control and Measurement for Industrial/Agricultural Use, Medical/Scientific Devices and Automotive Industry	A2 (8 years)
Manufacture of Electronic Security Control	A2 (8 years)

Aerospace-related Activities Eligible for Additional Incentives

3/3

Activities	Current Incentives
<p>Electronics Design</p> <ul style="list-style-type: none"> - Microelectronics Design - Embedded System Design 	<p>A1 (8 years no cap)</p> <p>A1 (8 years no cap)</p>
<p>Software</p> <ul style="list-style-type: none"> - Embedded Software 	<p>A1 (8 years no cap)</p>
<p>Industrial Zones or Technology Industrial Zones</p> <ul style="list-style-type: none"> - Science and Technology Park 	<p>A1 (8 years no cap)</p>

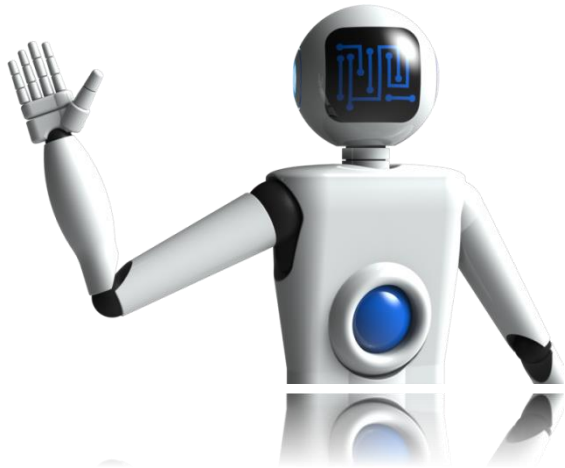
Proposal for Additional Activities	Incentives
<p>Software</p> <ul style="list-style-type: none"> - Add subcategory “software development and service provision” as follows: <ul style="list-style-type: none"> - Big Data and Business Process Management - IT and cyber security - Use for controlling and/or connecting advanced technology equipment e.g. aerospace, robots, automation, medical devices” since it is difficult to develop and is important to value chain of future industries 	<p>A1 (8 yr no cap)</p>

Proposals of Support Measurement for Aerospace and Space Industry

1/3

	Measures	Responsible Agency
1	Amend Aviation Act (No. 11) B.E. 2551 : Revoke the condition required registered capital must belong to a person holding Thai nationality at least 51 percent and business management power must be controlled by a person holding Thai nationality for an applicant for a Production Certificate for Aircraft and Major Aircraft Appliances and a Repair Station Certificate (Type 1)	MOT
2	Expedite the completion of development plan for aerospace and space industry	MOT MOST
3	Expedite aerospace industrial estate establishment in U-Tapao airport and developed area as a free zone	IEAT MOT
4	Expedite import-export approval procedure for equipment and tooling used for measure, calibrate, analyze, test or assembly with other object for aerospace and space industry but those items might fall under Radio and Television Broadcasting Act, B.E. 2498 (1955)	MICT NBTC MOD
5	Promote establishment of Certifying Body to certify production and service standard for aerospace industry such as AS/EN9110	MOI

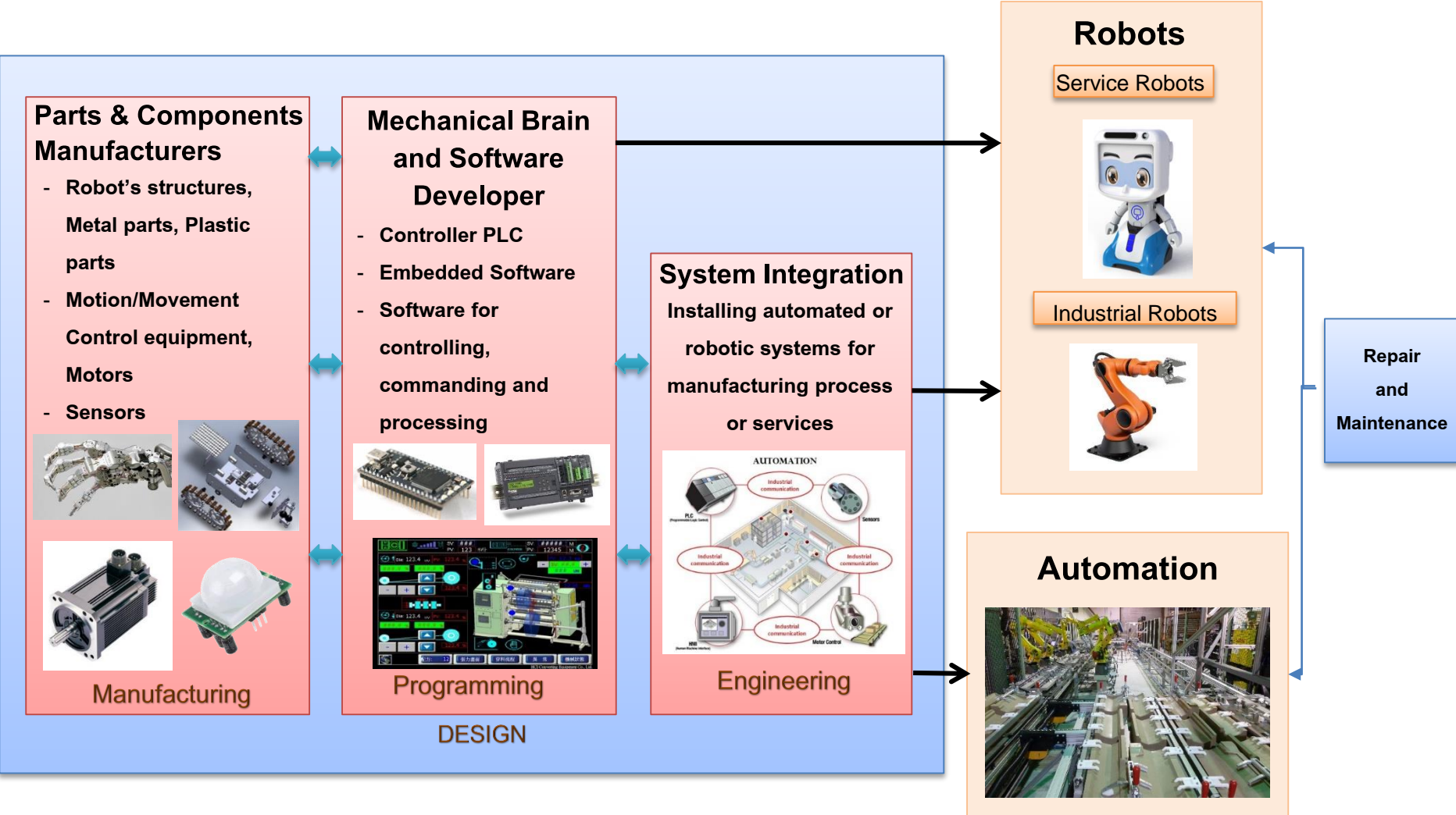
	Measures	Responsible Agency
6	Expedite the completion of Lab services/Training Centers that already existed in Thailand	MOST
7	Promote establishment of Metallurgy Laboratory Testing Unit which is not available in Thailand yet	MOST
8	Promote establishment of Training Center for Specific Area such as Composite Material, Electron Beam Welding เป็นต้น	MOST MOI
9	Establish Material Waste Management Unit from aerospace industry such as Titanium, Carbon Fiber	MOI
10	Support expenditure of obtaining standard certification related to manufacturing or repairing aircraft parts for Thai SMEs	MOF MOI
11	Create mechanism for evaluation of patent and IP value to use as an asset for loan guarantee	MOC
12	Provide Interest Subsidy to support an investment of Thai entrepreneur in manufacture of equipment and part for aerospace and space industry	MOF



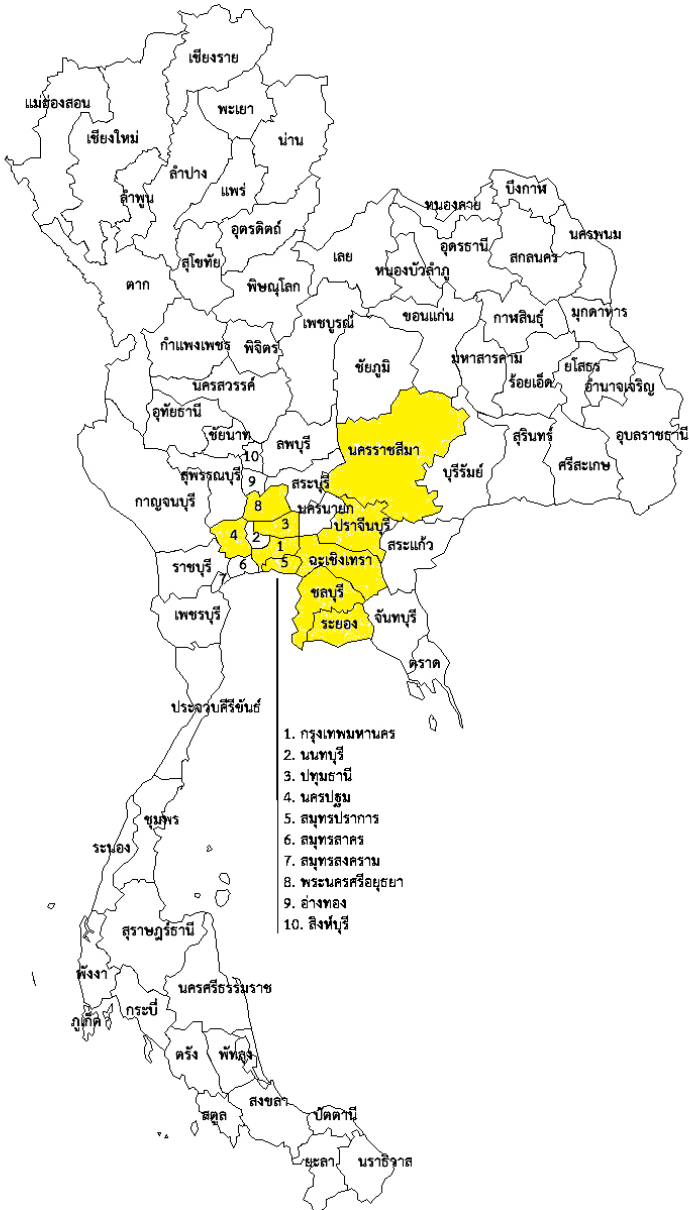
Investment Promotion Policy
for
Automation and Robotics Industry

Office of the Board of Investment of Thailand
November 2015

Supply Chain of Automation and Robotics Industry



Cluster Map for Automation and Robotics Industry



Provinces	Reasons
Bangkok	Presence of Educational and R&D Institutes
Samut Prakan	Presence of Educational and R&D Institutes and a lot of factories (potential customers)
Nakhon Prathom	Presence of Educational and R&D Institutes
Ayutthaya	A lot of factories (potential customers)
Pathum Thani	Presence of Educational and R&D Institutes and a lot of factories (potential customers)
Nakhon Ratchasima	Presence of Educational and R&D Institutes and a lot of factories (potential customers)
Prachin Buri	A lot of factories (potential customers)
Chachoengsao	A lot of factories (potential customers)
Chonburi	A lot of factories (potential customers)
Rayong	Presence of Educational and R&D Institutes and a lot of factories (potential customers)

Note: NSTDA’s study indicates that Automation and Robotics companies should be located near manufacturing base

- 76 Universities and 83 Vocational Schools
- 85,250 Engineering, Science and vocational schools students/year

BOI Promoted Activities for additional incentives on Automation and Robotics

1/2

Activities	Current incentives
<p>Manufacture of machinery, equipment and parts</p> <ul style="list-style-type: none"> - Automation machinery and/or automation equipment with engineering design - Machinery/ equipment and parts and/or repair of mould and die <u>for Automation and Robotics Industry(e.g. Servo Motor, Actuator)</u> 	<p>A2 (8 yr)</p> <p>A3 (5 yr)</p>
<p>Manufacture of Telecommunication products</p> <ul style="list-style-type: none"> - Manufacture of emission, transmission and reception devices used in fiber optic and wireless communication systems - Manufacture of other telecommunication products 	<p>A2 (8 yr)</p> <p>A3 (5 yr)</p>
<p>Manufacture of parts for Telecommunication products</p> <ul style="list-style-type: none"> - Manufacture of parts for emission, transmission and reception devices used in fiber optic and wireless communication systems - Manufacture of parts for other telecommunication products 	<p>A2 (8 yr)</p> <p>A3 (5 yr)</p>
<p>Manufacture of electronic control and measurement instruments for industrial/agricultural use</p>	<p>A2 (8 yr)</p>
<p>Manufacture of parts for electronic control and measurement instruments for industrial/agricultural use/, medical/scientific device and automotive industry</p>	<p>A2 (8 yr)</p>

BOI Promoted Activities for additional incentives On Automation and Robotics

2/2

Activities	Current incentives
Manufacture of security control equipment	A2 (8 yr)
Manufacture of parts for security control equipment	A2 (8 yr)
Electronics design <ul style="list-style-type: none"> - Microelectronics Design - Embedded System Design 	A1 (8 yr no cap) A1 (8 yr no cap)
Software <ul style="list-style-type: none"> - Embedded Software 	A1 (8 yr no cap)
Proposal for Additional Activities	Incentives
Software <ul style="list-style-type: none"> - Add subcategory “software development and service provision” as follows: <ul style="list-style-type: none"> - Big Data and Business Process Management - IT and cyber security - Use for controlling and/or connecting advanced technology equipment e.g. aerospace, robots, automation, medical devices” since it is difficult to develop and is important to value chain of future industries 	A1 (8 yr no cap)

	Measures	Responsible agencies
1	Revise import duty structure for parts or equipment used for manufacture or service provision of Automation and Robotics or use Section 12 of Ministry of Finance since import duty on parts or equipment is higher than finished products e.g. Servo Motor's import duty is 10% while robotic arm's import duty is 1%.	Min. of Finance
2	Exemption of import duty for products used for R&D or testing	Min. of Finance
3	Double Deduction for buying Automation and Robotics products in the National Innovation List	Min. of Finance
4	Progressive depreciation if using Automation and Robotics	Min. of Finance
5	10-15 year corporate income tax exemption for high priority activities for the future and exemption of personal income tax for both Thai and foreign internationally renowned experts like in Super Clusters	Min. of Finance
6	Expedite the completion of information on nationwide laboratories/testing units throughout the country	Min of Science

	Measures	Responsible agencies
7	Encourage the establishment of Integrated Automation and Robotics Testing and Standard Certifying Center e.g. NSTDA's PTEC	Min. of Industry
8	Establish Thai Entrepreneur Development Program in Automation and Robotics industries with government JV with large companies (companies' contribution is higher)	Min. of Finance
9	<p>Encourage the use of available funds that aim at developing technology and human resources e.g.</p> <ul style="list-style-type: none"> • Innovation Coupon by National Innovation Agency • Science and Technology Development Fund by NSTDA and BOI • Thailand Research Fund by TRF 	Min. of Science and BOI
10	Speed up the establishment of Fund of Funds under Ministry of Science and Technology to invest in private VC in the form of Matching Fund	Min. of Science