

**APCTT-CSIR Workshop on Technology Commercialization and Transfer  
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# **Strategic Imperative for Networking and Partnerships in Technology Transfer**

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# Outline

- **Networking and Negotiation Skills for Successful Technology Transfer**
- **Role of Negotiation in Technology-based Business Cooperation**
- **Concept of BATNA and ZOPA**
- **APCTT's Web-based Platforms and Tools**
- **Some Useful Tips for a Successful Technology Transfer Negotiation**
- **Concluding Remarks**

# Networking and Negotiation Skills for Successful Technology Transfer

- Technology transfer process is not a **Zero-sum** game
- The business cooperation strategy should focus on achieving a “**win-win**” deal for both the transferor and transferee
- While the **strong networking** skill will empower the business firm by providing access to vital information, it is the **negotiation skill** that helps to conclude the business deal

# Networking and Negotiation Skills for Successful Technology Transfer

- Partnerships can significantly expand opportunities for accessing **knowledge, resources, markets, and technologies**
- However, **benefits do not flow automatically**, nor do partners necessarily gaining equal proportions. There is indeed a **great deal of learning** associated with setting up and managing successful partnerships (UNIDO)

# Networking and Negotiation Skills for Successful Technology Transfer

## Key Lessons for Success

Clearly understand the **strategic goals** of the organization;

Clearly review the organization's **needs from the partnership**;

**Negotiate** a suitable agreement;

Treat the partnership agreement as a **“living” document**;

Understand that the **comparative advantages** of partners at the outset of the agreement may change over time;

Create **clear provisions for a framework of technology use** in the partnership;

Partnership agreements must contain sound provisions for **dispute resolution, and the exit mechanism** to be employed in terminating the partnership in the event of irreconcilable differences;

**Monitor and review** the partnership throughout its lifetime



# Networking and Negotiation Skills for Successful Technology Transfer

Cross-border as well as inter-institutional collaboration always implies a **trade-off** between **greater access** (markets, finance, resources, capabilities) on the one hand, and **less control of strategic decision-making, day-to-day management, and technological and other kinds of proprietary knowledge** on the other hand.

## Critical Elements

**Control of the partnership**, including its equity structure and power of veto over various aspects in managing the partnership

**Conditions** governing the partnership

**Dispute resolution** in the partnership

**Terms** of partnership termination



# Networking and Negotiation Skills for Business Firms

## Fairly common negotiation problems include:

- **Value** of the competencies / assets brought by each partner to the partnership
- **Transparency**
- **Conflict resolution** procedures among partners
- **Allocation of management responsibility** and degree of management independence
- **Changes in ownership shares** as partnership matures
- **Exit policy; benefit sharing policy and measurement of performance**

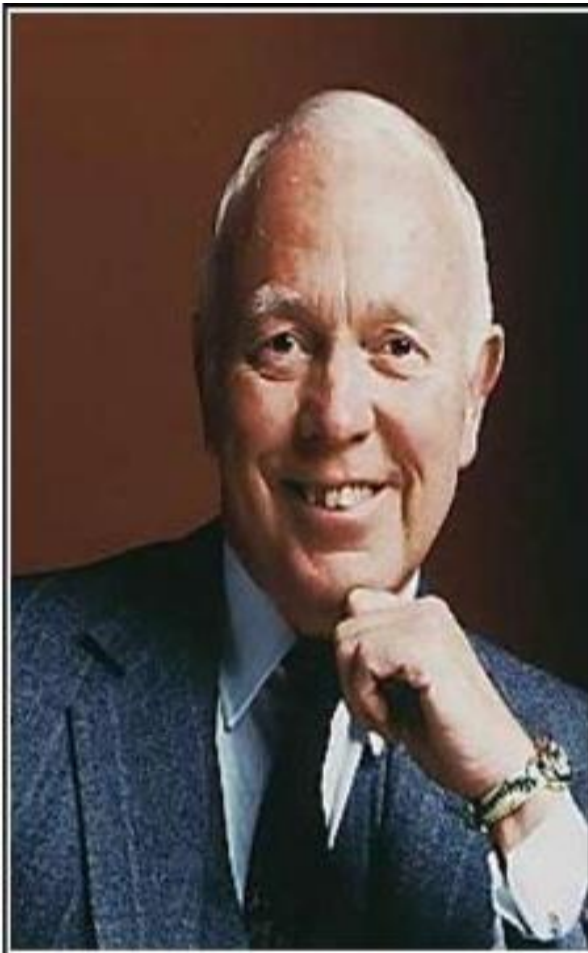


# Role of Negotiation in Technology-based Business Cooperation

Negotiation plays a critical role in two ways to ensure that both parties are benefited in a technology transfer process.

- Negotiation helps to **achieve** the best possible agreement that would benefit the parties to the negotiation
- Negotiation also helps to **avoid** an agreement that would harm the interests of the parties to the negotiation





True negotiation takes place when each side respects the other, and their point of view, and enters into the discussion positively. If you are determined that your solution, and your particular solution only, is the correct one - to be imposed on the other side if necessary - that is not negotiation; it is dictatorship

— Tony Buzan —

AZ QUOTES

## Concept of BATNA and ZOPA

- **Best Alternative to a Negotiated Agreement (BATNA)** is the best option available to the negotiating parties, if the negotiation does not result in a desired outcome for the parties.
- A well thought of BATNA is a **source of power** in negotiation because it provides real option(s) to fall back on in case the negotiation does not meet the interests of the parties

# Concept of BATNA and ZOPA

- **Zone of Possible Agreement (ZOPA)** is ‘the zone’ in which both the negotiating parties find their interests are **mutually acceptable** and there is scope for reaching an agreement.
- This is the **most crucial phase** that decides the final terms and conditions of a technology transfer agreement
- If parties to a negotiation know their BATNAs and the stage at which they can stop negotiations if the envisaged outcomes do not meet their expectations, the parties should be able to communicate, evaluate their respective proposed agreements, and eventually identify the ZOPA

# Concept of BATNA and ZOPA – Case Study I

- **Tech-2**, a leading business firm, had the technology to manufacture bio-ethanol.
- **Fast Solutions (FS)**, another company was very keen to get the technology from Tech-2 due to the huge demand.
- FS initiated negotiations with Tech-2 without a careful examination of their BATNA.
- During the course of negotiations, Tech-2 realized that FS was very keen to get the technology licensed and was ready to accept any terms and conditions from Tech-2.
- Realizing their strong position in negotiation, Tech-2 demanded a **large licensing fee** from FS and in addition **demanding that it had to procure the key catalyst** for the manufacturing process from Tech-2 every year, without which bio-ethanol cannot be produced.
- FS accepted this condition reluctantly

# Concept of BATNA and ZOPA – Case Study I

- Tech-2 designed the fermentation units for FS that were only compatible with the catalyst supplied by Tech-2 and would not support any other catalyst
- The technology transfer agreement was signed between the two parties and FS invested USD 40 million in this project.
- After a few initial years of profits (due to monopoly of the product in the market in Country B), **Fast Solutions faced tough competition in the market with new entrants**, whose technology for manufacturing bio-ethanol was more economical and flexible.
- While FS had to depend entirely on Tech-2 for the supply of catalyst, the other firms were able to **use cost-effective catalysts available locally**. Eventually, FS had to **suffer huge losses and had to stop manufacturing bio-ethanol due to high and non-competitive operating costs and negligible profit margins**.
- If FS had a BATNA, **based on a good market analysis and technology road mapping and forecasting**, which could have advised against entering into an inflexible agreement, then this huge loss could have been avoided

# Concept of BATNA and ZOPA – Case Study II

**Firm A: What's your final expectation on the licensing fee for your technology to manufacture?**

**Firm B: I would like to offer this for a lump sum licensing fee of USD 1.25 million**

**Firm A: That's pretty high.**

**Firm B: The profit margin for the manufacturer is also high**

**Firm A: Well, I don't think, we can afford to offer such a huge licensing fee only for the know-how. But, if you offer it as a turn-key project with a buy-back guarantee of the finished product from your side, our management could consider your offer.**

**Firm B: We cannot offer you all the equipment for the process within this cost. However, we could provide all the technical assistance to set up and commission the plant, also offer 2 years of technical support to the project after it is commissioned. We could also think of a guarantee for a buy-back period of 3 years once your firm starts manufacturing**

**Firm A: Sounds good. But, I assume that the training costs of our staff are also included in this.**

**Firm B: Yes, it is already included.**

**Firm A: I believe that we have arrived at a common ground. I will talk to my management to get their nod to finalize the deal. Thank you very much.**



# APCTT's Web-based Platforms and Tools


- Asia-Pacific Online NIS Resource Centre ([www.apctt.org](http://www.apctt.org))
- Technology4SME Database ([www.apctt.org](http://www.apctt.org))
- Global Technology Databases ([www.apctt.org](http://www.apctt.org))
- Renewable Energy Technology Database ([www.apctt.org](http://www.apctt.org))
- Tech Monitor Website ([www.techmonitor.net](http://www.techmonitor.net))
- Asia-Pacific Nanotechnology R&D Management Network (<http://apctt.org/nanotech/>)




# Technology4SME Database

The screenshot shows the website's header with navigation links: Home, About APCTT, Focus Areas, Member Countries, Events, Resource Centre, and Contact Us. Below the header, the APCTT and ESCAP logos are displayed. The main content area features a yellow banner for 'Technology Offers (855)'. On the left, a 'Sectors' list includes Aerospace (6), Textile (4), Energy (23), Environment (23), Food Processing (40), Garment (1), Information Technology (61), and Instrumentation (4). A red 'Submit Technology Offer' button is positioned above the list. On the right, a green box contains the text 'Technology4SME Database', followed by buttons for 'Login', 'Register', 'Technology Offers', 'Technology Requests', and 'Joint Venture & Partnership'.

Home About APCTT Focus Areas Member Countries Events Resource Centre Contact Us

 **APCTT**  
Asian and Pacific Centre  
for Transfer of Technology

Asian and Pacific Centre for Transfer of Technology  
of the United Nations Economic and Social Commission for Asia and the Pacific

 UNITED NATIONS  
**ESCAP**  
Economic and Social Commission for Asia and the Pacific

## Technology Offers (855)

Submit Technology Offer

### Sectors

- Aerospace (6)
- Textile (4)
- Energy (23)
- Environment (23)
- Food Processing (40)
- Garment (1)
- Information Technology (61)
- Instrumentation (4)

**Technology4SME Database**

Login

Register

Technology Offers

Technology Requests

Joint Venture & Partnership

## Technology4SME Database....

### Technology4sme is -

- A **regional platform** for technology suppliers and seekers from the Asia-Pacific region and beyond
- An **IT powered mechanism** that helps technology based SMEs in exploring opportunities across the region
- An **effective source of information on technological development at regional level** and also on technology related events such as conferences, workshops, exhibitions organized in the Asia Pacific region

# Global Technology Databases

The screenshot shows the APCTT website's navigation bar with links for About APCTT, Focus Areas, Member Countries, Events, Resource Centre, and Contact Us. The main heading is "Global Technology Databases". Below this, there is a paragraph explaining that APCTT has compiled a list of global and country-wise technology databases for SMEs and entrepreneurs. It also mentions that if a search in the Technology4SME database yields no results, users can use this section to extend their search. A note states that over 10 technology databases are accessible through this service, with more being added periodically. There are two dropdown menus: the first is set to "Global" and the second to "All". A "Submit" button is located below the second dropdown. At the bottom of the page, there are two links: "Enterprise Europe Network" with the URL <http://www.enterprise-europe-network.ch/marketplace/index.php?file=bbs-search.php&disregion=0> and "UNIDO ITPO Tokyo's Environmental Technology Database" with the URL [http://www.unido.or.int/en/activities/technology\\_transfer/technology\\_db/](http://www.unido.or.int/en/activities/technology_transfer/technology_db/).

# Renewable Energy Technology Bank

The screenshot shows the APCTT website's navigation bar with links for About Us, Target Countries, Services, Solution Centre, and Contact Us. The main heading is "Renewable Energy Technology Bank (RET-Bank)". Below this, there is a paragraph explaining that APCTT's Renewable Energy Cooperation-Network for the Asia Pacific (RECAP) is an institutional cooperation mechanism established in accordance with United Nations ESCAP Commission resolution 64/3 of 30 April 2008. It aims to promote the utilization and development of renewable energy technologies (RETs) to meet energy needs and foster sustainable development. A list of member countries is provided: Bangladesh, China, Fiji, India, Indonesia, Islamic Republic of Iran, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand, and Viet Nam. The text describes the network's four major functions: (1) collection and dissemination of information on RETs, (2) sharing of best practices on RE, (3) developing capacity to plan and implement RET transfer projects, and (4) promoting research and development (R&D) collaboration. A "View RET-Bank" button is visible. At the bottom, there are "Quick Links" for Objectives, Target Countries, and Cooperation Mechanisms.

# SATNET Asia Technology Database



## TFS 11-System Of Rice Intensification (SRI)

28 Nov 2014  Cereals, System Rice Intensification, India

 [Download](#)

The System of Rice Intensification (SRI) is a system of cultivation methods that combine a modified transplanting pattern and transplanting handling with modified water management and soil aeration.



## TFS 10-Biointensive School Gardens: Enhancing Nutritional And Agro-Biodiversity Outcomes

31 Oct 2014

 Vegetables, Sustainable Natural Resource Management, Capacity Development Methods, Philippines, Indonesia

 [Download](#)

Biodiverse school gardens represent organic systems with a low carbon footprint.



## TFS 09-Floating Vegetable Garden

31 Oct 2014

 Vegetables, Floating Garden, Traditional Practice, Floating Cultivation, Wetlands, Bangladesh

 [Download](#)

A floating bed, constructed of water hyacinth and other aquatic plants, is used for production of high-value vegetables during the monsoon season, when much arable land is flooded.



## TFS 08-Integrated Pest Management For Eggplant Fruit And Shoot Borer

 Pest Management, Eggplant, Fruit And Shoot Borer, Integrated Pest Management, Bangladesh

# Asia-Pacific Nanotechnology R&D Management Network

<http://apctt.org/nanotech/>

The screenshot shows a web browser window displaying the website <http://apctt.org/nanotech/>. The page features a blue header with navigation links: Home, About APCTT, Focus Areas, Member Countries, Events, Publications & Databases, and Contact us. Below the header, there are logos for APCTT (Asian and Pacific Centre for Transfer of Technology) and ESCAP (United Nations Economic and Social Commission for Asia and the Pacific). A purple banner highlights the "Asia-Pacific Nanotechnology R&D Management Network". Below this, a search bar is present, followed by a welcome message and a paragraph describing the network's purpose. The footer contains four columns of links: ABOUT APCTT, UN LINKS, REGIONAL INSTITUTIONS, and FOLLOW US. The page is dated 24/04/2017.

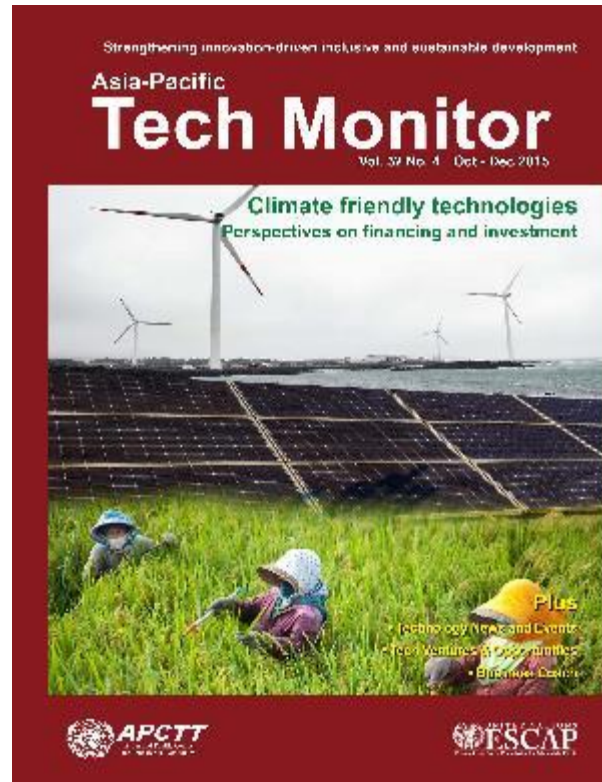


# Technology Intelligence Services of APCTT

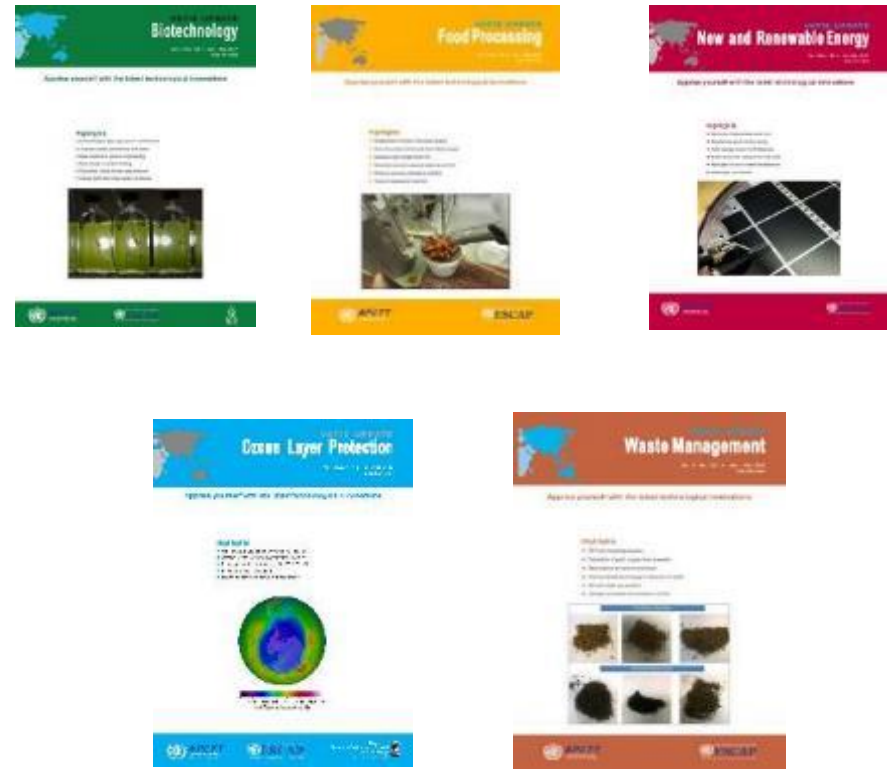
<http://www.techmonitor.net>

- **Asia-Pacific Tech Monitor journal**
- **Value Added Technology Information Service (VATIS) Updates** on Waste Management, Food Processing, New and Renewable Energy, Ozone Layer Protection and Biotechnology
- **Focus** – Innovative technologies, Technology trends, Policies, Market, IPR, Innovation management, Technology events, Technology opportunities, etc
- **Target groups** – Policy makers, SMEs, Technology transfer intermediaries, Policy analysts, Researchers, Academia

# Asia-Pacific Tech Monitor



# VATIS Updates





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## Some Useful Tips for a Successful Technology Transfer Negotiation

- **Know your BATNA** (and try to know other party's BATNA) before entering into negotiations
- Focus on **interests** and not **positions**
- Try to explore **various options for mutual gain**
- Insist on **objective criteria**
- Maintain the **right quotient of empathy and assertiveness**
- Include **provisions for improving the agreement**

# Concluding Remarks

- **Technology transfer** and **technology based business cooperation** are critical sources of revenue generation for research institutions
- **Skill in networking and negotiation** is key for achieving the desired outcomes
- Being a Regional Institution of United Nations with a specific mandate to promote technology transfer, APCTT strives to be an enabling platform for **cross-border knowledge transfer, regional networking and capacity building**
- APCTT promotes **South-South, North-South** as well as **Triangular** cooperation modalities for supporting countries in technology-driven sustainable and inclusive development in the Asia Pacific region

# Thank you

**For more information, contact**

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