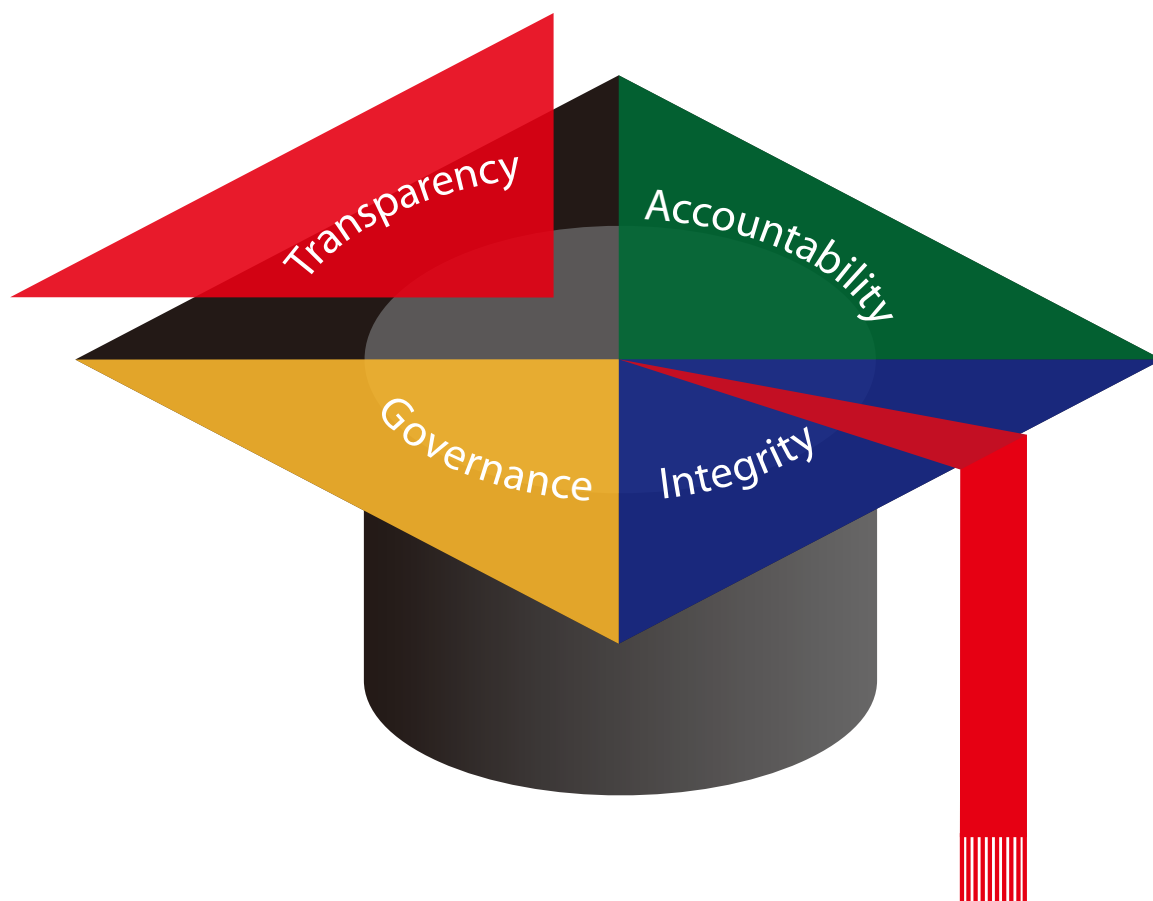


Partner for Excellence



Technology Transfer and Commercialization



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Excellence*



*Technology Transfer and
Commercialization*

Introduction

The tertiary education institutions (TEIs) are statutorily autonomous corporations with substantial freedom in the control of curricula and academic standards, the selection of staff and students, initiation and acceptance of research, and the internal allocation of resources. Nevertheless, because the TEIs are also entrusted with significant public and private resources, and in view of their pivotal role in the development of higher education in Hong Kong, the Government and the community at large expect that TEIs are providing the highest possible standards of education in the most cost-effective way and managing their affairs in an accountable and transparent manner.

In early 2011, the Independent Commission Against Corruption (ICAC) joined hands with all the 11 TEIs to set up a Working Group to address public concerns on a number of issues pertaining to the governance of TEIs, including administration of donations, technology transfer and commercialization, procurement, outside practice and financial reporting. The Working Group agreed to conduct reviews by the ICAC Corruption Prevention Department (CPD) on these five identified areas with a view to further strengthening institutional governance and corruption prevention safeguards in TEIs' procedures and guidelines. Based on the findings of the reviews, the Working Group has produced this Corruption Prevention Guide (the Guide), comprising a set of five modules which consolidate the good practices and corruption prevention measures being in force by individual local and overseas institutions. The Guide is designed as reference for TEIs for the purpose of corruption prevention and is not mandatory in nature. TEIs are encouraged to suitably adapt and adopt the good practices and corruption prevention safeguards recommended in the Guide with regard to their unique character, cultural heritage, size, organizational structure and resource capability.

We hope TEIs will find the Guide useful, informative and stimulating. CPD stands ready to provide free, confidential and tailor-made corruption prevention services to help TEIs implement the recommended measures in the Guide. CPD could be contacted by telephone at 2826 3198, by fax at 2521 8479, or by email at cpd@icac.org.hk.

Working Group on Tertiary Education Institutions Governance
December 2011

DISCLAIMER

The recommendations as contained in this Guide including the sample forms or documents are for general guidance only. The sample forms and documents should be modified and adapted as appropriate to suit individual organizations' operational needs before use. The ICAC will not accept any liability, legal or otherwise, for loss occasioned to any person acting or refraining from action as a result of any material including the sample forms or documents in the Guide.

Throughout this Guide, the male pronoun is used to cover references to both the male and female. No gender preference is intended.

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CHAPTER 1

Background

To support Hong Kong in becoming a knowledge-based economy, many TEIs have made knowledge transfer as their “third mission” alongside teaching and research. According to the University Grants Committee (UGC)¹, knowledge transfer is defined as “*The systems and processes by which knowledge, including technology, know-how, expertise and skills are transferred between higher education institutions and society, leading to innovative, profitable or economic or social improvements.*”. As an important component of knowledge transfer, “technology transfer” is commonly used to describe the process of exploiting the commercial potential of an academic discovery or invention or a technological breakthrough from the laboratory to the marketplace. This process does not only involve the transfer of TEIs’ fruits of applied research for the benefit of the community, but also closer collaborations between TEIs and the industries/businesses early from the research stage.

TEIs’ technological inventions involve highly specialized technologies and their “buyers” or licensees could have a substantial return if these technologies could be turned into successful commercial products. In view of the difficulties in valuating these technologies and their market potential, the commercialization process, if not properly managed, is prone to favouritism and manipulation, or the perception of such. TEI staff members’ close contact with the potential business partners and the prospects of some having a financial interest in the business can also expose them to substantial risks of conflict of interest or allegations of selling the inventions at unreasonably low price. This Module aims to identify vulnerable and corruption prone areas in the technology transfer and commercialization process and highlight the good practices for the reference of TEIs in strengthening their internal control mechanism. In addition to these measures, the **Module on Financial Reporting** of the Guide also provides safeguards against abuse throughout the commercialization process from the financial reporting perspective to further mitigate the associated risks.

¹ To strengthen knowledge transfer in TEIs, UGC has provided recurrent earmarked funding starting from 2009/10 to the eight UGC-funded institutions.

CHAPTER 2

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Determining the Mode of Technology Transfer and Commercialization

2.1 Introduction

TEIs receive various funding from both the public and private sectors to support their research and development projects, including the General Research Fund under the Research Grants Council of the UGC, the Innovation and Technology Fund, industry partners or sponsors, and private donors². When an invention is developed in the course of project implementation, TEIs normally apply for a patent to protect the intellectual property (IP) rights (**Chapter 4.1**) of the invention and claim ownership of the patented technologies unless stated otherwise by the funding source. To promote wider application of the market-compatible technologies, it is common for TEIs to transfer them to the industry and business sectors by way of commercialization.

2.2 Modes of Commercialization

For the purpose of this Module, commercialization activities are broadly categorized into the following three types:

2.2.1 Sponsored Research

It refers to research services offered by TEI academics upon request by individual companies in the industry to meet their specific needs. In such research projects, all the research costs are fully borne by the companies (commonly known as the sponsors), irrespective of whether the research output could be successfully launched for commercialization purposes, with the resulting IP rights, if any, normally belonging to the sponsor.

2.2.2 Technology Licensing

This is the most commonly used commercialization arrangement, under which the TEI grants the licensee the exclusive or non-exclusive right to use a specific patented or non-patented technology of the TEI for a specified period of time. The licensee in return pays the TEI an upfront licence payment and/or royalty³ during the licence period.

² The acceptance, receipt and usage of donations by TEIs are covered in the **Module on Administration of Donations** of the Guide.

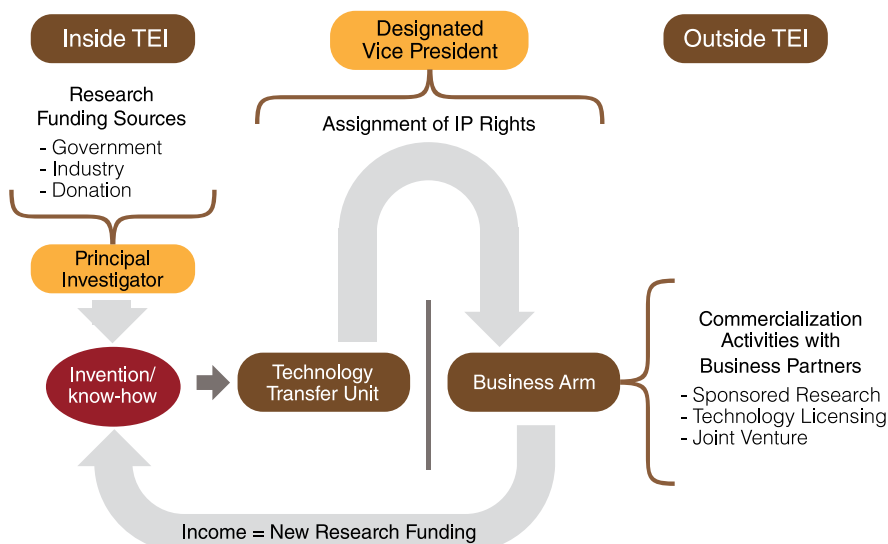
³ Royalty is normally paid at a percentage of the product sales throughout the licence period.

2.2.3 Joint Venture Business

This refers to the formation of a new company by the TEI and its business partner to continue the research and development work on an invention originally developed by the TEI, which has the prospect of being turned into a commercial product for sale and marketing. Under this arrangement, the TEI contributes its IP asset or provides consultancy services by its researchers as its capital injection to the joint venture (JV) company⁴. To foster an entrepreneurship culture, it is not uncommon for TEIs to encourage staff to establish a technology-based start-up company, which could become a JV if partnered with the TEI and the industry.

2.3 A Typical Commercialization Model

The following diagram illustrates a typical commercialization model which involves close work interface between a TEI and its stakeholders inside and outside the institution. With such a close relationship, it is important that the TEI handles the process with integrity and accountability, as any impropriety would easily attract allegations of favouritism or be perceived as transfer of benefits by the public.



Source: Diagram modeled on Isis Innovation, a technology transfer company wholly-owned by the University of Oxford.

2.3.1 Key Stakeholders in Commercialization

A brief account of the roles and responsibilities/functions of each key stakeholder in the commercialization process is given below:

- **Designated Vice President (VP)** – oversees the whole of TEI's commercialization process.
- **Principal Investigator (PI)**⁵ – conducts research projects funded by various sources, the output of which may be a technological invention or know-how with market potential.
- **Technology Transfer Unit (Chapter 3)** – assists in valuation of IP and filing of patents for the inventions (**Chapter 4**), sourcing of business partners (**Chapter 5**) and negotiating with them on the terms of collaboration (**Chapter 6**).

⁴ Also known as a spin-off company by some TEIs.

⁵ In this Module, the term "PI" is used to denote the TEI academic staff/researcher concerned and his research team collectively.

- **Business arm (Chapter 3)** – on behalf of the TEI, enters into contractual agreements with business partners and holds shares of JVs, and monitors the commercialization activities (Chapter 7).
- **Business partner** – includes the sponsor for sponsored research, licensee and JV partner who obtains the IP right of the invention/know-how for further development and usage, in accordance with the business agreement signed (Chapter 6.5).

2.4 Setting up Functional Boards and Committees

To facilitate important decision-making and due supervision over these commercialization activities, TEIs should establish various functional boards, committees or panels at different levels with their roles and responsibilities clearly defined in the terms of reference. They may include the following:

- **Technology Transfer Committee** – advises the TEI on policies and strategies relating to commercialization such as approval of important decisions and scrutiny of internal audit report, and co-ordinates the implementation of these policies and strategies.
- **Investment Committee** – advises the business arm on investment policies regarding JVs, e.g. the shareholding ratio between the TEI and the business partner, the TEI's initial contribution and "exit" strategy.
- **Patent Committee** – assesses the patentability and commercial viability of an invention and approves the applications for filing of patents.
- **Assessment Panel** – evaluates business collaboration requests/proposals and approves the selection of business partners.

TEIs should require committee members to declare conflict of interest as and when necessary, in particular any financial interest in the business partners, and properly document such declarations. To ensure effective operation of the committees, TEIs should formulate a policy on their composition, including:

- an adequate number of committee members, having regard to the size and scale of the technology transfer and commercialization functions which they perform;
- a balanced mix of membership, where applicable from the TEI's governing body and independent members with different professional or industry background or other expertise (e.g. finance, commerce and industry, experience as venture capitalist) to maintain checks and balances; and
- the tenure of committee Chairman and members as well as a mechanism for the nomination of new members into the committee.

2.4.1 Considerations for Commercialization

To ensure consistency in practice, the Technology Transfer Committee (**Chapter 2.4**) may take into account the following factors when determining the different commercialization modes to be adopted:

- Adherence to the TEI's mission of knowledge transfer.
- Adequacy of in-house resources to monitor the commercialization projects.
- Emerging or prevailing commercialization trends and practices adopted by the international and local academia.
- Development stage of the technology to be commercialized (e.g. technology in its infant stage may be unappealing to venture capitalists).
- Requirement of the TEI's capital investment (either in cash or in kind).

CHAPTER 3

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Setting up Administration Units

3.1 Introduction

To delineate core teaching and research activities from entrepreneurial endeavors, many TEIs create two independent administration units – an internal unit commonly known as the Technology Transfer Unit/Office to act as a bridge between the institution and its PIs on matters like filing patent applications for the TEI's technological inventions and marketing them to potential business partners; and an external business arm, which is a private entity wholly-owned by the TEI to serve as its vehicle to conduct business with the industry partners and act on its behalf in all sorts of contractual arrangements. Depending on the scale of their commercialization activities, some TEIs may just create one administration unit (usually a private entity) to serve both internal and external stakeholders and take up all activities relating to technology transfer and commercialization. This Chapter aims to provide corruption-resistant safeguards to help strengthen the governance and internal control of these administration units for their effective service delivery.

3.2 Governance and Organization Structure

In setting up the internal administration unit, TEIs should lay down clearly from the outset its terms of reference with the roles and responsibilities of the organizational hierarchy well-defined. To ensure there is adequate segregation of duties to meet specific operational needs, the organization structure of the unit should be organized in such a way that it comprises the following key functions:

- **IP/legal** responsibilities for the management of IP (e.g. maintenance of patent database (**Chapter 4.7**) and custody of the original business agreements) and drafting of legal documents including business agreements.
- **Business development**⁶ responsibilities for the major areas of the commercialization activities, including valuation of IP, identification of business partners for collaboration and negotiation of business terms.
- **Marketing** responsibilities for organizing/notifying researchers of the various marketing and outreach activities which may help in promoting the TEI's innovations, fostering TEI-industry relationship, and facilitating the early identification of potential business partners.

⁶ The scale and structure of the business development responsibilities may vary depending on the TEI's involvement in specific research specialty and subject areas ready for commercialization.

Similarly, in setting up the external business arm/private company, TEIs should incorporate in its Memorandum and Articles of Association the objectives and mission of the company together with the establishment of a Management Board for providing leadership, setting strategic directions and monitoring implementation of the laid down policies and strategies by the company. The TEI should appoint the designated VP (**Chapter 2.3.1**) and members of its governing body to the Management Board, and adhere to the principles laid down in **Chapter 2.4** when determining the Board composition. To ensure its effective governing role over the company, the Management Board should observe the following key elements:

- Issue a statement of commitment of the company to good governance and ethical practices in the conduct of all its businesses and activities, e.g. the company's "zero tolerance" policy towards corruption and fraud.
- Lay down Board meeting arrangements, e.g. quorum of the meeting and maintenance of minutes of meeting.
- Report back to the TEI's governing body or its designated committee periodically the progress of work of the company, including the nature and number of commercialization activities conducted.
- Publicize the company's Annual Report and audited financial statements on its website to enhance transparency of the work of the company, including a list of JVs currently under the company.

3.3 Instructions and Guidelines

To ensure consistent practices and guard against abuses, the administration units should, upon endorsement by the designated VP or the Management Board, draw up instructions/manuals and issue procedural guidelines on the major activities relating to technology transfer and commercialization for staff compliance, covering management and valuation of IP, selection of and negotiation with business partners, etc. In addition, procedures for key operations of the business arm such as procurement of goods, engagement of service providers, staff administration, and finance and accounting should be drawn up. The operational manuals/instructions should define clearly the roles and responsibilities of each level of employees, specify the approving authorities for making decisions in various activities and require proper documentation and records in the processes.

3.4 Probity Requirements

TEIs have issued a staff handbook and/or a staff Code of Conduct to their employees, covering policies and rules governing probity issues. To foster a culture of high integrity within the business arms, the Management Board should also draw up and issue similar probity requirements in the form of a Code of Conduct to Board members and staff who are not employed as TEI staff for strict compliance. A sample Code of Conduct is at the **Appendix**, with the key policies and provisions highlighted in the ensuing paragraphs.

3.4.1 Solicitation and Acceptance of Advantage and Entertainment

The Code should set out the policies governing solicitation and acceptance of advantage and entertainment, with particular reference to Section 9 of the Prevention of Bribery Ordinance (Cap. 201) (**Annex 1 of the Appendix**). Such policies should include:

- prohibition of Board members and staff from soliciting and accepting advantages (including shares of the business partners and JVs) from persons with whom they have official dealings, unless with the Management Board's permission, to ensure their objectivity in conducting the company's business;
- the permissible value of token gifts that Board members and staff are allowed to accept in their official capacity;
- the procedures and approving authority for acceptance of advantages under various circumstances; and
- a reminder to avoid accepting excessive, lavish or frequent entertainment offered by business partners, as this may constitute a "sweetener" effect in return for future demands or favourable treatment.

3.4.2 Conflict of Interest⁷

To better manage conflict of interest, the Management Board should:

- formulate a mechanism for Board members and staff to avoid and declare any actual and perceived conflict of interest, particularly any vested interest in their business partners;
- provide illustrative examples of conflict of interest situations to enhance staff understanding;
- devise a standard form for declaration of conflict of interest (**Annex 3 of the Appendix**); and
- establish a system to manage the declared conflicts, including the subsequent actions taken to mitigate the conflicts and the documentation of such actions.

⁷ A conflict of interest situation arises when the "private interests" of a Board member or employee compete or conflict with the interests of the TEI/business arm or his official duties. "Private interests" include any financial or other personal interests of the Board member or employee concerned, his family members or other relations, his personal friends, the clubs and associations to which he belongs, any other groups of people with whom he has personal or social ties, or any person to whom he owes a favour or is obligated in any way.

Protecting and Evaluating Intellectual Property Assets

4.1 Introduction

IP refers to a group of intangible property rights in relation to creations of the mind, the creators of which are recognized to have the ownership and exclusive rights in using them. It exists in such forms like patents, registered designs, copyrights, trademarks, business reputation and goodwill, which are all assets that may bring considerable amount of revenue to TEIs. The more common IP assets which TEIs transfer to the industry or community for commercialization are their **patented⁸** technological inventions in areas like biotechnology and engineering, and **copyrighted⁹** products such as software, multi-media teaching tools and educational materials. In view of the difficulties in objectively assessing the commercial value of the IP assets which, nevertheless, may enable their “buyers” or licensees to yield a substantial return when turning them into commercial products for wider consumer application, this Chapter aims to recommend corruption prevention measures for TEIs to better manage their IP assets for commercialization purposes.

4.2 Setting an Intellectual Property Policy

To facilitate the pursuits of technology transfer with outside parties and encourage research and development, it is important for TEIs to formulate a set of policy guidelines on IP for the inventions and discoveries by staff produced at the institution. The policy should not only set out clearly the related approval and administrative procedures, but also include the essential elements listed below:

- Fundamental principles and objectives in protecting IP, having regard to international standards and legal basis in determining IP ownership.
- TEIs’ rights to own and retain all IP rights arising from research and teaching activities, unless proper approval for a waiver from the designated VP (**Chapter 2.3.1**) has been sought.
- Procedures for PIs to disclose their inventions or original works for claiming IP rights (**Chapter 4.3**).

⁸ As the most common form of IP for technological invention, a patent serves to grant exclusive rights to its inventor to prevent others from making, using or selling the same invention.

⁹ Copyright refers to the protection of original works that fall under the categories of literature, dramatic, musical, artistic and intellectual. It is an automatic right which arises when a work is actually created, thus not necessary for the creator to register a copyright.

- Types of research output that will be protected (e.g. technological inventions, computer software), the way by which they will be protected (e.g. patent), and how they will be identified for transfer (**Chapter 4.4.1**).
- The party responsible for bearing the cost and fees of acquisition and maintenance of IP right in various circumstances (e.g. when the IP is created under TEI-assigned duties or is an output of a sponsored research).
- Income sharing arrangements with the PIs, if applicable (**Chapter 4.6**).
- The responsibility of the internal administration unit (**Chapter 3**) in managing the IP asset on behalf of the TEI.

4.3 Disclosure of an Invention/Know-how

The technology transfer process begins when the PI identifies an invention or completes a copyrightable work which has the potential for commercial development. To protect the TEI's IP right and prevent abuse, the PI should, in accordance with the IP policy (**Chapter 4.2**), report immediately such invention or original work via a standard "Invention Disclosure Form", providing essential information which includes the following details to the internal administration unit:

- Names of all inventors/creators;
- A brief description of the innovation, including the title, general purpose, improvements over existing practices/products, and development stage of the research;
- Funding source of the research;
- Potential commercial markets for the innovation;
- Companies that may be interested in commercializing the innovation; and
- A declaration by the PI on whether he has any financial or personal interest in these nominated companies.

4.4 Valuation of Invention for Patenting

Given the high cost in patent acquisition and maintenance, valuation of invention is a crucial step in the patenting procedure because it enables TEIs to consider whether it is value-for-money to file a patent for protection of the invention. For innovations or IP assets that are not patentable but nevertheless has potential for commercialization (e.g. computer software), TEIs should also assess their values and marketability by suitably adopting the following recommended measures.

4.4.1 Factors for Patenting

Upon receipt of an invention disclosure, the internal administration unit should preliminarily review and evaluate the invention, taking into account the following factors:

- Novelty of the disclosure, having regard to whether it is an innovation, i.e. a new discovery in science or technology, and if so, whether it is a technological invention that warrants patent protection or just a know-how that should only be copyright-protected;
- Stage of development and estimated lifecycle of the innovation;
- Market potential which includes application of the innovation in daily life and overall impact on society; and
- Whether patenting of the invention is a condition imposed by the funding source of the research project (e.g. some government-funded projects may specify the patenting of research output as a project deliverable).

4.4.2 The Valuation Process

Based on the factors listed in **Chapter 4.4.1**, the internal administration unit should conduct research to estimate the value of the invention as against the cost of patenting it, by going through the following procedures:

- “Prior art search”, i.e. checking the relevant academic literature and patent database (**Chapter 4.7**) or consulting a professional patent attorney to ascertain whether there is any publicly-known information about the invention;
- Market research on the potential commercial value of the invention by making reference to, say:
 - > research reports provided by internationally recognized market research companies (e.g. Frost & Sullivan) to estimate the market size;
 - > industrial standards of similar products to compare the royalty fees of these products; and
 - > standard business models to project the approximate income that could be generated (e.g. discounted cash flow analysis); and
- Estimation of total costs for acquiring and maintaining the patent.

4.5 Approving Patent Application

After conducting the initial analysis, the internal administration unit should preferably seek further comments from an independent researcher before submitting an evaluation report, together with supporting documents such as results of the prior art search, reference materials regarding the royalty fees, the independent researcher’s views, etc., to the Patent Committee (**Chapter 2.4**) for consideration. The identity of the independent researcher should be kept anonymous.

Upon the Patent Committee’s approval, the internal administration unit should contact the TEI’s patent agent to work with the PI concerned and file the patent application under the name of the TEI. If his patent application is not supported, the PI concerned should also be notified of the result.

4.6 Income Sharing Arrangement

To remunerate staff for their time and effort in the research work which produces income-generating innovations, TEIs normally share part of the income arising from commercialization activities (e.g. royalties paid by the licensees) with the PIs concerned. To avoid undue discretion in the disbursement of income, the following should be stipulated in the TEIs' income sharing policy:

- The ratio of income sharing among the PI, the TEI and the academic department/research centre concerned; and
- The various distribution methods (e.g. cash to be paid out or retained in an account administered by the TEI for further investment) of the income to the PIs.

4.7 Patent Database

For easy referencing and retrieval of information relating to IP rights, the internal administration unit should maintain a computerized patent database (e.g. by using off-the-shelf IP management software), covering data such as cost incurred in each patent application, statistics of patent applications, etc., to keep track of all patenting activities within the TEI.

CHAPTER 5

Selecting a Business Partner

5.1 Introduction

In commercializing a patented technology, one of the challenges faced by TEIs would be the uncertainty of its market potential and profitability, which may limit the selection of the most suitable business “buyer” or partner for the commercialization deal. For this reason, it is not uncommon for TEIs to engage in negotiations direct with the first and only company who has come forward to indicate an interest in any collaboration plan with the TEI. This practice, however, would invite allegations of favoritism or “under-the-table” deals, in particular if the business partner is nominated by the PI concerned or when the invention could subsequently be turned into successful commercial products with a substantial return. This Chapter recommends a host of good practices to help TEIs mitigate the risks of manipulation when sourcing their business partners for commercialization endeavors.

5.2 Marketing the Intellectual Property

To enhance transparency of the IP assets ready for commercialization, TEIs should adopt suitable means to display and promote these assets to draw the attention of the potential business partner(s), which include the following promotional channels:

- Draw up lists of the patented technology, know-how and research services available for commercialization with essential details (e.g. a brief introduction of the technology, advantages over the existing practices, potential benefits it could bring) and publicize them on the website of the TEI and the administration units (**Chapter 3**), or through other promotional means such as mass mailing within the alumni network so that interested companies could approach the TEI direct.
- Publish feature articles to introduce the innovation in academic and research journals of the relevant fields or trade-specific newsletters, with contribution from the PI concerned.
- Organize marketing and outreach activities like technology seminars and visits to trade associations to “sell” the innovation to the “target customers” in the industry.
- Participate in promotional events such as trade fairs and innovation competitions to introduce the innovation to potential business partners.
- Build up a database of potential business partners and companies, including those sourced

through various promotional means mentioned above and nominated by the PI concerned and relevant staff of the administration units based on their personal network, to facilitate direct marketing whenever an innovation is available for commercialization.

5.3 Laying Down Selection Requirements

Although it may be an industrial norm for TEIs to engage in negotiation directly with the first company that appears to be interested in collaboration, they could stipulate a set of selection criteria in broad terms, which are, in practice, embedded in the minds of individual staff of the TEI/administration units. To enhance transparency and impartiality of the selection process and ensure the potential partner is “qualified” to take forward the commercialization deal, some essential selection criteria such as the following may be laid down and made known to the potential partner(s):

- Profile of the potential business partner, including the company's:
 - > experience, strength and credentials in the relevant industry;
 - > technical capability in developing and bringing the innovation into the market;
 - > financial strength and commitment in investing into the collaboration; and
 - > track record, if any, in collaborating with the TEI in commercialization activities.
- Benefits that could be brought to the TEI and any other impact on the society.
- Any negative impact on the image or reputation of the TEI in collaborating with the business partner (e.g. association with certain undesirable industry like the tobacco business).
- Possibility of the potential partner to collaborate together with other partners under the same IP.

Where necessary, especially in the event of a JV business, the potential business partner(s) should be required to submit a written business proposal to facilitate a fair and objective comparison. The JV proposal should, among other things, cover:

- a competitive analysis of the innovation;
- the proposed capital injection and shareholding structure of each party;
- business strategies and timeframe in developing and introducing the products to the market;
- plans for promoting and marketing the commercialized products; and
- an estimation of turnover, profits and operational cost of the JV.

5.4 Handling Collaboration Requests

Companies interested in TEIs' commercialization projects may approach the TEI direct, or alternatively the TEI can outreach to a potential partner(s). To ensure that all interested companies are given a fair chance for consideration, the administration units are advised to:

- record all direct approaches from interested business partners in a register to facilitate proper follow-up actions;
- do the same as mentioned above in respect of the contacts they have made at the marketing stage (**Chapter 5.2**); and
- document and securely keep all business proposals received, if any, before assessment.

5.5 Evaluation and Approval of Business Partners

To avoid bias or domination by individual staff member(s) in the evaluation of a collaboration request or proposal, TEIs should adopt the following safeguards wherever possible:

- Designate an Assessment Panel (**Chapter 2.4**) to evaluate the requests/proposals and approve the selection of business partners;
- Devise a marking scheme based on the pre-determined selection criteria with weightings attached to each criterion to facilitate the Panel members' systematic assessment and comparison of the merits of the requests/proposals;
- Compile a summary of the companies rejected at the initial contact stage (**Chapter 5.4**) (e.g. the company's name and background, date of first contact, response of the company, reasons for rejection), if any, for the information of the Panel; and
- Document properly the assessment results, with supporting documents attached where applicable.

5.5.1 Due Diligence Check

In evaluating the collaboration requests/proposals, TEIs should also conduct due diligence check on the potential business partners to ascertain their company and financial background and protect the TEI from associating with undesirable companies or persons. In this connection, TEIs should:

- request the potential business partners to submit business certificates and other relevant documents;
- obtain the names of the companies' ultimate shareholders (i.e. the individuals ultimately holding the shares of that company) for background checking; and
- engage renowned service provider specialized in maintaining commercial database (e.g. Dun & Bradstreet) to see if there are any anomalies such as records of poor financial management in the potential partners.

CHAPTER 6

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Negotiating Collaboration Terms

6.1 Introduction

Negotiation plays an important part in the commercialization process, particularly in the case of JV business where the terms of collaboration have to be agreed and resolved by both the TEI and its partner after rounds of negotiation. It is also a highly corruption prone process given the discretion and flexibility required by the negotiators on either side in order to finalize a commercial deal. Any corrupt dealings by the TEI negotiator will not only bring disrepute to the TEI, but also hurt its revenue income. This Chapter aims to provide corruption prevention safeguards to help TEIs strengthen their internal control when engaging in negotiation with their business partners.

6.2 Designating a Negotiation Team

Since negotiations conducted in one-to-one situation by the internal administration unit (**Chapter 3**) would place the TEI negotiator in a vulnerable position, the unit head should designate a team to conduct negotiations. The size and the relevant expertise required (e.g. legal background) of the team should be determined in light of the types of research output under consideration, the potential revenue to be generated, the complexity of the terms and conditions to be agreed upon, etc.

6.3 Setting the Parameters and Baseline for Negotiation

To control the exercise of discretion by the negotiation team, the head of the internal administration unit should define and approve the baseline proposed by the team before commencement of the negotiation, based on objective references and industrial practices which may include the following:

- Valuation of the invention (**Chapter 4.4**).
- Estimated cost for the setup of the JV and the initial capital injection (both in kind and in cash) of each party, including staff cost, equipment required and other operating costs, etc., having regard to TEI's laid down JV policies pre-determined by the Investment Committee (**Chapter 2.4**).
- Publications issued by IP experts or renowned associations (e.g. Association of University Technology Managers) for similar commercialization transactions that took place in the industry.

- Management and control of the IP rights transferred, e.g. whether it is an exclusive IP right.
- Duration of the collaboration and the agreement period.

6.4 Conduct of Negotiation

While the negotiators may be given a free hand in conducting negotiations, they should be issued with guidelines on prohibited conduct, which include:

- ✗ holding the negotiation at an entertaining establishment;
- ✗ disclosing sensitive commercial information of a business partner under negotiation (e.g. business plans and IP rights) to assist others in enhancing the competitiveness of their proposals;
- ✗ indicating to the business partner the baseline that the TEI is prepared to accept;
- ✗ soliciting or accepting advantages and entertainment from the business partner under negotiation; and
- ✗ participating in the negotiation with a business partner in which they have a financial interest.

After the negotiation, the team should require the potential partner to submit a best and final offer to confirm its offer, and prepare a report documenting the key points discussed or agreed, including the initial offer and counter-offer(s) for consideration and approval by the unit head. Under no circumstances should the negotiation team be allowed to commit the TEI to accepting any terms outside the approved baselines without further seeking the unit head's endorsement.

6.5 Signing Business Agreements

Upon approval and consulting the IP/legal staff, the business arm (**Chapter 3**) should enter into a contractual agreement with the business partner, setting out the terms and conditions of the collaboration and the duties and obligations of both parties. The key contractual terms may include the following:

6.5.1 General

- **Project description** – the agreed scope, cost and expected deliverable(s) of the project.
- **IP ownership** – the business partner is granted the exclusive or non-exclusive right to use the IP during the licence period which may last until the expiry of the patent.
- **Payment terms** – the business partner has to pay an upfront licence fee and/or royalty according to an agreed schedule.
- **Reporting requirement** – the business partner has to periodically report efforts made to develop the technology and sales figure of the licensed product sold.
- **Confidentiality** – each party is required to keep secret and confidential all commercial information obtained from the other party.

- **Termination** – either party may terminate the agreement if the other party breaches any terms set out in the agreement.

6.5.2 Specific to Shareholders' Agreement for Joint Venture

- **Establishment** – the authorized share capital, shareholding structure and the initial investment (both in cash and in kind) of each party.
- **Management of the company** – the number of Directors from each party, proceedings of Board meetings, supervision of the company's daily operation and basis for sharing of profits.
- **Transfer of shares** – transfer of shares is not allowed unless agreed by the other party. A shareholder must first offer its shares to the other shareholder(s) and could only transfer the shares to a third party if the other shareholder(s) does not accept those shares.

CHAPTER 7

Managing Commercialization Projects

7.1 Introduction

The business arm (**Chapter 3**) of TEIs is generally responsible for managing and monitoring the different modes of commercialization projects in accordance with the terms and conditions agreed with the business partners. Although the amount involved in commercialization activities may be minimal when compared to the overall budget of the TEI, it is important that the institution's pursuit for technological entrepreneurship is transparent, accountable and properly managed to maintain the good reputation of the TEI. With the rapid growth of commercialization activities within the TEI sector, this Chapter aims to provide safeguards against malpractices to help TEIs strengthen their internal controls in managing and monitoring the commercialization projects.

7.2 Sponsored Research

To ensure the timely completion of sponsored research projects in compliance with the terms and conditions agreed with the sponsors, TEIs should require the PIs to:

- draw up a project plan covering key areas like timeframe, manpower deployment and budget breakdown for endorsement by the supervisor (e.g. Head of Department/Dean of Faculty);
- submit periodical progress report and a final report upon completion of the project, including both technical and financial aspects of the project, for monitoring and review by the supervisor; and
- seek the supervisor's prior endorsement if there are any deviations (e.g. change of project deliverables) from the project plan before agreement with the sponsor.

Separately, the responsible staff of the business arm should obtain the sponsors' feedback on the research services provided by the PIs, and draw the attention of the Management Board (**Chapter 3.2**) to any anomalies (e.g. failure of the PI to complete the project) for follow-up action.

7.3 Technology Licensing

Whilst technology licensing requires the least management effort by the business arm when compared to other modes of commercialization, the business arm should establish an effective accounting system capable for the timely collection, chasing and recording of the payments from licensees, as well as distribution of the licence fees received to the PI in accordance with the laid down income sharing rules (**Chapter 4.6**). The business arm should also scrutinize the annual audited accounts or other periodic reports submitted by the licensees for verification of the royalties collected.

7.4 Joint Venture Business

Although the setup and nature of JV companies differ from one to another, the Management Board of the business arm should set out a clear mandate of the governance and daily management for individual JV companies and include it in the shareholders' agreement (**Chapter 6.5**) to ensure that the TEI's interest in the JVs is properly protected. Very often, TEI staff (the PI concerned and/or a representative of the Management Board) are deployed to sit on the JV's management hierarchy to oversee the company's business. While the TEI's degree of involvement in the JV may depend on its share of capital injection in the company and the contractual terms agreed with the JV partner, its monitoring mechanism should include the following areas:

7.4.1 Management Hierarchy

- Set out the governance framework to monitor each JV company.
- Designate an appropriate level of representative(s) to sit on the Board of the JV with their roles and responsibilities clearly defined to enhance accountability.
- Ensure the company maintains proper records of Board meetings and its business operations to facilitate audit trail.

7.4.2 Ethical Conduct

- Require each company to draw up ethical guidelines or a Code of Conduct for adoption and compliance by its Directors and staff, similar to that for the business arm (**Chapter 3.4**).
- Prohibit the TEI representative(s) from accepting paid executive responsibilities in the company to avoid conflict of interest. Those who wish to assume an executive role in the company should be required to apply for no-pay leave for the period of their stay in the company.

7.4.3 Reporting Requirements

- Require the representative(s) to report major business issues of the company back to the Management Board for consideration and decision-making.
- Require the company to submit business plans, periodic progress reports and audited financial statements to the Management Board so that the TEI is able to identify problems in the company at an early stage and make well-informed decisions to better manage its investments.

7.4.4 Performance Monitoring

- Devise a performance monitoring mechanism and assess the business performance of each company, including the market share gains, product quality and costs relative to those of its competitors, to enable a decision on whether the company should be further invested into or disposed of.
- Develop an "exit" strategy for each JV business at the business planning stage and execute the policy in a timely manner.

APPENDIX

Sample Code of Conduct

Introduction

1. The (*name of company*) (hereafter referred to as the Company) regards honesty, integrity and fair play as our core values that must be upheld by all directors and staff¹ of the Company at all times. This Code sets out the basic standard of conduct expected of all directors and staff, and the Company's policy on acceptance of advantage and handling of conflict of interest when dealing with the Company's business.

Prevention of Bribery**Prevention of Bribery Ordinance**

2. Under the Prevention of Bribery Ordinance (the Ordinance), any director or staff member who, without the permission of his employer or principal (i.e. the Company), solicits or accepts an advantage as a reward or inducement for doing any act or showing favour in relation to the latter's business, commits an offence. The person offering the advantage also commits an offence.

(The relevant provisions of Section 9 of the Ordinance and the definition of "advantage" are detailed at **Annex 1**.)

Acceptance of Advantage

3. It is the Company's policy that directors and staff should not solicit or accept any advantage for themselves or others, from any person, company or organization having business dealings with the Company, except that they may accept (but not solicit) the following advantages when offered on a voluntary basis:

- (a) advertising or promotional gifts or souvenirs of a nominal value; or
- (b) gifts given on festive or special occasions, subject to a maximum limit of \$_____ in value; or
- (c) discounts or other special offers given by any person or company to them as customers, on terms and conditions equally applicable to other customers in general; or
- (d) gifts or souvenirs of nominal value presented to them in official functions.

No director or staff member should accept any advantage from a subordinate, except those mentioned in paragraphs (a) and (b) above.

¹ "Staff" cover full-time, part-time and temporary staff, except where specified.

4. Gifts or souvenirs described in paragraph 3(d) above are deemed as offers to the Company. The directors and staff members concerned should report the acceptance to the Company and seek direction as to how to handle the gifts or souvenirs from *the approving authority*² using Form A (**Annex 2**). If a director or staff member wishes to accept any advantage not covered in paragraph 3, he/she should also seek permission from *the approving authority* using Form A.

5. However, a director or staff member should decline an offer of advantage if acceptance could affect his/her objectivity in conducting the Company's business or induce him/her to act against the interest of the Company, or acceptance will likely lead to perception or allegation of impropriety.

6. If a director or staff member has to act on behalf of a client in the course of carrying out the Company's business, he/she should also comply with any additional restrictions on acceptance of advantage that may be set by the client.

Offer of Advantage

7. Directors and staff are prohibited from offering advantages to any director or staff of another company or organization, for the purpose of influencing such person or company in any dealings, or any member or staff of a government department or public body while having business dealings with the latter, whether directly or indirectly through a third party, when conducting the Company's business.

Entertainment

8. As defined in Section 2 of the Ordinance, "entertainment" refers to food or drink provided for immediate consumption on the occasion, and any other entertainment provided at the same time. Although entertainment is an acceptable form of business and social behaviour, a director or staff member should avoid accepting overly lavish or frequent entertainment from persons with whom the Company has business dealings (e.g. suppliers or contractors) or from his/her subordinates to avoid placing himself/herself in a position of obligation.

Records, Accounts and Other Documents

9. Directors and staff should ensure that all records, receipts, accounts or other documents they submit to the Company give a true representation of the events or business transactions as shown in the documents. Intentional use of documents containing false information to deceive or mislead the Company, regardless of whether there is any gain or advantage involved, may constitute an offence under the Ordinance.

Compliance with Laws of Hong Kong and in Other Jurisdictions

10. Directors or staff must comply with all local laws and regulations when conducting the Company's business, and also those in other jurisdictions when conducting business there.

² Specify the post of the approving authority in the Code and the Form.

Conflict of Interest

11. Directors and staff should avoid any conflict of interest situation (i.e. situation where their private interest conflicts with the interest of the Company) or the perception of such conflicts. They should not misuse their position or authority in the Company to pursue their own private interests which include both financial or personal interests and those of their family members, relatives or close personal friends. When actual or potential conflict of interest arises, the director or staff member should make a declaration to the management through the reporting channel using Form B (**Annex 3**).

12. Some common examples of conflict of interest are described below but they are by no means exhaustive:

- (a) A staff member involved in a procurement exercise is closely related to or has financial interest in the business of a supplier who is being considered for selection by the Company.
- (b) One of the candidates under consideration in a recruitment or promotion exercise is a family member, a relative or a close personal friend of the staff member involved in the process.
- (c) A director of the Company has financial interest in a company whose quotation or tender is under consideration by the Board.
- (d) A staff member (full-time or part-time) undertaking part-time work with a contractor whom he is responsible for monitoring.

Use of Company Assets

13. Directors and staff in charge of or having access to any Company assets, including funds, property, information, and intellectual property, should use them solely for the purpose of conducting the Company's business. Unauthorized use, such as misuse for personal gain, is strictly prohibited.

Confidentiality of Information

14. Directors and staff should not disclose any classified information of the Company without authorization or misuse any Company information (e.g. unauthorized sale of the information). Those who have access to or are in control of such information, including information in the Company's computer system, should at all times protect the information from unauthorized disclosure or misuse. Special care should also be taken in the use of any personal data, including directors', staff's and customers' personal data, to ensure compliance with the Personal Data (Privacy) Ordinance.

Outside Employment

15. Any full-time staff who wish to take up employment outside the Company must seek the prior written approval of the approving authority. The approving authority should consider whether the outside employment would give rise to a conflict of interest with the staff's duties or the interest of the Company.

Relationship with Suppliers, Contractors and Customers

Gambling

16. Directors and staff are advised not to engage in frequent gambling activities (e.g. mahjong) with persons having business dealings with the Company.

Loans

17. Directors and staff should not accept any loan from, or through the assistance of, any individual or organization having business dealings with the Company. There is however no restriction on borrowing from licensed banks or financial institutions.

[The Company may wish to include other guidelines on the conduct required of directors and staff in their dealings with suppliers, contractors, customers, and other business partners as appropriate to specific trades.]

Compliance with the Code

18. It is the responsibility of every director and staff member of the Company to understand and comply with this Code, whether performing his company duties in or outside Hong Kong. Managers and supervisors should also ensure that the staff under their supervision understand well and comply with this Code.

19. Any director or staff member in breach of this Code will be subject to disciplinary action, including termination of appointment. In case of suspected corruption, a report will be made to the ICAC, and of other criminal offences, to the appropriate authority.

20. Any enquiries about this Code or reports of possible breaches of this Code should be made to *(post of designated senior staff)*.

Date :

(Name of Company)

Extracts of the Prevention of Bribery Ordinance

Section 9

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- (1) Any agent who, without lawful authority or reasonable excuse, solicits or accepts any advantage as an inducement to or reward for or otherwise on account of his –
 - (a) doing or forbearing to do, or having done or forborne to do, any act in relation to his principal's affairs or business; or
 - (b) showing or forbearing to show, or having shown or forborne to show, favour or disfavour to any person in relation to his principal's affairs or business,
 shall be guilty of an offence.
- (2) Any person, who, without lawful authority or reasonable excuse, offers any advantage to any agent as an inducement to or reward for or otherwise on account of the agent's –
 - (a) doing or forbearing to do, or having done or forborne to do, any act in relation to his principal's affairs or business; or
 - (b) showing or forbearing to show, or having shown or forborne to show, favour or disfavour to any person in relation to his principal's affairs or business,
 shall be guilty of an offence.
- (3) Any agent who, with intent to deceive his principal, uses any receipt, account or other document –
 - (a) in respect of which the principal is interested; and
 - (b) which contains any statement which is false or erroneous or defective in any material particular; and
 - (c) which to his knowledge is intended to mislead the principal,
 shall be guilty of an offence.
- (4) If an agent solicits or accepts an advantage with the permission of his principal, being permission which complies with subsection (5), neither he nor the person who offered the advantage shall be guilty of an offence under subsection (1) or (2).
- (5) For the purpose of subsection (4) permission shall –
 - (a) be given before the advantage is offered, solicited or accepted; or
 - (b) in any case where an advantage has been offered or accepted without prior permission, be applied for and given as soon as reasonably possible after such offer or acceptance,
 and for such permission to be effective for the purpose of subsection (4), the principal shall, before giving such permission, have regard to the circumstances in which it is sought.

Section 2

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“Advantage” means :

- (a) any gift, loan, fee, reward or commission consisting of money or of any valuable security or of other property or interest in property of any description;
 - (b) any office, employment or contract;
 - (c) any payment, release, discharge or liquidation of any loan, obligation or other liability, whether in whole or in part;
 - (d) any other service, or favour (other than entertainment), including protection from any penalty or disability incurred or apprehended or from any action or proceedings of a disciplinary, civil or criminal nature, whether or not already instituted;
 - (e) the exercise or forbearance from the exercise of any right or any power or duty; and
 - (f) any offer, undertaking or promise, whether conditional or unconditional, of any advantage within the meaning of any of the preceding paragraphs (a), (b), (c), (d) and (e),
- but does not include an election donation within the meaning of the Elections (Corrupt and Illegal Conduct) Ordinance (Cap. 554), particulars of which are included in an election return in accordance with that Ordinance.

“Entertainment” means :

The provision of food or drink, for consumption on the occasion when it is provided, and of any other entertainment connected with, or provided at the same time as, such provisions.

Section 19

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In any proceedings for an offence under this Ordinance, it shall not be a defence to show that any such advantage as is mentioned in this Ordinance is customary in any profession, trade, vocation or calling.

Report on Gifts Received

Form A

Part A – To be completed by Receiving Staff

To : (Approving Authority)

Description of Offeror :

Name & Title of Offeror : _____

Company : _____

Relationship (Business / Personal) : _____

Occasion on which the Gift was / is to be received : _____

Description & (assessed) value of the Gift : _____

Suggested Method of Disposal :**Remark**☐ Retain by the Receiving Staff☐ Retain for Display / as a Souvenir in the Office☐ Share among the Office☐ Reserve as Lucky Draw Prize at Staff Function☐ Donate to a Charitable Organization☐ Return to Offeror☐ Others (please specify) : _____

(Date)

(Name of Receiving Staff)
(Title / Department)**Part B – To be completed by Approving Authority**

To : (Name of Receiving Staff)

The recommended method of disposal is ***approved / not approved**. *The gift(s) concerned should be disposed of by way of : _____

(Date)

(Name of Receiving Staff)
(Title / Department)*** Please delete as appropriate.**

Declaration of Conflict of Interest

Form B

Part A – Declaration *(To be completed by Declaring Staff)*

To : (Approving Authority) via (Supervisor of the Declaring Staff)

I would like to report the following actual/potential* conflict of interest situation arising during the discharge of my official duties:-

Persons/companies with whom/which I have official dealings
My relationship with the persons/companies (e.g. relative)
Relationship of the persons/companies with our company (e.g. supplier)
Brief description of my duties which involved the persons/companies (e.g. handling of tender exercise)

(Date)

(Name of Declaring Staff)
(Title / Department)

Part B – Acknowledgement *(To be completed by Approving Authority)*

To : (Declaring Staff) via (Supervisor of the Declaring Staff)

Acknowledgement of Declaration

The information contained in your declaration form of _____ (Date) _____ is noted. It has been decided that:-

- ☐ You should refrain from performing or getting involved in performing the work, as described in Part A, which may give rise to a conflict.
- ☐ You may continue to handle the work as described in Part A, provided that there is no change in the information declared above, and you must uphold the company's interest without being influenced by your private interest.
- ☐ Others (please specify) : _____

(Date)

(Name of Approving Authority)
(Title / Department)

* Please delete as appropriate.

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