

New Methods and Future Development

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Topics covered in the presentation

- Features of the Hong Kong Government Supplies Department's procurement system
- The development of an electronic tendering system for GSD
- How electronic tendering might change procurement for the National Laboratory construction project
 - APEC's procurement principles maintained
 - benefits obtained
- Future development of tendering
 - advantages and disadvantages of tendering as a method of procurement
 - modifications to traditional tendering practices
 - how the Internet will change government procurement

Main functions of GSD

- (i) to purchase many common-user items (e.g. stationery, cleaning materials, electrical appliances, textiles for making into uniforms), hold these items in a central store and deliver them to end-users when required, using its own fleet of vehicles;

Main functions of GSD

(ii) to act as the purchasing agent for government departments and NGOs acquiring products above a minimum value which are peculiar to their own needs and functions; such items are usually delivered by the supplier directly to the location of use;

Main functions of GSD

- (iii) to serve as the Government's source of expertise on purchasing and stores management; this function is discharged primarily through the secondment of Supplies Grade staff to other departments to manage departmental stores and assist in their own purchases.

Key Procurement Statistics 1998-99

- Total value of purchases : HK\$5,010 million
(US\$650 million)
- Registered suppliers : **4,763**
- Tender invitations issued : **49,118**
- Contracts awarded : **4,613**

Key Procurement Statistics 1998-99

■ Major categories of purchases

↗ pharmaceuticals :

HK\$1,560 million (US\$200 million) 31%

↗ computer equipment and software :

HK\$995 million (US\$130 million) 20%

↗ water treatment chemicals :

HK\$358 million (US\$46 million) 7%

↗ hospital and medical equipment :

HK\$304 million (US\$39 million) 6%

↗ scientific and laboratory equipment and consumables:

HK\$250 million (US\$32 million) 5%

Key Procurement Statistics 1998-99

■ Major categories of purchases

↗ fuel oils and hydrocarbon lubricants :

HK\$182 million (US\$24 million) 4%

↗ medical consumables :

HK\$169 million (US\$22 million) 3.5%

↗ telecommunications equipment :

HK\$128 million (US\$17 million)
2.5%

↗ other categories :

HK\$1,064 million (US\$137 million)
21%

Key Procurement Statistics 1998-99

- Products purchased were manufactured in 36 countries or administrative regions
- Major sources of supply

	<u>HK\$(M)</u>	<u>%</u>
USA	1,613	32
China	717	14
<i>(excluding Hong Kong, Macau and Taiwan)</i>		
UK	395	7.9
Switzerland	382	7.6
Germany	344	6.9
Australia	264	5.3
Japan	205	4.1
Hong Kong, China	167	3.3
Other countries	923	18.4

Key features of GSD's purchasing system

- Adherence to WTO Agreement on Government Procurement requirements
- Forms of tendering
 - Open public tenders
 - Tenders following prequalification
 - Restricted and single tenders

Key features of GSD's purchasing system

- Approval by tender board
 - Central Tender Board for contracts for goods and services above HK\$10 million and works contracts above HK\$30 million
 - Supplies Tender Board for contracts for goods and services above HK\$1.3 million up to HK\$10 million
 - Works Tender Board for works contracts above HK\$3 million up to HK\$30 million
- Low value procurements
 - decentralised
 - quotations
 - repeat buy
 - Government purchasing card

Tendering by manual procedures

1. Prepare tender documents and specifications
2. Issue invitation to tender
 - ↗ tender notice published in Government Gazette and 4 Hong Kong newspapers
 - ↗ copies sent to overseas trade consuls in Hong Kong
3. Issue of tender documents
 - ↗ to registered suppliers for category of product to be purchased
 - ↗ to other potential suppliers on request
4. Tender offers deposited in tender box by stipulated tender closing time

Tendering by manual procedures

5. Tender evaluation

6. Submission to tender board

7. Award of contract

- letter of acceptance to successful tenderer
- name of successful contractor and contract price published in Government Gazette
- letter to unsuccessful tenderers informing them of reason for rejection of offer

Manual procedures supplemented by Internet

- 1995 : GSD launched Home Page on Internet
- Home Page now contains information in English and Chinese on
 - Purchasing procedures
 - Market research enquiries
 - Forecast of future procurements
 - Notice of current tenders and prequalifications
 - Standard tender terms and conditions of contract
 - Notice of contract award
 - Code of access to information
 - Links to other sites of interest,
e.g. APEC, International Public Procurement Association

Hong Kong SAR Government's policy for Information Technology

■ Digital 21 strategy

➤ to enhance and promote Hong Kong's information infrastructure and services so as to make Hong Kong a leading digital city in the globally connected world of the 21st century

■ Electronic delivery of public services

➤ to establish an information infrastructure with an open, common interface, through which the public can transact business with the government electronically, 24 hours a day, 7 days a week

Hong Kong SAR Government's policy for Information Technology

■ Public Key Infrastructure

➤ to enable secure electronic transactions by providing a framework for ensuring the integrity of information exchanged and for authenticating the identity of participants in such transactions

➤ Hongkong Post will become a “root Certification Authority” for Hong Kong

- ✧ issue digital certificates

- ✧ define other Certification Authorities

Hong Kong SAR Government's policy for Information Technology

■ Legal framework

➤ to establish a clear legal framework for the conduct of electronic transactions

⊗ legal backing for use of data messages and digital signatures in electronic transactions

⊗ establishment of Certification Authorities

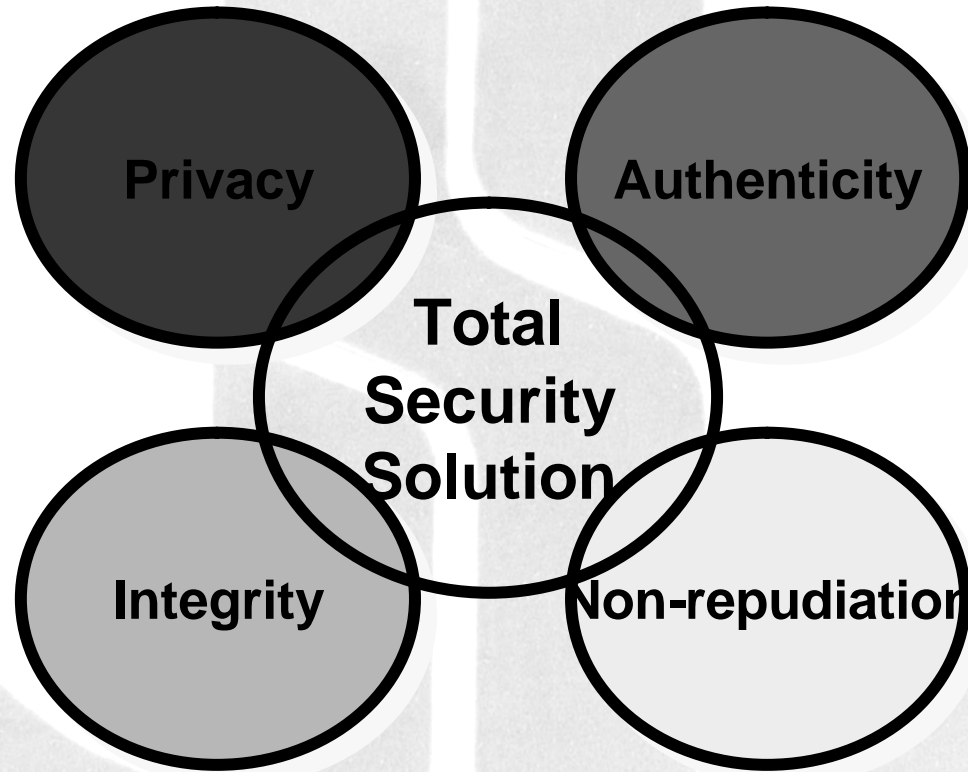
Development of an electronic tendering system for GSD

- May-October 1998* : Feasibility Study
- January 1998* : Request for information sent to registered suppliers and others who had expressed interest and put on Internet
- April-May 1998* : Presentations and demonstrations by potential vendors
- September 1998* : Funding approval
- December 1998* : Issue of tender invitation
- March 1999* : Award of contract for system development and operation
- December 1999* : Development of system completed
- January 2000* : Electronic tendering system operational

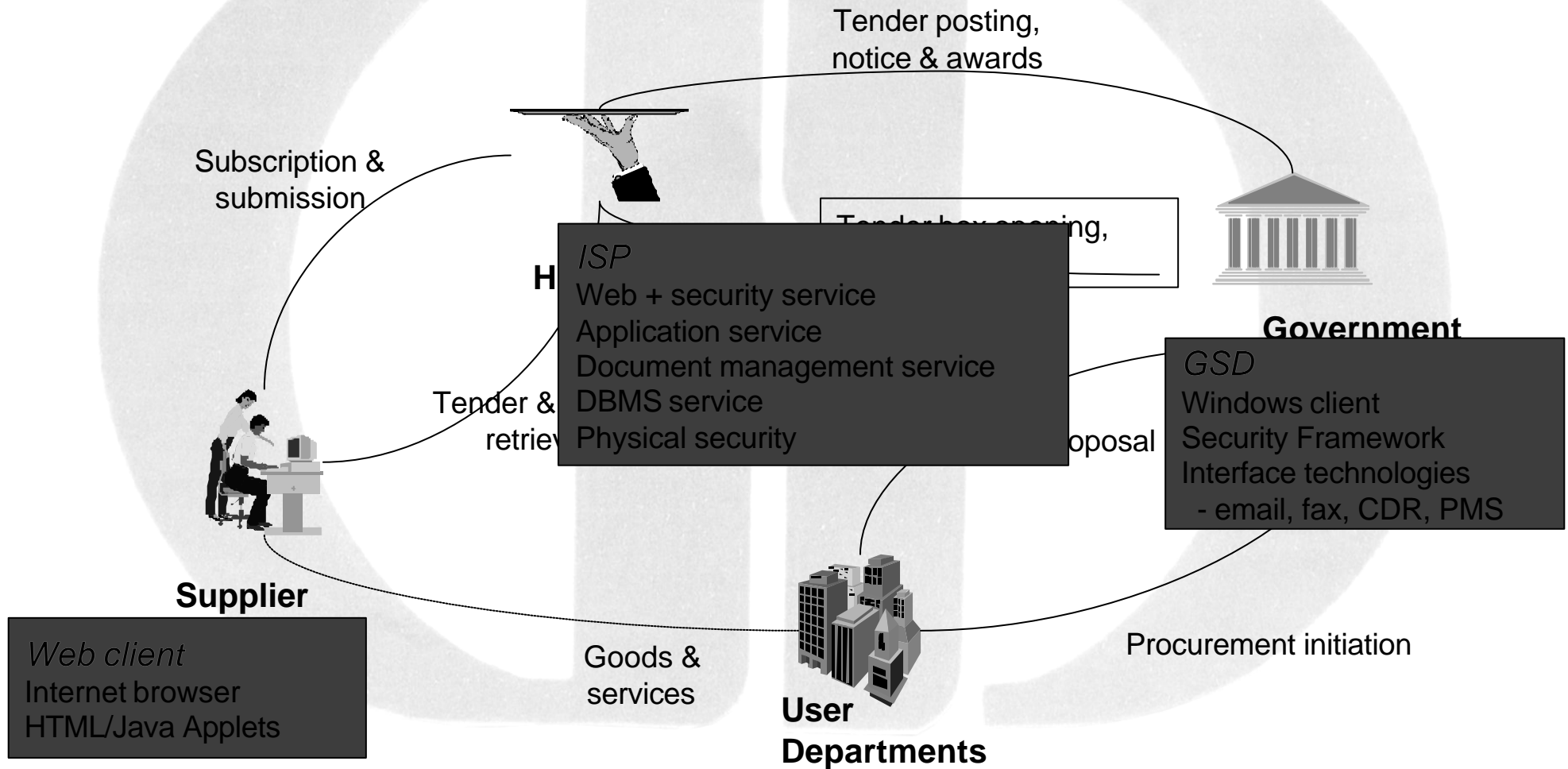
Features of GSD's electronic tendering system

- To be operated by contractor on subscription basis
 - ↗ subscription charge set at HK\$800 (US\$103) for a full year's benefits
 - ↗ infrequent users can pay a charge of HK\$20 (US\$2.60) each time
- Services to be provided by electronic means to subscribers
 - ↗ registration of suppliers
 - ↗ notification of tenders
 - ↗ issue of tender documents
 - ↗ receiving and responding to enquiries
 - ↗ submission of tender offers
- Suppliers will have a choice between existing manual system and electronic tendering system

Security Considerations



Solutions Overview

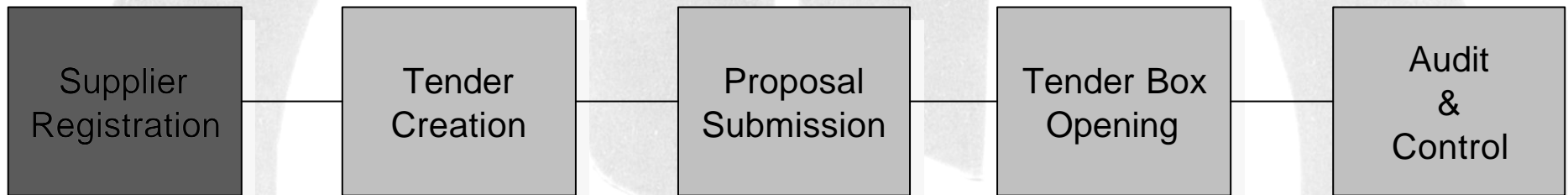


Electronic Tendering System Business Process





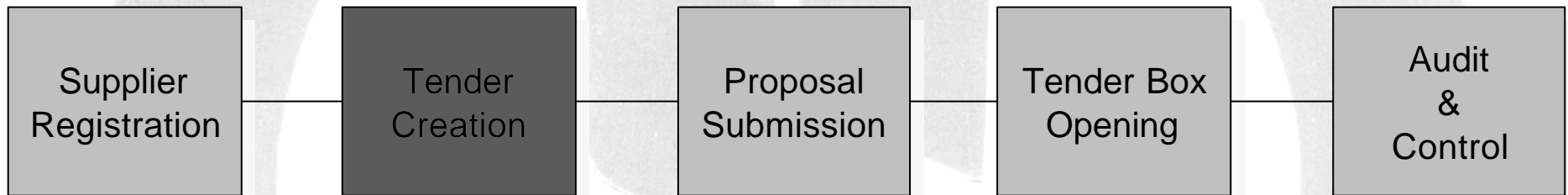
Business Process Supplier Registration



- **Suppliers interact with the ETS via common web browsers without pre-installing additional software. All supplier data sent to ETS is encrypted via RSA encryption standard**
- **ETS Web client supports on-line searching, general or specific tender queries, document download, registration and submissions.**



Business Process Tender Creation



- **Tenders are created with interface data from PMS. Tender documents and notifications are posted to the web automatically via the web publishing agent.**
- **The Electronic Tender Box provides a secured repository for tender proposals**



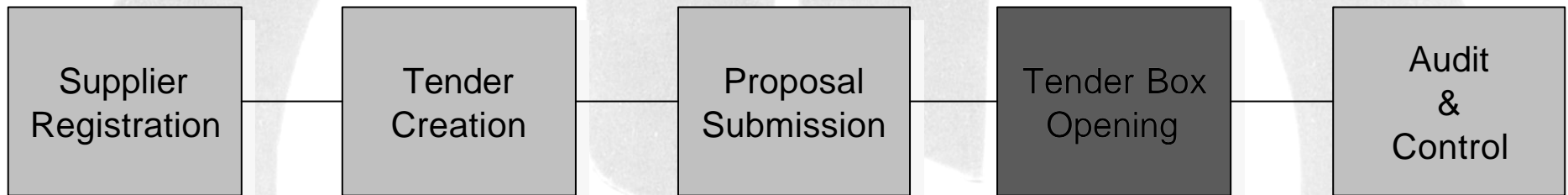
Business Process Proposal Submission



- Tender submissions are managed by a security framework ensuring *privacy*, *integrity* and *authenticity*. Tender proposals are managed by a dedicated document server providing additional flexibility and ease of maintenance.



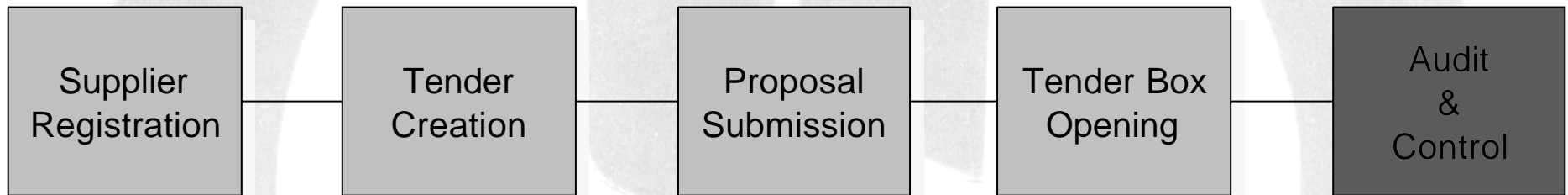
Business Process Tender Box Opening



- **Tender box opening procedure is designed to co-exist with current manual process at GSD.**
- **Comprehensive security and integrity control are installed**



Business Process Auditing and Security Control



- **Our design provides all level of logging with related to tender download and submission. Comprehensive audit trails are available together with performance and analysis statistics for further expansion.**

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- Electronic tendering means more efficient mode of delivery, does not change tendering principles

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- APEC's non-binding principles on government procurement continue to apply
 - Transparency principle : sufficient and relevant information should be made available to all interested parties consistently and in a timely manner through a readily accessible, widely available medium at no or reasonable cost
 - ⊗ tender information, including regulations and procedures, readily accessible and instantaneous
 - ⊗ on-line enquiry function to assist those not familiar with the organization's tender requirements and procedures
 - ⊗ reach of tender invitation extended to potential suppliers throughout the globe
 - ⊗ cost of electronic tender submission should be kept below cost of courier service
 - ⊗ prompt notification of contract award and reasons for

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- APEC's non-binding principles on government procurement continue to apply
 - Value for money principle : GP practices and procedures should be directed to achieving the best available value for money ... on a whole of life basis

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- APEC's non-binding principles on government procurement continue to apply
 - Open and effective competition principle : GP regime should be open and facilitate levels of competition commensurate with the benefits received ... readily accessible to all potential suppliers
 - ⊗ extending the reach of tender invitation to potential suppliers throughout the globe may improve the prospect of obtaining more competitive offers
 - ⊗ instantaneous transmission allows tenderer more time to prepare his proposal
 - ⊗ an efficient and cost effective system may reduce the administrative costs of tendering both for the purchasing organization and its suppliers

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- APEC's non-binding principles on government procurement continue to apply
 - Fair dealing principle : procurement activities are conducted in a fair, reasonable and equitable manner and with integrity
 - ⊛ electronic tendering systems facilitate even-handed treatment of suppliers by easy transmission of information to all
 - ⊛ geographically-distant suppliers are not disadvantaged in comparison with local suppliers
 - ⊛ high level of security maintains confidentiality and prevents unauthorized access and amendment of bids
 - ⊛ tender box opening maintained under secure

How would procurement for the National Laboratory construction project proceed if tendering through electronic means is introduced?

- APEC's non-binding principles on government procurement continue to apply

➤ Accountability and due process principle :
accountable to their governments, the end-users, the public and suppliers for the efficient, cost-effective and fair conduct of their procurement

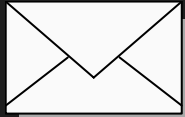
- ⊗ audit trail maintained throughout procurement process

- ⊗ integrity of system audited by independent authority (Hong Kong Productivity Council)

- ⊗ facilitates bid-challenge or other review mechanism

The business advantages of electronic tendering

Sending a 42-page document from Ottawa to HK



Courier

3 days

\$39.00



Fax

31 minutes

\$24.49



Internet

2 minutes

\$0.11

2160 times faster

Over 350 times cheaper

Source: Industry Canada Compilations

Benefits which the National Laboratory Construction project might obtain through electronic tendering

- Access to wider range of potential suppliers
- More competitive offers
- More time for tenderers to prepare proposals will help to ensure that proposals satisfactorily meet the needs of buyers
 - round-the-clock downloading of tender documents
 - instantaneous submission of bids
- Easier enquiry and response function may reduce risk of misunderstanding of requirements
- Shortening of procurement process
- Lower administrative costs for purchasing organization and for tenderers

What is the future development of tendering methods?

■ Advantages of tendering as a method of procurement

➤ **Fair**

- ⊗ based on rules and specifications determined in advance of the procurement process
- ⊗ if properly conducted, tendering can avoid favoritism or bias in the procurement process

➤ **Transparent**

- ⊗ same information available to all potential tenderers
- ⊗ reasons for acceptance or rejection of offers can be explained by reference to procurement rules or tender specifications

What is the future development of tendering methods?

- Advantages of tendering as a method of procurement
 - **Accountable**
 - ⊗ compliance with procurement rules can be monitored by legislature
 - ⊗ bid challenge system or other redress mechanism can be provided

What is the future development of tendering methods?

■ Disadvantages of tendering

- public perception that government organizations acquire cheap, low quality products and services
- end-users may not acquire the product that is best suited to their needs
 - ⊗ product specifications must be prepared with great care to provide a complete statement of desired product features
 - ⊗ relies on end-users' not suppliers' expertise to identify required product features
 - ⊗ end-users' may not be aware of current technological advancements
- may not produce competitive response
 - ⊗ vulnerable to cartels or market dominant supplier

What is the future development of tendering methods?

■ Disadvantages of tendering

➤ procurement process expensive and slow

⊗ over-elaborate procedures prolong the time of acquisition

⊗ lengthy documentation increases the administrative cost of procurement

➤ ~~may be unsuitable for low-value purchases~~
➤ absence of supply chain management

⊗ focus on competition not collaboration

⊗ absence of an incentive scheme to reward good-performing suppliers may mean that government is not regarded as a “preferred customer”

⊗ uncertainty over future business may lead supplier to try to recover total costs, including set up costs, during the initial contract term

Modifications to traditional tendering practices

- Electronic tendering
 - quicker, more convenient, cheaper and more user-friendly
- Longer term contracts
 - supplier has incentive to invest in the business relationship
- Prequalification (two-stage tendering)
 - ensures tendering confined to capable suppliers
- Marking schemes
 - products and services rated for quality aspects as well as price in tender evaluation
 - distinction made between mandatory and desirable product features
 - tenderers may be given extra marks for submitting alternative proposals which bring added value to improve the offer

Modifications to traditional tendering practices

■ Framework agreements

- Supply contracts made through tendering process with more than one supplier but without commitment on the quantity to be purchased over the contract term
- End-users may draw from any of these contracts on terms which are no less favourable than those in the contract
- Advantages
 - ⊗ multisourcing ensures competition between contracted suppliers maintained throughout the contract term
 - ⊗ end-users obtain a choice over the product they acquire
 - ⊗ suitable for mass-produced, high-technology products, e.g. PCs, mobile phones, where tendered models and prices may rapidly become outdated

How will the Internet change government procurement?

- More consumer and business purchasing is being conducted via the Internet
 - Forecast of growth of inter-company trade of goods over the Internet in America

<u>1998</u>	<u>2003</u>
US\$43 billion	US\$1.3 trillion

(Source, Forrester Research, quoted in the Economist)

- Internet trading will become the norm not the exception among businesses

How will the Internet change government procurement?

■ Electronic product catalogues

- ↗ range of available products and prices displayed in purchasing organization's product catalogue
- ↗ suppliers maintain the content of their page of product catalogue, provide updates to product features and prices
- ↗ end-users select from catalogue the product brand that is available on the most favourable terms

■ Informediaries

- ↗ provide electronic product catalogue for particular product categories, together with search engines and all the information on which to base a purchasing decision

How will the Internet change government procurement?

- Enables more comprehensive packaging of related products and services
 - e.g. merging of IT, telecommunication and broadcasting products and services
 - e.g. plane ticket + hotel reservation + hire car
 - flexibility to offer comprehensive solution to unexpected changes
- Increases power of the purchaser vis à vis the supplier
 - more comprehensive product search and analysis to find best available offer
 - your alternative supplier is just a mouse-click away

How will the Internet change government procurement?

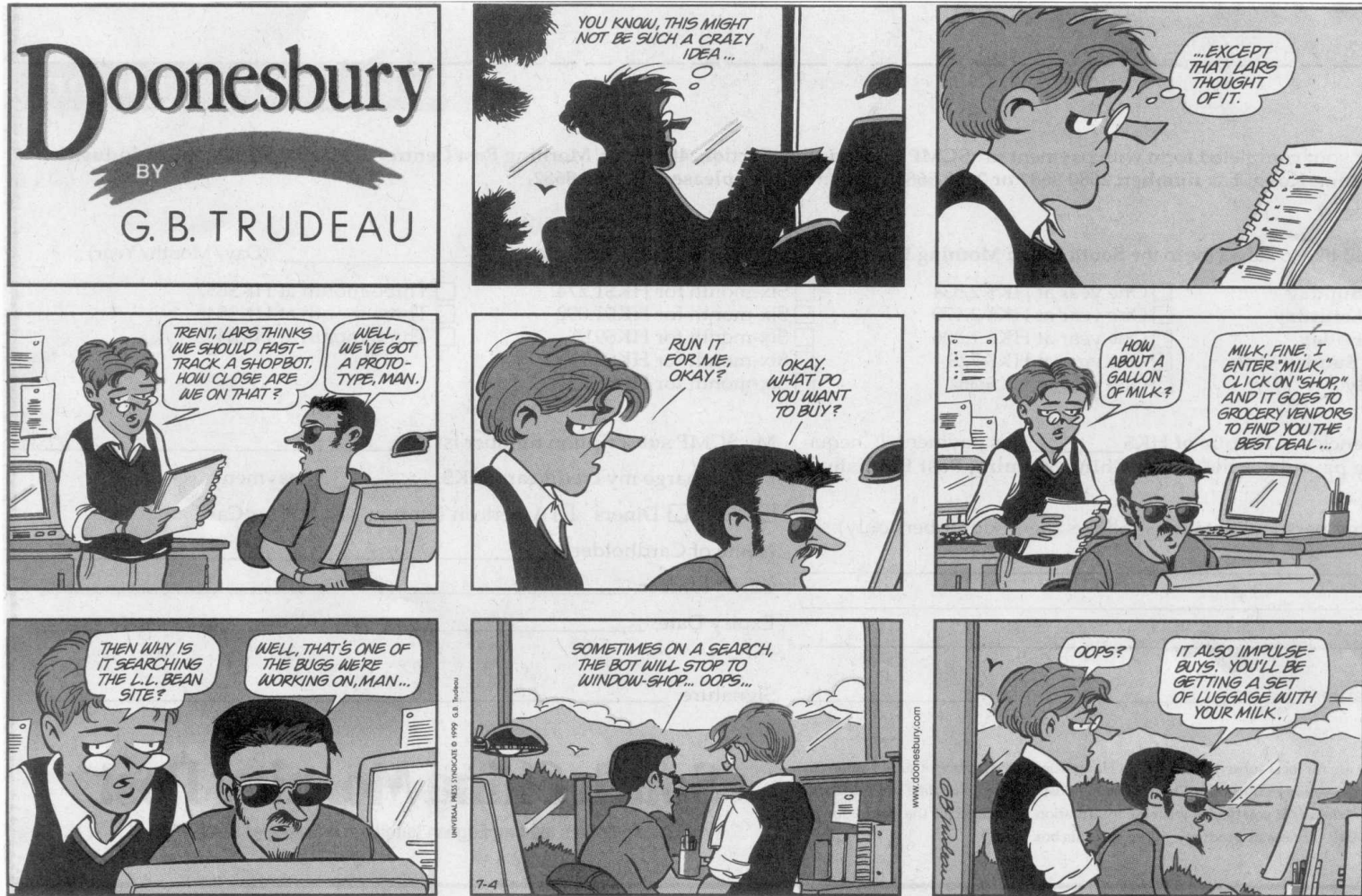
- Government procurement may become truly international
 - suppliers may seek access to a wider range of government markets
- Will electronic procurement harm SMEs?
 - “Its no longer about the big beating the small, its about the fast beating the slow.”
(Larry Carter, Chief Financial Officer, Cisco Systems)

How will the Internet change government procurement?

■ Possibilities for government purchasers

- Governments may eventually need to follow the trend to Internet trading
- Use of electronic product catalogues and intermediaries may replace part of traditional tendering
- Procurement rules may need to be modified to take account of the changing environment
- Purchasers should retain flexibility to adapt to rapid changes in product features, prices and package deals

Purchasing technology can sometimes go wrong



END

**Asia-Pacific Economic Cooperation
Workshop on Government Procurement Practices
Kunming, China, July 14-18, 1999**

**New Methods and Future Development
Presentation by Nigel Shipman, Director of Government Supplies,
Hong Kong, China**

The presentation will begin by looking at the features of the Hong Kong Government Supplies Department's (GSD) procurement system. The Department purchases goods and related services for all departments of the Hong Kong SAR Government and many non-government public sector organisations. (There are separate arrangements for public works contracts in Hong Kong). In 1998-99 it arranged over 4,600 supply contracts worth HK\$5,010 million (US\$650 million), for products manufactured in 36 countries or administrative regions. Hong Kong, China is a signatory to the WTO Agreement on Government Procurement and purchases within the scope of the Agreement are effected by tendering, with contracts approved by a tender board, though less formal and administratively simpler arrangements may be followed for low value purchases.

2. GSD already maintains an Internet Home Page with information on its procurements, though tender documents have to be sent out by post and tenderers must deposit their offers in the tender box by the stipulated time. As part of the Hong Kong SAR Government's programme to promote the electronic delivery of public services, GSD is currently developing an electronic tendering system which is planned to be operational by January 2000. The electronic system will be operated by a contractor on a subscription basis, though the existing manual system will be maintained and suppliers will have a choice which system they use to submit their tenders. The services to be provided by electronic means to subscribers include -

- registration of suppliers;
- notification of tenders;
- issue of tender documents;
- receiving and responding to enquiries;
- submission of tender offers; and
- notification of contract award.

There will be a total security solution that ensures privacy, authenticity, integrity and non-repudiation. This will be assisted by the establishment of a Public Key Infrastructure for Hong Kong and a clear legal framework for the conduct of electronic transactions.

3. If tendering through electronic means were to be introduced for procurements for the National Laboratory construction project, this would provide a more efficient mode of delivery but would not necessarily change the principles inherent in the tendering process. In particular, APEC's non-binding principles on government procurement, viz transparency, value for money, open and effective competition, fair dealing, accountability and due process, should not be diminished or repudiated by the introduction of an electronic tendering system. Electronic tendering may bring many business advantages, in particular by enabling documents to be transmitted much faster and cheaper than would be possible if post or courier services were used. An electronic tendering system may enable the purchasing organisation to access a wider range of potential suppliers, including geographically distant suppliers, and this may bring more competitive tender offers. By being able to download tender documents round the clock and to submit their bids instantaneously, tenderers would gain more time to prepare their proposals and may therefore be better able to ensure that their proposals satisfactorily meet the needs of buyers. The availability of an easy-to-use and rapid enquiry and response function may also help to reduce the risk of misunderstanding of the purchaser's requirements. Instantaneous transmission also opens the possibility of shortening the procurement process. An electronic tendering system could also bring lower administrative costs for the purchasing organisation and for tenderers.

4. Turning to the future development of tendering methods, tendering as a method of procurement has the advantages of being fair and transparent and it facilitates accountability. However, there may be a poor public perception of government procurement which sometimes associates tendering with the acquisition of cheap, low quality products and services. End-users sometimes complain that they have not through the tendering process acquired the product that is best suited to their needs. Moreover, in certain market situations, tendering may not produce a competitive response. If over-elaborate procedures are embedded into the tendering system, the procurement process may be expensive in administrative costs and the time of acquisition may be delayed, making tendering less suitable for low value purchases. Of particular concern is the absence of an incentive scheme to reward good performing suppliers. The possibility of losing the business when the contract comes up for retender may lead the supplier to try to recover total costs, including set-up costs, during the initial contract term. Moreover, if the supplier has sufficient non-government business to keep his plant busy, the government organisation may not be his preferred customer.

5. There are various means by which traditional tendering practices may be modified to address some of these concerns. As already noted, electronic tendering may provide a quicker, more convenient, cheaper and more user-friendly service. The making of longer term contracts may provide the supplier with an incentive to invest in the business relationship. Prequalification or two-stage tendering may ensure that tendering is confined to suppliers who are known to be capable of meeting the requirements. Marking schemes may be used to give more weight to quality as against price in the tender evaluation and to encourage tenderers to submit alternative proposals which bring added value. Framework agreements, by which more than one contractor is contracted to supply but without commitment on the quantity to be purchased over the contract term, may ensure that competition between contracted suppliers is maintained throughout the contract term and may thus be particularly suitable for mass-produced, high technology products where tendered models and prices may rapidly become outdated.

6. The Internet and related technologies are opening up new purchasing methods. Some purchasing organisations already have electronic product catalogues which display the range of available products and prices, with suppliers maintaining the content of their page of the product catalogue and providing updates to product features and prices, so that end-users may select from the catalogue the product brand that is available on the most favourable terms. More comprehensive packages of products and services are being assembled. Companies known as 'informed intermediaries' provide an electronic catalogue for particular product categories, together with search engines and all the information on which to base a purchasing decision. Both consumer and business purchasing through the Internet are growing exponentially and the time may come when Internet trading will be the norm not the exception among businesses. These developments have been widely welcomed by purchasers as they may help to strengthen their position in the supply market, by providing a more comprehensive search and analysis to find the best available offer and by making alternative sources of supply more readily accessible. These developments may open up new possibilities for government purchasing and may enable it to become truly international, particularly as suppliers themselves may seek access to a wider range of government markets. Governments may need to take account of these developments and consider the implications for their procurement rules.

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5 July 1999*
