CARGO PROCESSING AND ICT
Issues and Challenges in ASEAN Economies

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OUTLINE

- Cargo Processing and ICT

- Status of ICT application in Cargo Processing in ASEAN

- Issues affecting ICT effectiveness as instrument of Customs Control

- Cross-border Clearance: Rosettanet

CARGO PROCESSING AND ICT

• Average trade transaction would involve **30 parties**, **40 documents**, **200 data** elements, and **re-encoding** of **60 to 70%** of all data at least once. (UNCTAD, cited in ASEAN document)

• **Dual role of ICT in Customs**: **trade facilitation** and tighten **border control** (cargo security and safeguarding revenue)

- faceless, paperless transaction
- shorter clearance time
- lower transaction cost
- better data quality
- pre-arrival clearance
- management by exception

ASEAN AGENDA

Vientiane Action Programme (2004-2010)

- Establishment of **ASEAN Single Window**

- Creation of an integrated **ASEAN e-Customs Community**

- 30-min. average clearance time by 2006

Imperatives:

- Simplification and harmonization of documents and Customs formalities

- Automation of cargo processing
- Operational convergence

STATUS OF ICT APPLICATION

- Automated vs. manual customs clearance

  - manual : Lao, Myanmar
  - semi-automated: Cambodia, Brunei, Vietnam
  - automated: Indonesia, Philippines, Thailand
  - automated with inter-agency linkages: Singapore, Malaysia

- Application of risk management and reliance on audit-based controls

  - Less than 100% physical examination even in non-automated systems

 - Institution of green and red lanes

STATUS OF ICT APPLICATION

- Special processing: clearance based on minimum information (Philippines: Super Green Lane; Thailand: Gold Card; Indonesia: Priority channel)

  - Establishment of Post Clearance Audit (PCA) units

- Increasing connectivity of trading community

  - Customs with traders, port community, government agencies, financial institutions
  - NTMs make the connectivity imperative

  - Singapore's single permit system

  - Indonesia's Port EDI system

ISSUES IN ICT APPLICATION

Issue 1: Manual re-entry and extensive conversion of data due to lack of **standard data format**

SHIPPING LINE

EDI or Internet Network

CARGO MANIFEST

CUSTOMS
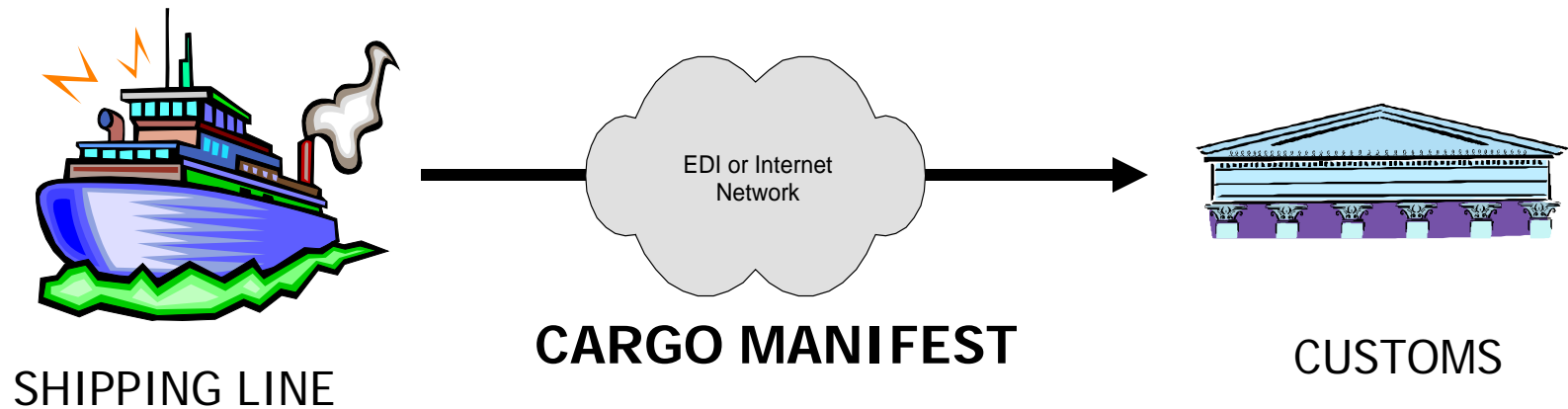
• In most ASEAN economies, inward manifest submission deadline is 24 hours **after** vessel arrival; outward manifest, 72 hours after vessel departure.

ISSUES IN ICT APPLICATION

Issue 2: Legal issues may prevent use of ICT.

- Electronic communications should be treated equivalent to paper-based documents.

- Only 5 of 10 ASEAN economies have electronic transactions law.

- Upshot: electronic lodgment and submission of supporting documents not allowed
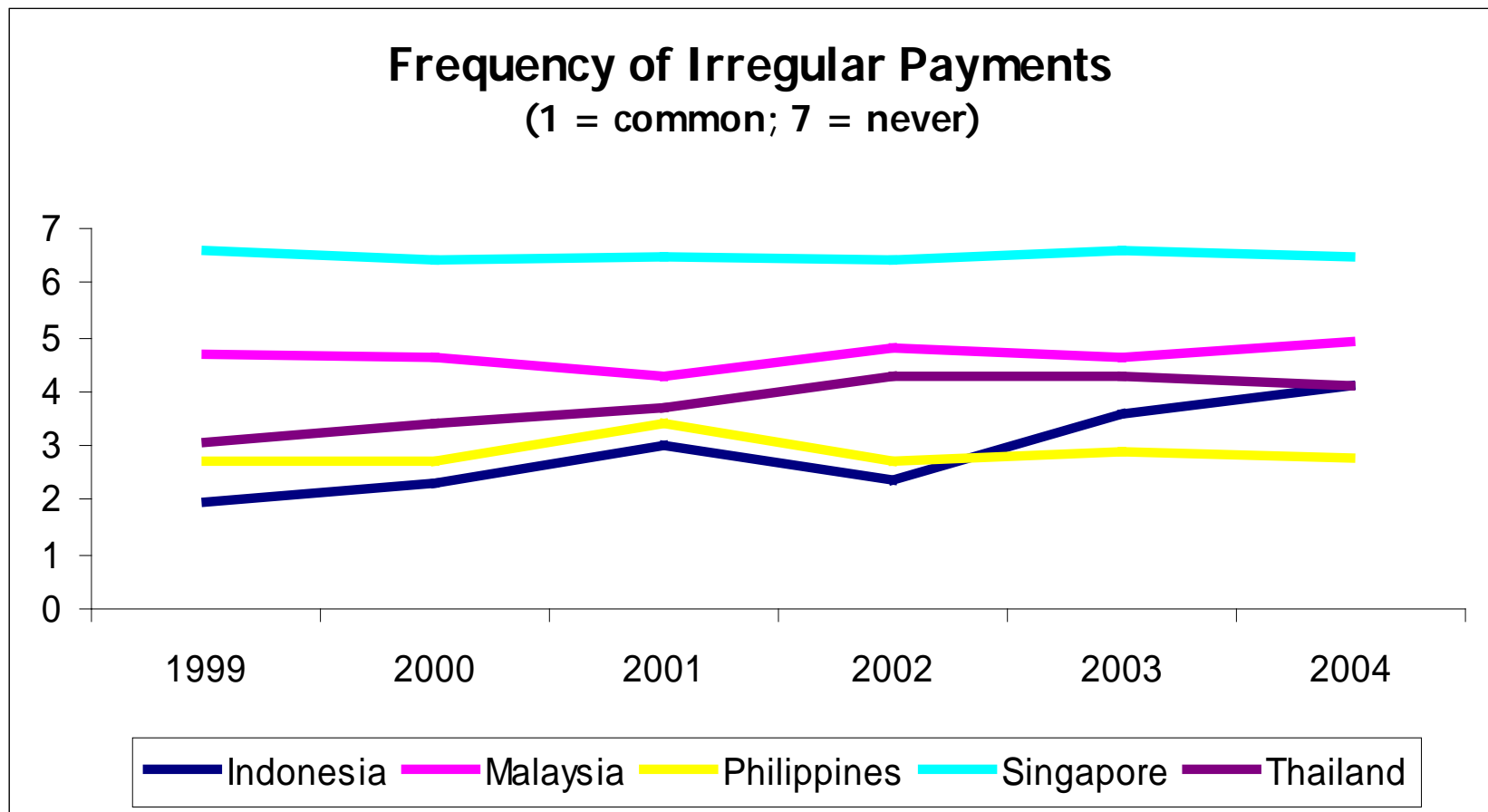
ISSUES IN ICT APPLICATION

Issue 3: Infrastructure constraint

- Not all entry points are connected
  - feasibility
  - scale

- Unless mandated, traders would prefer manual over electronic submission

- Where broadband facilities are scarce, EDI- or internet-based application is preferred over web-based application

ISSUES IN ICT APPLICATION

Issue 4: Use of ICT is not a sufficient condition to ensure integrity.

Frequency of Irregular Payments
(1 = common; 7 = never)

Legend: Indonesia, Malaysia, Philippines, Singapore, Thailand

Source: Global Competitiveness Report

ISSUES IN ICT APPLICATION

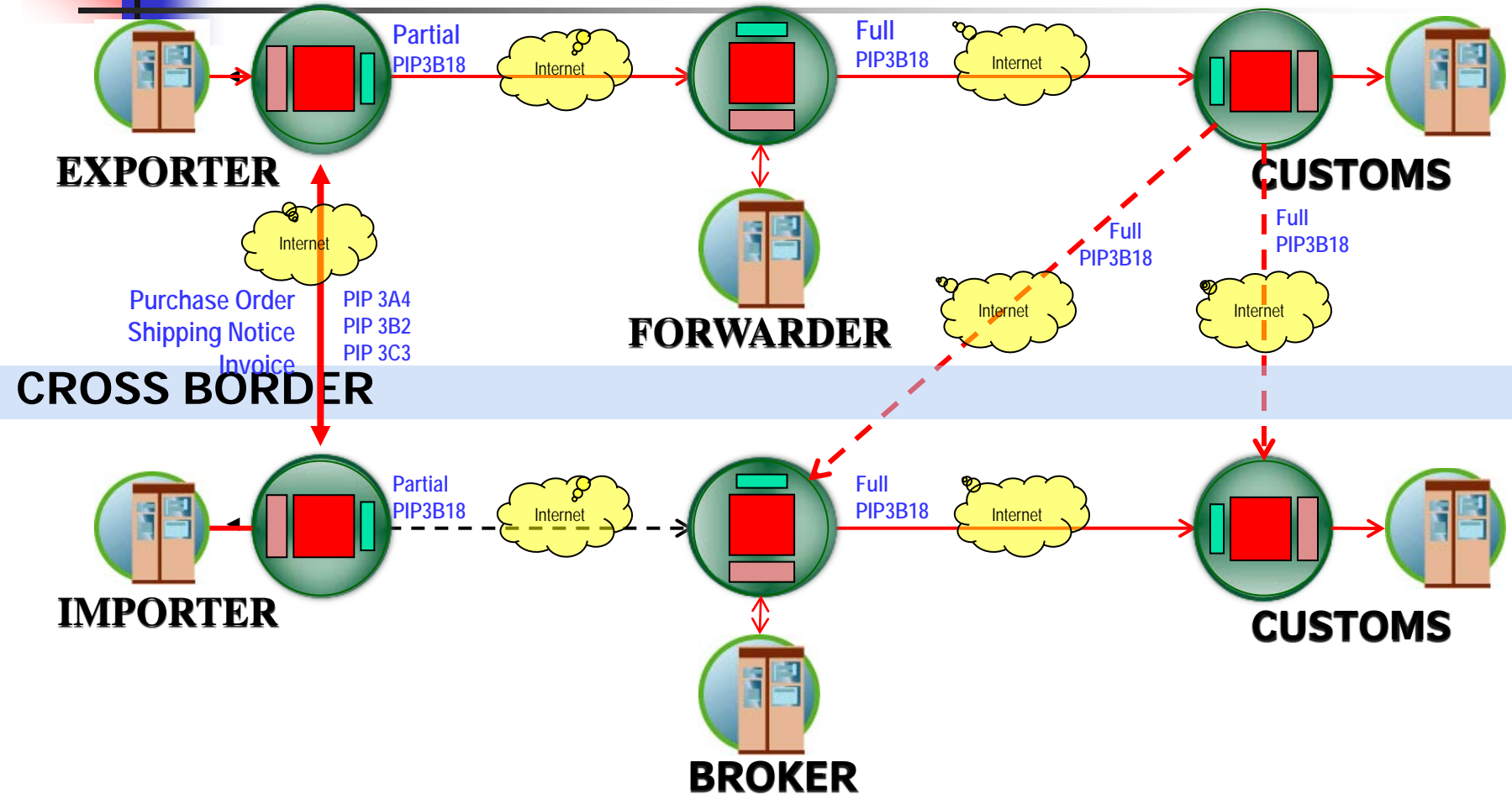**Issue 5:** Funding limitations for continuous system upgrade

- Initial gains from computerization easily reversed

    - increasing proportion of cargos subject to inspection

- Limited budget for capital expenditures

- Options:
    - Revenue retention

    - Customs-private sector partnership (*e.g.,* Singapore's TradeNet; Malaysia's DagangNet

PPP ICT INITIATIVE: ROSETTANET

- Formed in 1998, RosettaNet is a global consortium of electronics and semiconductor manufacturing companies to develop and deploy open internet-based business standards.

- Partners in Asia:
    - Japan (100); Malaysia (62); Singapore (48); Philippines (18); Korea (29); Taiwan (94)

- Cross-border clearance using a single document, PIP3B18, extracted directly from a supplier's ERP

- Initial implementation in 2003: Penang, Malaysia (Intel, Dell, Exel); Cavite, Philippines (Intel, Amkor and Exel)

ROSETTANET CROSS BORDER CLEARANCE

EXPORTER

Partial
PIP3B18

Internet

Full
PIP3B18

Internet

CUSTOMS

FORWARDER

Internet

Purchase Order
Shipping Notice
Invoice

PIP 3A4
PIP 3B2
PIP 3C3

Full
PIP3B18

Full
PIP3B18

Internet

CROSS BORDER

IMPORTER

Partial
PIP3B18

Internet

Full
PIP3B18

Internet

CUSTOMS

BROKER

Source: InterCommerce

ROSETTANET CROSS BORDER CLEARANCE

- **BENEFITS**

  - Shorter Customs clearance time: in Penang, from 2.5 hours to 30 minutes

  - Cost savings to traders: 60 to 70%

  - Better data quality

    - data accuracy, integrity
    - few fields manually encoded during declaration

ROSETTANET CROSS BORDER CLEARANCE

- **ISSUES**

  - Infrastructure : computers and internet access

  - Export shipments are not loaded or are partially loaded into carrier/vessel

    - Customs do not usually match Export declaration with outbound manifest.

  - Governments' approval is critical.

    - data exchange
    - acceptance of export declaration in one country as basis for import declaration

  - Interoperability between supply chains