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#### **Session 2: Enabling Environment and Policies**

How important is network security in e-transactions?

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(Thursday, 8<sup>th</sup> September 2005, 8.15am – 10.00am)

## How important is network security in e-transactions?

NASIS Conference 7<sup>th</sup> – 8<sup>th</sup> September 2005 Brunei Darussalam



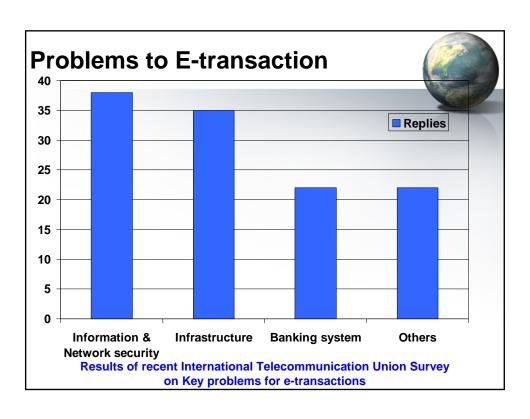
#### What is E-transactions?

- The sale of products and services over the Internet.
- Internet Banking.
- Online Bill payment.

#### **E-transaction and Network**



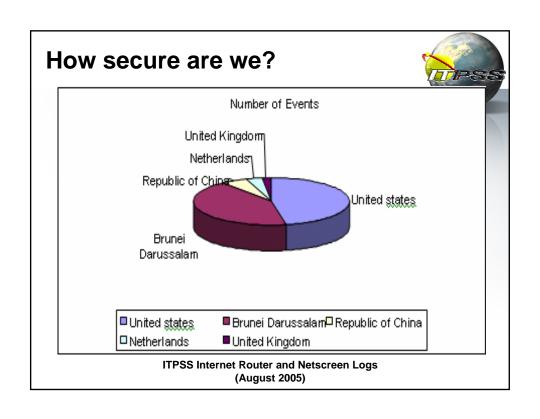
- The mechanism of e-transaction is built on a complex network infrastructure connecting to another network infrastructure through the Internet.
- If the network infrastructure security itself is lacking then data via electronic transaction may be in jeopardy.
- With e-transaction, there must be a proper infrastructure to manage the identity of users.



#### How safe is it?



- Without the proper security implementation, our information is not safe.
- There's are numerous threats aimed at destroying critical infrastructure, stealing important data, identity and intercepting communications and destroying trust and confidence in the use of Internet for critical transactions.



#### How secure are we?

Country	Number of Events	% from total event
United states	7,399	42.10%
Brunei Darussalam	6,639	37.80%
Republic of China	868	4.90%
Netherlands	508	2.90%
United Kingdom	321	1.80%

ITPSS Internet Router and Netscreen Logs (August 2005)

#### **Challenges to E-transactions**



- Authentication of Users (Who are we dealing with?)
- Non-repudiation for transactions
- Confidentiality (Privacy)
- Interoperability
- Liability

#### **Security solutions**



- PKI Infrastructure
  - The use of cryptographic technologies such as Digital signature and Digital certificates.
- Monitoring services
  - 24/7 monitoring should be put in place that will alert the relevant people to take the necessary action.
- Security audits
  - An effective way of ensuring proper implementation of security with accordance to an international security standard.

### What Users should know about online transactions.



Internet

- Security Awareness is important in today's digital world.
- Use a secure browser.
- Use a credit card.
- Never store your credit card number on the site, if possible.
- Never store your credit card and password info in your computer.
- Always change your username and password regularly.
- Shop at trusted companies.



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