#### Management Framework for Organizing National Cybersecurity Efforts:

National Strategy
&
Self-assessment tool

Prepared by Joseph P. Richardson

#### Why a National Strategy?

Cybersecurity is a SHARED responsibility

- All "participants" must be involved
  - Appropriate to their roles

#### **Participants**

"Participants" responsible for cybersecurity:

Government, business, other organizations, and individual users who develop, own, provide, manage, service and use information systems and networks.

"UNGA Resolution 57/239 Creation of a global culture of cybersecurity"

#### Goals of National Strategy

- Create awareness
  - of need for national action
  - of need for international cooperation
- Reduce risk and effects of disruptions
- Provide basis for cooperation
  - among parties responsible to prevent, prepare for, respond to and recover from incidents

#### Steps to National Strategy

- Commitment to policy development
  - Recognize importance of CII
  - Identify risk
  - Establish cybersecurity policy goal(s)
  - Identify implementation approach
- Identify roles, responsibilities and relationships
- Define processes and mechanisms for cooperation

#### **Government Actions**

- Provide leadership, guidance and coordination for national effort and international cooperation
  - Identify lead person and institution for national strategy
  - Identify lead persons and institutions for each element of national strategy
  - Develop computer security incident response team with national responsibility (N-CSIRT)
  - Identify cooperative arrangements and mechanisms for cooperation among all participants

#### **Government Actions**

- Provide leadership, guidance and coordination for national effort and international cooperation (continued)
  - Identify international counterparts and relationships
  - Identify experts
  - Establish integrated risk management process
  - Assess and periodically reassess cybersecurity
  - Identify training requirements

# Getting Started on a National Strategy

 Cybersecurity Self–Assessment Tool

#### Self – Assessment Tool

- Based on Best Practices document
- Focused at national management and policy level
- Intended to assist national governments:
  - Understand existing national approach
  - Develop "baseline" re <u>Best Practices</u>
  - Identify areas for attention
  - Prioritize national efforts

#### Considerations

- No nation starting at ZERO
- No "right" answer or approach
- Continual review and revision needed
- All "participants" must be involved
  - appropriate to their roles

#### The Self-Assessment Tool

 Examines each element of Framework at management and policy level

- National Strategy
- Government Industry Collaboration
- Deterring Cybercrime
- National Incident Management Capabilities
- Culture of Cybersecurity

#### The Self-Assessment Tool

Looks at <u>organizational</u> issues for each element of Framework

- The people
- The institutions
- The relationships
- The policies
- The procedures

#### The Self-Assessment Tool

 Objective: assist nations <u>organize</u> and <u>manage</u> national efforts to

- Prevent
- Prepare for
- Protect against
- Respond to, and
- Recover from

cybersecurity incidents.

#### **National Pilot Tests**

- ITU-D is sponsoring pilot tests of the selfassessment tool
  - Vietnam (August 2007)
  - Argentina (2007)
  - Ghana (2007)
  - 2008 to be determined
- For information on pilot test program
  - contact <u>cybmail@itu.int</u>

### ITU Self-Assessment Toolkit

Additional and updated information at

http://www.itu.int/ITU-D/cyb/cybersecurity/projects/readiness.html

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#### National Strategy

Prepared by Joseph P. Richardson <a href="mailto:line-width">Joseph.richardson@ties.itu.int</a> 202-258-9278