



# Cybersecurity and Education

## Development of National Capacity

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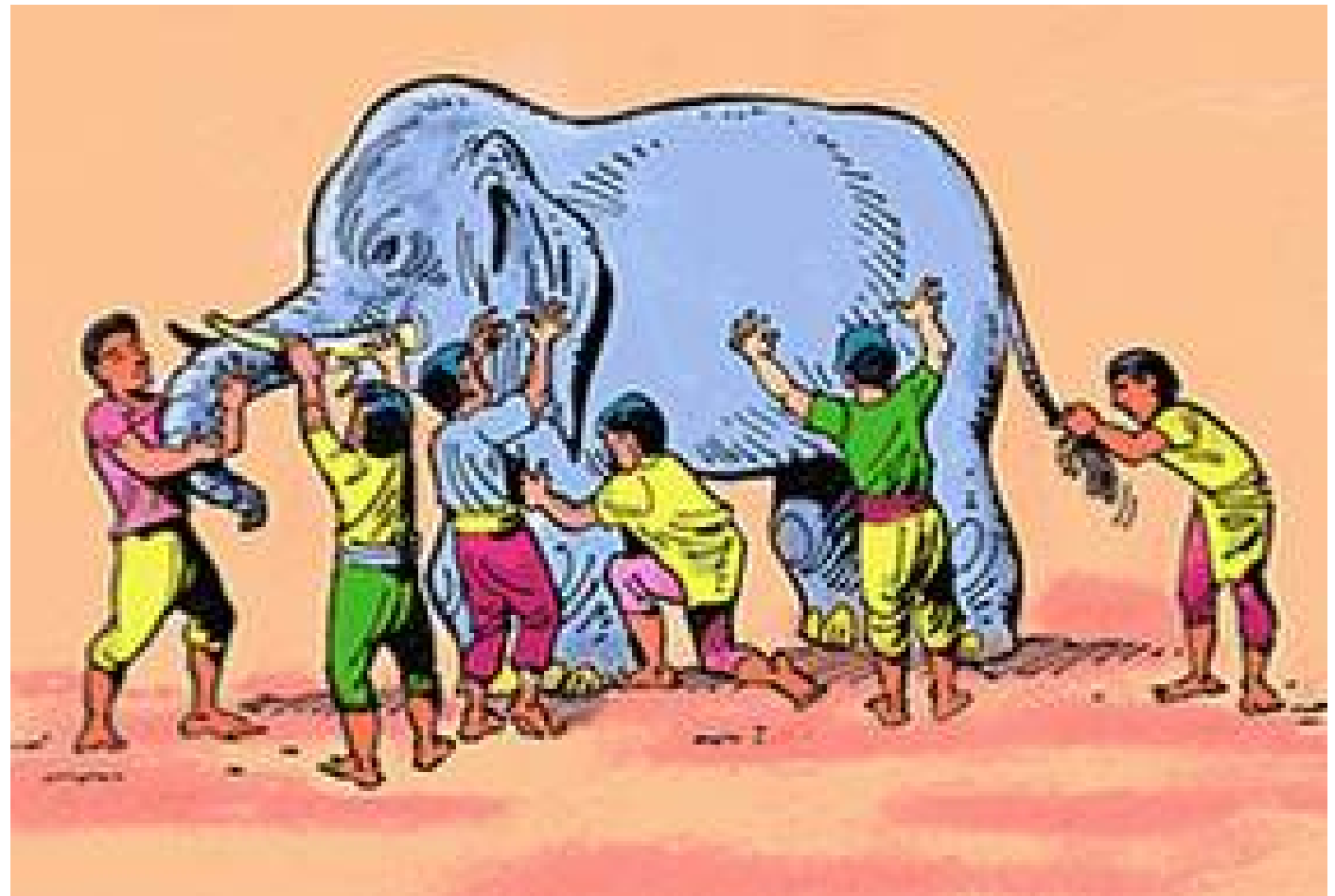
ITU Regional Cybersecurity Forum for Europe and the  
Commonwealth of Independent States (CIS)

Sofia, 7-9 October 2008

Jovan Kurbalija & Vladimir Radunovic  
DiploFoundation

## Different Perspectives

- Politicians
- Lawyers
- Business
- NGOs
- Insurers
- Academics
- The Media
- IT security
- ... others...



snake    spear    fan    tree    wall    rope

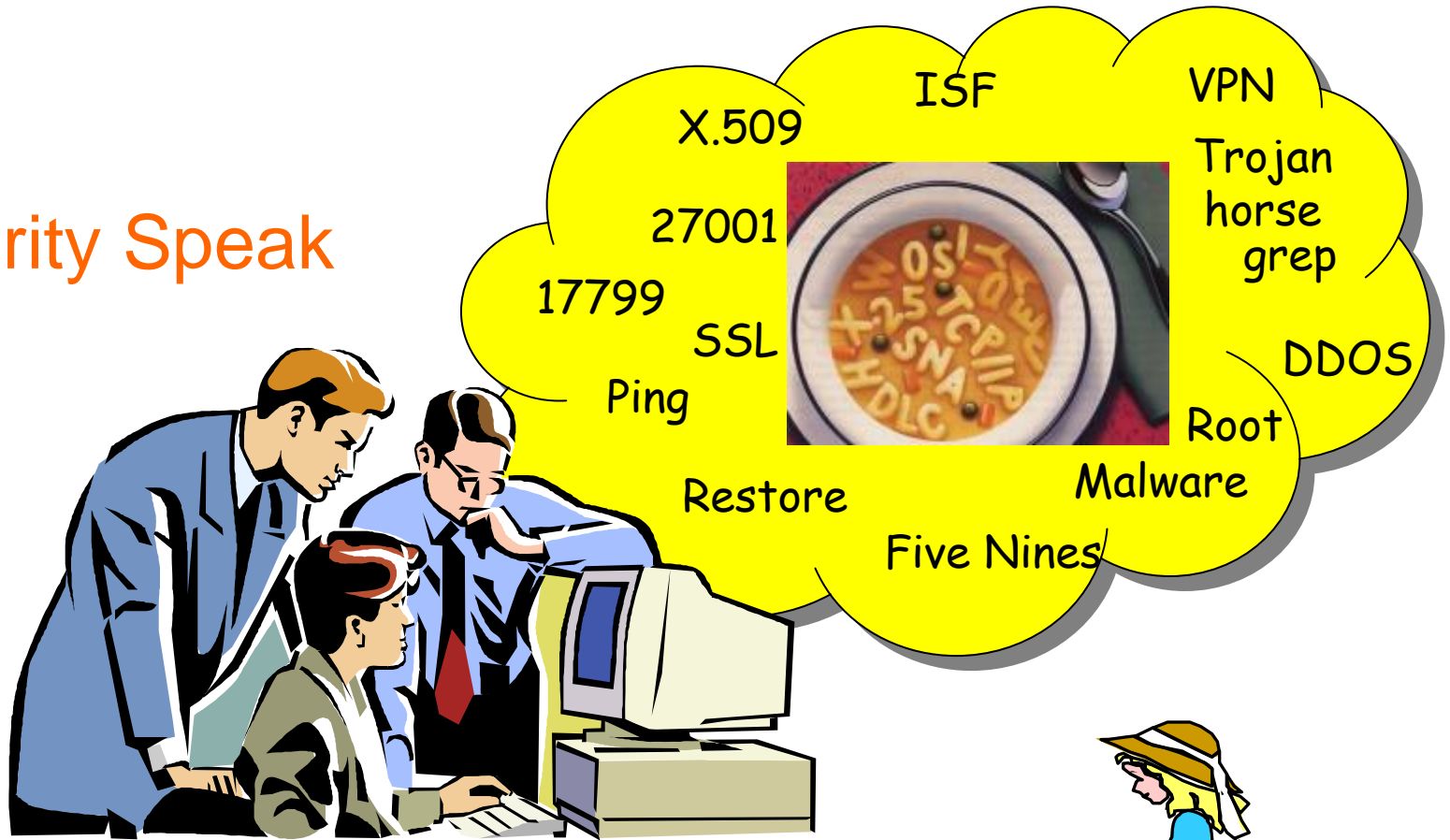
Are they different from the six blind men describing an elephant ?

*Provided by Ed Gelbstein*

# How to Communicate?



# IT Security Speak



"Somehow it seems to fill my head with ideas -  
only I don't exactly know what they are"

Lewis Carroll, *Alice's Adventures in Wonderland*, 1865



Provided by Ed Gelbstein



## Same Problem Different Perspectives

- **Parliamentarians** – Need to be re-elected
- **Government Officials** – Risk Avoidance + Focus on Procedures
- **IT People** – Solution Oriented + “Algorithm Approach”
- **Media** – Sensation & Front-page Story – Cybersecurity as “Scary” and Attractive Topic
- **Civil Society** – Focus on Human Rights
- **Academia** – Comprehensive and Sometimes Slow Approach
- .....

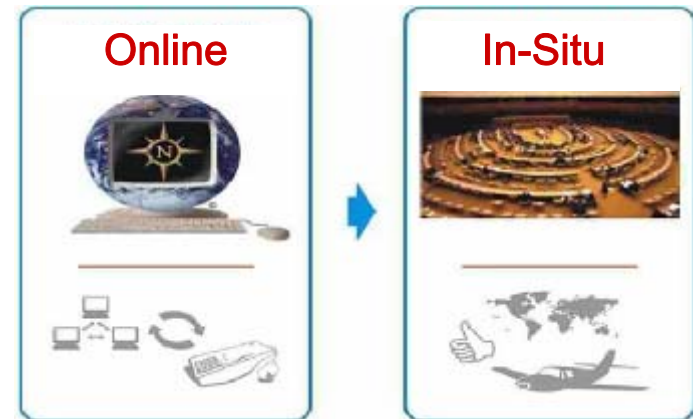


## How to address these challenges?

- Introduce **inter-professional communication** in the cybersecurity curriculum (academic courses and professional training)
- **Multistakeholder** composition of student / participant groups – opening trainings to other professional and institutional groups
- “Walk the talk” – **use online tools** for training and community building
- Encourage **peer-to-peer** collaboration – involve experienced peers as intermediaries between senior experts and new trainees
- Introduce “Learning by Doing” – combine **training and practice**
- Introduce National Cybersecurity Capacity Development

# Cybersecurity Capacity Development

- I. Course (online or blended)
- II. Policy Research
- III. Policy Immersion
- IV. Facilitating Communities of Practice



# Cybersecurity Capacity Development and the ITU Toolkit

## ITU Cybersecurity Toolkit

*"The identification of specific training requirements and ongoing training programs should be made."*

*(National strategy, part C.6)*



## Capacity Development

Incorporating the Toolkit into the course, policy research and immersion as a baseline for practical follow-up initiatives

Broader context:

# Global Cybersecurity Agenda



- **Foundation Course (one month)**
  - Ensures basic understanding and shared context
  - Guides participants with varied backgrounds
  - Creates an initial community and shares knowledge
  
- **Advanced Courses (one month)**
  - Explore important issues in depth
  - Provide multiple perspectives
  - Engage participants experience and views



# Policy Research

## Online collaborative research

- Initial training provides context and background for policy research (*what is policy? how to do a policy research?*)
- Research of the national and regional challenges and status, and impact of relevant policies (*what, who, where, how, when?*)
- Research results published and disseminated to decision makers

NATIONAL INFORMATION &  
COMMUNICATIONS TECHNOLOGY (ICT)  
POLICY

BY

MINISTRY OF INFORMATION &  
COMMUNICATIONS

JANUARY 2006

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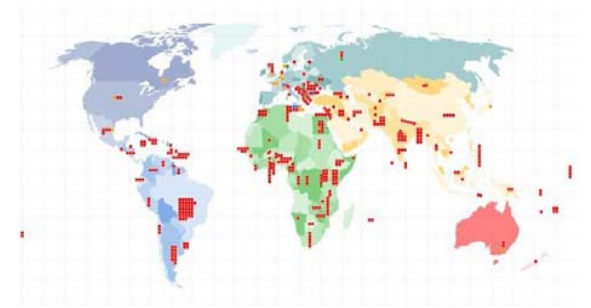
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# Policy Immersion

- Practice oriented
- Participation in policy processes
- Links with international organisations
- Opportunity to apply previous training
- Merit-based selection



# Communities of Practice



## Establishing Communities of Practice

- Functional integration of ITU's Cybersecurity Toolkit into National and Regional Initiatives
- Participants remain active and involved
- New initiatives from the Community
- Regional activities and links
- Impact on national, regional and international level
- Using ICTs for communication and collaboration

### Experience from Internet Governance

- Training of 400+ professionals worldwide over the last 4 years
- Establishment of National, Regional and Global Expert Communities
- Continuous communication after the training

■ Participants ■ Tutors ■ Advisors ■ Organizers



# Communities of Practice

The collage consists of several overlapping screenshots:

- Top Left:** An email window with a subject line "ICANN News: Changes About Accountability, Closed".
- Top Center:** A discussion forum titled "Discussions: 8 of 741 messages" with a list of links and titles such as "YANN - cons. bas em Washington - materia de morosa" and "First 80% of the world's subscriber base was prepaid by March 2008".
- Top Right:** A Facebook page for "Diplo Foundation" with a navigation bar (Home, Profile, Friends, Pages) and a "Welcome to the new facebook" message.
- Middle Left:** A screenshot of a community website titled "Diplo Internet Governance Community" with a navigation menu (Home, My Page, Members, Forum, Groups, News, Photos, Videos, Blogs) and a central "Welcome to Diplo Internet Governance Community" message.
- Middle Right:** A screenshot of a blog titled "DIPLO Internet Governance and Policy" with a header image of people holding hands and a "Community blog" section.
- Bottom Left:** A screenshot of a Facebook page for "Diplo Foundation" showing basic info, contact info, and photos.
- Bottom Center:** A screenshot of a community website showing a list of groups like "Diplo IIG", "9th ICANN Sudan/Kenia", and "Diplo #Imagining the Internet".
- Bottom Right:** A screenshot of a blog post titled "Fostering Success for Local SMEs to Venture in E-commerce in the Philippines: Sesma Leticia" with a search bar and "About" section.

# Communities of Practice



## Next Steps?

- *Framework:*  
Global Cybersecurity Agenda
- *Toolkit:*  
Use of ITU Cybersecurity Toolkit
- *Action:*  
Introduce National, Regional and Global Cybersecurity Capacity Development
- *Approach:*  
Walk the talk – Online Trainings and Community Building
- *Principle:*  
Multistakeholder Participation
- *Planning:*  
Development Period: 4-6 Months





## About DiploFoundation

- Involved in Online Learning Since 1996 (as part of the Mediterranean Academy of Diplomatic Studies)
- Established as Independent Foundation by Governments of Malta and Switzerland in 2002
- Offices in Malta, Geneva and Belgrade
- 20 full-time and 40 part-time staff
- UN ECOSOC Special Consultative Status
- Alumni of 1000 diplomats, officials and academics



## What Diplo Does

- Capacity Building Programmes
- Academic Courses (M.A., short courses)
- Development of Tools and Methodologies for Information and Knowledge Management
- Innovative approaches to learning – always engaging, interactive and collaborative

# Questions?





**D*i*PLO**

[www.diplomacy.edu](http://www.diplomacy.edu) or  
[www.diplomacy.eu](http://www.diplomacy.eu)