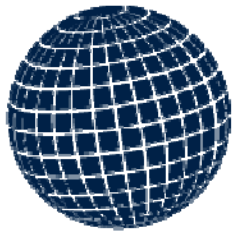

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ITU-D Study Group Question 3/2: Increasing the Scale and Effectiveness of Cyber Capacity Building

Taylor Roberts

Wednesday, September 24th, 2014

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Overview

- Oxford Centre perspective on Cyber Capacity Building
- Current Projects:
  - Cyber Capability Maturity Model
  - Cybersecurity Capacity Portal
- Request for Input

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Oxford Centre Capacity Dimensions

- D1: Cyber policy and strategy
- D2: Cyber culture and society
- D3: Cyber education, training and skills
- D4: Cyber legislation and regulation
- D5: Technology and Standards

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Cyber Capability Maturity Model

- Designed to serve as a self-assessment tool
- Increase levels of cyber capacity across five dimensions
- Request for Input
- Five levels of maturity:
  1. Initial
  2. Repeatable
  3. Defined
  4. Managed
  5. Optimizing

Capacity Building Factors	Initial	Repeatable	Defined	Managed	Optimizing
D1-1: Creation of National Cyber Security Strategy	An initial national cyber security strategy document exists, driven forward by some department of government without broad consultation.	National strategy built on foundation of broad government consultation, allowing all departments to input with clear processes for strategy renew established.	National strategy renewal processes include specific mandate with appropriate processes to consult with wider public and private sectors and civic society. All areas of government have a common understanding of cybersecurity terminology.	Representation of the whole national strategy can be made with confidence by multiple stakeholders across government. Wider stakeholders feel they understand how their interests are represented, and are confident of the processes by which they can influence strategy.	Promotion of trust and confidence building measures (TCBM's) to ensure the continued contribution of all stakeholders including the private sector and international partners.
	No overarching national cybersecurity programme, budgets are distributed across various public offices with reliance on willingness to cooperate (perhaps with instruction to do so) as opposed to a single coordinated programme office.	Coordinated programme exists, however, budgets may still be distributed with a reliance on cooperation to achieve single programme.	Single programme ownership / designated coordinating body has been identified with budget. This programme stipulates goals, milestones, and metrics to measure progress. Clear roles and responsibilities of cybersecurity within government bureaucracy elucidated, including a designated coordinating body.	Evidence of repeated application of metrics and resulting refinements to operations and strategy, across the breadth of government involved in cyber security risk management.	Single model of nations cyber security posture exists with near-real-time feedback on the performance of risk controls, resulting in fast and active consideration of changes to priorities and redistribution and focusing of budgets.
	The strategy development may reflect societal values, traditions, and legal principles but will not be the result of wide constulation with stakeholders. Advice may have been sought from international partners.	Consultation processes will have been established for key stakeholder groups, including international partners. These processes will have been followed and learnings fed into strategy 'owners' and strategy renew processes.	National security risks and how they relate to wider stakeholder community understood, with metrics and mitigations defined and measurement processes established.	Exercises that provide an accurate picture of national cyber resilience regularly held.	Wide and continuous societal participation in cyber resilience activities and controls.
	Links will have been made to national risk priorities, but these will be ad-hoc and lack detail on how the strategy will help to address such risks.	Cyber security strategy is linked to national risks, priorities and objectives, and is contained within (and enhancing) existing National Security Strategy. Some metrics for success will have been established for some (but not all) aspects, and the methods for collecting data and applying metrics agreed. Critical national security assets in cyberspace have been identified.	Controls relating to the following aspects included in the strategy: public awareness of cyber issues, education and training of professionals, cybercrime mitigation efforts, national data collection/surviellence, national data security, the role of a national Computer Emergency Response Team, intenational standards and conventions on cybersecurity, national cyber defence exercises, investment in to cybersecurity research, and the role of National Critical Infrastructure	Strategy objectives and interventions assessed and modified (if required) in response to exercise results and learnings from cyber related events. All signfiicant events considered for cyber and physical components, with assessment of the performance of controls and their impact on physical security measures are explicitly made.	

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Posted By: Dr. David A. Bray
16 June, 2014

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Professor William Dutton on cyber security, culture and attitudes within society. How can we avoid a culture of compliancy or a culture of fear?

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Comments

Dr. David A. Bray

Mapping and measuring cybercrime part 1 at: http://cybercapacity.devclo... Mapping and measuring cybercrime part 2 at: http://cybercapacity.devclo... Can we create a multi-stakeholder global cybersecurity commons at: http://cybercapacity.devclo... (note, links might change if the domain name for this website changes) Hope this helps!

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Posted By: **Taylor Roberts**
16 June, 2014

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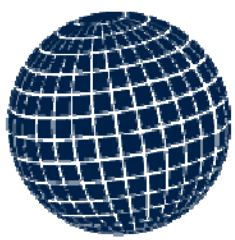
Requests for Input

- Cyber Capability Maturity Model (CMM)
  - Promote its application in assisting policy-makers perform effective and informed assessments of cybersecurity maturity
  - When possible, provide feedback to Oxford on its value and impact
- Cybersecurity Capacity Portal:
  - Use as a resource for global information on cybersecurity capacity building
  - Encourage utility, contribution, feedback, and requests for further information



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