

## **Minutes of the April 25, 2012 EDTF – CIE Subgroup meeting**

Room 801, 40 Sheppard Ave. West, Toronto

**Participating:** Roger Jones, George Comrie, Jim Finch, Tyson Macaulay, Peter DeVita (t/c), Colin Cantlie (t/c), Ian Marsland, Jordan Max (staff advisor)

**Regrets:** Corneliu Chisu, Dave Adams, John Clark, Alana Lavoie

The meeting was preceded by a presentation on Smart Grid by Joshua Wong to CIE and members of the OSPE Energy Committee, and dinner. The meeting started at 7:15 pm.

### **1. Approval of Agenda**

The agenda was reviewed and two items were added – Smart Grid presentation debrief and the Etobicoke Chapter event. Motion: that agenda as revised be approved (Jim/Roger): passed

### **2. Approval of March 22, 2012 meeting minutes and follow up on action items**

The draft minutes were reviewed without amendment. Motion: that the minutes be approved (Jim/Roger): passed

Follow up on action items:

#### Phase 2 report:

- Section 3 – just add Stuxnet highlights (watershed-sophisticated, cyber-warfare, use of SCADA control systems) and hyperlinks/footnotes to detailed reports
- Section 5 – Tyson asked which specific conclusions he was to add. Jordan identified that George had added some comments on an earlier draft in Central Desktop.

### **3. Smart Grid debrief**

The group discussed whether and how to incorporate Joshua's presentation into the Phase 2 report. It was noted that the province's primary concern with Smart Grid was personal privacy rather than security, and that while other jurisdictions had adopted the NERC standards, Ontario had yet to do so. It was concluded that Smart Grid should be a separate section (8c), written by George. [NOTE: This has been updated in the attached Status Report]. It was also requested that a thank you letter be sent to Joshua Wong (by George).

### **4. Stakeholder Consultation**

George reported that he was still discussing an Ottawa Chapter presentation with Guy Boone. There was discussion about the best timing for this, and it was concluded that early fall would be better, so that the feedback could be incorporated into the report to be presented to Council.

### **5. Etobicoke Chapter event**

George reported that he was planning a May 24<sup>th</sup> CIE panel presentation for his Etobicoke Chapter, and that Jim has been contacting potential speakers.

#### **6. Next meeting**

The next meeting date was set for Wednesday, May 30, from 6-9pm

#### **7. Phase II Report review**

Jordan reported that all subsections of section 9 had been merged into one document. The first part, dealing with Scopes of Practice, was reviewed and it was concluded that the Scope and diagram that appeared in the Phase 1 report did not need repeating here. **Action: Peter** to revise first part of section 9.

There was also discussion about 9.2.1.1 dealing with applicants since there were currently no CEAB-accredited CIE programs in the country. There is a need to think about this section some more.

Section 9. 2.1.2 also needs to be revised (Jordan noted it dealt with academic requirements and had been copied from PEO's website, but George noted it was inaccurate. Action: Jordan to check the content against the website.

Section 9. 4 (First Licencees) should be moved after the Enforcement (Compliance) section, and its content should reflect the approach recently taken by the Removal of Industrial Exception Task Force (no grandparenting) as approved by Council.

#### **8. Adjournment**

Due to the late hour, it was moved (Tyson/Peter) that the meeting be adjourned – motion passed. The meeting was adjourned at 9:35pm.

## CIE PHASE II REPORT- CURRENT STATUS

Section	Possible Sources for Content	Assigned author	Status
1. Purpose of report	Phase 1 report: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/</a>  September 2011 Council briefing note	Peter	pending
2. Executive summary	Phase 2 report	George	pending
<b>3. Public interest issues – cybersecurity – external threats</b>			
a. General public safety b. business interest – e.g. 7 types of liability insurance, cyberliability ins for engineers	Tyson’s draft section <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/11947143/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/11947143/</a>  World Economic Forum – 2012 – Partnering for Cyber Resilience <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/16348488/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/16348488/</a>  Chapter 2 of Building Capacity in Cyber Security report – Conference Board of Canada The Scope of Cyber Threats: Consequences of Digital Dependency <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/14998253/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/14998253/</a>  Rotman-TELUS Study of IT Security Practices: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13990222/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13990222/</a>  Amazon’s Wikileaks Cloud vulnerability: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13071032/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13071032/</a>	Jim	drafting

Section	Possible Sources for Content	Assigned author	Status
	Council position statement (CIE Rationale): <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15006471/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15006471/</a>		
<b>4. Stakeholder analysis</b>			
a. who we talked to and what we learned	Stakeholder feedback report <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13108206/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13108206/</a>  Append GRC's reports?????	George/  Jordan	drafted
<b>5. Profile of the CIE industry and practitioners</b>			
<ul style="list-style-type: none"> <li>ICTC research?</li> <li>ITAC research?</li> <li>Gov't of Ontario info</li> </ul>	ITAC report – outlook for ICT sector 2011-16  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13203045/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13203045/</a>	George	Pending
<ul style="list-style-type: none"> <li>No standards on hiring for this type of work</li> </ul>	Department of Homeland Security report on IT skills  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13993491/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13993491/</a>  Yankee Group report on Training Needs for Networks:  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/12776115/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/12776115/</a>	Tyson	Drafted
<ul style="list-style-type: none"> <li>CSEC – cpsa – need stream 1 qualifications – post-sec, security, 15 yrs exp.</li> </ul>	CSEC response <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15437634/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15437634/</a>  CPSA Stream 1	Tyson	Drafted
<ul style="list-style-type: none"> <li>MGS – network vs. security silos</li> </ul>	?????		Pending

Section	Possible Sources for Content	Assigned author	Status
<b>6. External regulatory landscape</b>			
<ul style="list-style-type: none"> <li>federal – legislation, jurisdiction,</li> </ul>	<p>Phase 1 report: pp.23-25  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/</a></p> <p>US National Cybersecurity Initiative:  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555325/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555325/</a></p> <p>Canada-US Border Action Plan:  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13798600/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13798600/</a></p> <p>Shared Services Canada: <a href="http://business.financialpost.com/tag/shared-services-canada/">http://business.financialpost.com/tag/shared-services-canada/</a></p> <p>Public Safety Canada’s Cyber Security Strategy:  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10552557/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10552557/</a></p>	Colin	Pending
<ul style="list-style-type: none"> <li>EU/US descriptions? Senate bill 773</li> <li>CISPA</li> </ul>	<p>EU???? Council of Europe Convention on Cybercrime  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/doc/10555403/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/doc/10555403/</a></p> <p>CISPA: <a href="http://www.pcworld.com/printable/article/id,253800/printable.html">http://www.pcworld.com/printable/article/id,253800/printable.html</a></p> <p>Phase 1 report reference, updated on THOMAS  <a href="http://www.govtrack.us/congress/bill.xpd?bill=s111-773&amp;tab=related">http://www.govtrack.us/congress/bill.xpd?bill=s111-773&amp;tab=related</a></p> <p>UK Cybersecurity strategy (2009/2011):  <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555288/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555288/</a></p> <p>2011 version:</p>	???????	pending

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	<a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/16062768/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/16062768/</a> Australia Cybersecurity strategy (2009): <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555228/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10555228/</a>		
<ul style="list-style-type: none"> <li>US SEC – draft guidance to disclose cyber breaches to public</li> </ul>	SEC news article <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721127/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721127/</a>		Pending
<ul style="list-style-type: none"> <li>Insurance industry – cyber liability</li> <li>(Parking here for now)</li> </ul>	Consulting Engineers Ontario news article: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721032/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721032/</a>  Got Cyber Insurance? Article <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15505337/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15505337/</a>  Engineers could be liable for cyber hacking article: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721032/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15721032/</a>	George	Pending
<b>7. External (industry) standards</b>	ISO 27001 etc. <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15554130/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15554130/</a>  Phase 1 report – CISCO etc.  New cloud certification: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13083487/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13083487/</a>  <b>ISEA 3402 – international service assurance audit standard replacing the venerated SAS70 / CICA 5970</b>	<b>Tyson</b>	Drafted

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	ISO Standard for Vulnerability Disclosure	Tyson	pending
<b>8. CIE industry emerging operational models</b>			
a. Communications	Introduction of Ipv6 and the evolution of flatter networks with huge address ranges.	Tyson	Drafted
b. M to M – e.g. utility association (mentioned in phase 1 report) – embedding a Comm.. Network to points of use	Phase 1 report: (NERC page 26) <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/10009737/</a> /	Tyson	Drafted
c. Smart Grid – (privacy) – NERC,	MIT Future of the Grid report: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/doc/16056892">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/doc/16056892</a>  OSPE Report on Wind and the Grid	George	Pending
d. cloud computing	Rise of the Cloud article <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13071031/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/13071031/</a>  Bell Canada Cloud Security paper  <will upload to central desktop>	Tyson	Drafted
<b>9. PEO Regulatory issues</b>			
• Draft definition Scopes of practice	Draft CIE Scopes of Practice: <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15737564/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15737564/</a>	Peter	Drafted
• Licensure & registration – Academic requirements,	Engineers Canada (CEQB) statement on CIE  NME Phase 2 report: (pp. 25-32)	Ian	Drafted

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experience requirements	<a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15668878/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/15668878/</a>		
• First licencees	Pre-existing and first batch of CIEs	Peter	Pending
• limited licence	NME Phase 2 report (pp.26-7, 32)	George	Pending
• Professional guidelines & standards	NME Phase 2 report (pp. 33-34); draft TOR for PSC subcommittee	Roger	Pending
• Enforcement (Compliance) considerations and proposals	NME Phase 2 report (pp. 34-5)	Jordan	Drafted
• Complaints & Discipline Concerns	???? Generic description/criteria for disciplinary action/standard of practice	Colin	Pending
• Legislation	????		
<b>10. Communications and Public Education Plan</b>	September 2011 Council briefing note, Phase 1, 2 reports, Software Engineering Task Force final report? <a href="https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/3853900/">https://engineersontario.centraldesktop.com/emergingdisciplinestaskforce/file/3853900/</a>	Connie Mucklestone/ George	Pending
<b>11. Final recommendations</b>	Summary of all Phase 2 section recommendations	Jordan	Pending
<b>12. Future work</b>	???? – Legislation?		Pending
<b>Appendix A - list of stakeholders – include</b>	Stakeholder list	Jordan	Pending



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reports			