

Practical Software and Systems Measurement

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A foundation for objective project management



**Constructive Network
Infrastructure Protection
Cost Model (CONIPMO)**

27-28 July 2006

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PSM 1

July 2006

Practical Software and Systems Measurement

Constructive Network Infrastructure Protection Cost Model (CONIPMO)

- **COCOMO-like model being developed to estimate the costs of implementing various network defense strategies**
 - **Perimeter defense**
 - **Defense in depth**
- **Tradeoff model looking at both investments and operational costs**
- **Model is requirements-based and based on successful COSYSMO effort**
- **Work funded under a SBIR Phase I**
 - **Calibration work targeted for Phase II**

PSM 2

July 2006

- PSM 3**

- PSM 4**

Summary

- *Discussed the model and the process by which it was developed*
 - *Collaborators group develops model*
 - *Experts polled and consensus on model and its original calibration achieved*
 - *Pilot projects identified and calibration activities commences*
- *Summarized the results of the first round of our Delphi*
- *Generated interest in the effort*
- *Solicited attendees to have experts in the security domain complete and return the Delphi*

Conclusions, Recommendations, and Results

- *Security viewpoints are important because they establish difference contexts for measurement*
 - *Develop engineering products while considering security (trade space)*
 - *Secure the networks used by the project (both project and infrastructure supplied)*
 - *Address enterprise level security issues and constraints*
- *CONIPMO important because it addresses the network security view (not covered by current research)*
- *New models, metrics and measurements are needed to determine if the network is secure, net-ready, etc.*
- *Attendees agreed to solicit inputs from security experts within their organizations*
- *Attendees agreed to coordinate implementation of the CONIPMO action plan within their respective organizations*

Next Steps/Action Items

- ***Complete round 2 of the Delphi***
 - ***Anyone who wants to can participate – a soft copy of the instrument will be put on the PSM web site along with my presentation materials to establish a context for the effort***
 - ***Delphi instrument aimed at security engineer***
- ***Provide letters of support and identify pilot for Phase II effort***
 - ***Tom Conrad (Navy) and Gary Hafen (Lockheed) volunteered to provide support and try to enlist pilots***
- ***Win a Phase II effort to develop the model***
 - ***Calibrate and pilot the model with project***
 - ***Launch the model after two year development cycle is complete***