# **Seminar 2 Preparation: Estimating Tools and Risk Assessment**

Review on the National Institute of Standards and Technology (NIST)

### **Framework Core**

Not a check list, tell you what can be done, but not tell you what you have to do

- Identify
- Protect
- Detect
- Respond
- Recover

## **Profiles**

We may put all the information (Business Objectives, Threat Environment, Requirements and controls) together into the cybersecurity profile, which help organization align and prioritize cybersecurity activities

- Target profile
- Current profile
- Gap analysis

### **Implementation Tiers**

- 1 Partial
- 2 Risk Informed
- 3 Repeatable
- 4 Adaptive

Function Unique Identifier	Function	Category Unique Identifier	Category
ID	Identify	ID.AM	Asset Management
		ID.BE	Business Environment
		ID.GV	Governance
		ID.RA	Risk Assessment
		ID.RM	Risk Management Strategy
		ID.SC	Supply Chain Risk Management
PR	Protect	PR.AC	Identity Management and Access Control
		PR.AT	Awareness and Training
		PR.DS	Data Security
		PR.IP	Information Protection Processes and Procedures
		PR.MA	Maintenance
		PR.PT	Protective Technology
DE	Detect	DE.AE	Anomalies and Events
		DE.CM	Security Continuous Monitoring
		DE.DP	Detection Processes
RS	Respond	RS.RP	Response Planning
		RS.CO	Communications
		RS.AN	Analysis
		RS.MI	Mitigation
		RS.IM	Improvements
RC	Recover	RC.RP	Recovery Planning
		RC.IM	Improvements
		RC.CO	Communications

### Reference

Institute of Standards, N. (2014). Framework for Improving Critical Infrastructure Cybersecurity, Version 1.1. <a href="https://doi.org/10.6028/NIST.CSWP.04162018">https://doi.org/10.6028/NIST.CSWP.04162018</a>

#### Create an estimate

Based on the requirements you have gathered for your assignment, create an estimate of the total effort and time to complete the planned demonstration of your system.

Program Evaluation and Review Technique (PERT) (Project Management Academy, N.D.) was applied to take into consideration of both pessimistic and optimistic situations.

$$PERT = \ \frac{O + 4M + P}{6}$$

From our team's judgement, the most likely schedule (M) takes 45 days, optimistic schedule (O) takes 40 days and pessimistic schedule takes 56 days. Therefore, the weighted schedule is:

$$Weighted\ schedule = rac{40 + 4 imes 45 + 56}{6}\ = 46\ igg( days igg)$$

As this project does not have any sponsor, it is assumed that there will be no funding for the project. Free resources will be utilized as much as possible in order to stay within the zero budget.