Περιμετρική Ασφάλεια Κρίσιμων Εγκαταστάσεων

THE D5 STRATEGY

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ΔΙΕΥΘΥΝΤΗΣ ΑΝΑΠΤΥΞΗΣ

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Plant Safety&Security CONFERENCE 2018

ΖΑΡΙΦΟΠΟΥΛΟΣ ΥΠΗΡΕΣΙΕΣ ΑΣΦΑΛΕΙΑΣ & ΕΛΕΓΧΟΥ

Εισαγωγή

Σημεία συζήτησης της σημερινής παρουσίασης

Τα 5 «D»

Τεχνολογίες ανίχνευσης

Ερωτήματα σχετικά με την εφαρμογή

Πως εκπονούμε ένα Πλάνο Ασφαλείας

Τα 5 “D”

Demarcation
Οριοθέτηση

Deter
Αποτροπή

Detect
Ανίχνευση

Delay
Καθυστέρηση

Defeat
Νίκη

1983
BEIRUT

1995
OKLAHOMA

2001
NEW YORK

2016
NICE

Demarcation

Οριοθέτηση

Ορατή οριοθέτηση της περιμέτρου. Αποφυγή ΝΑ

Deter

Αποτροπή

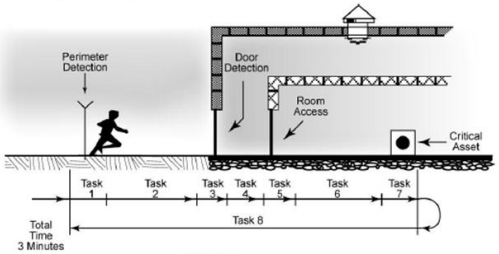
Οριοθετημένη αλλά όχι αποτρεπτική

Delay

Καθυστέρηση

Αποτρεπτική αλλά χωρίς να εισάγει σημαντική καθυστέρηση για τον εισβολέα

(3) Figure 1-1 illustrates the interaction of detection (at the perimeter fence and facility entrance door), delay (fence, exterior door, interior door), and response time to an adversary's sequence of actions. This figure was originally developed by Mary Lynn Garcia of Sandia National Laboratories and uses a thief (that is, a criminal) as the DBT to illustrate the time required for delay. Utilities should develop their own time sequence as part of their vulnerability assessment process.



	Time Estimate			
Task	Task Time (minutes)	Cumulative Time (minutes)	Adversary Task Description	Response
1	0.1		Climb over fence	1st Alarm
2	0.3	0.4	Run 250 feet (76 m)	
3	0.8	1.2	Force door	2nd Alarm
4	0.4	1.6	Walk 150 feet (46 m)	
5	0.2	1.8	Cut door lock	
6	0.1	1.9	Walk to asset	Response Force Arrives
7	0.2	2.1	Disable asset	Stop Adversary
8	0.9	3.0	Escape	
	3.0		Total Time	

Effective response time

FIGURE 1-1
Concept of Delay Calculation (adapted from Garcia, 2001)

Detect

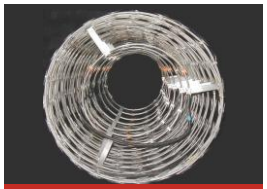
Ανίχνευση

Buried Ported Coax
(Leaky Cable)

Fluid Filled
Pressure Sensors

Seismic
Detectors

Electrostatic Field
(E Field, X Field)

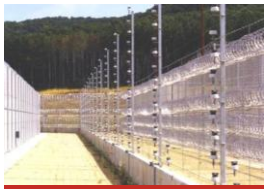


Acoustic Fence Mounted
& Fiber Fence Sensors

Taut Wire
Sensor

Fiber Mesh
Sensor

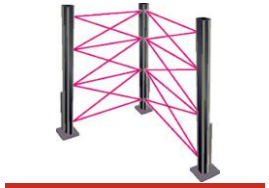
Point
Sensors



Lethal & Stun
Fence

Microwave
Detection

Passive
Infrared



Active
Infrared

Radar

Hybrid
(MW and PIR)

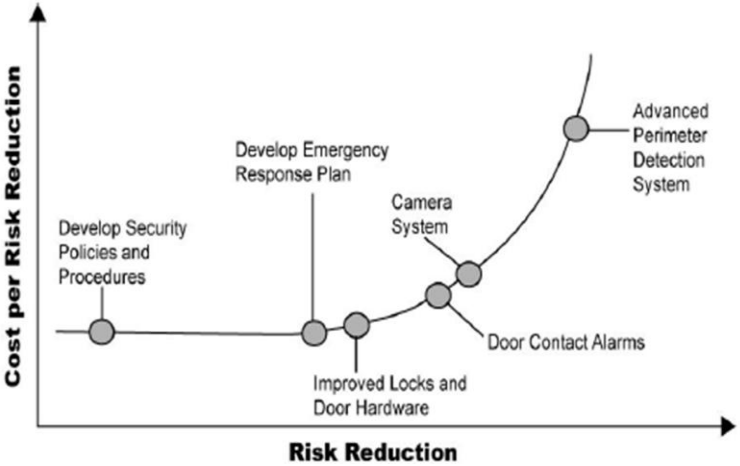
Video Analytics

Thermal Video Analytics

Defeat

Νίκη

Μερικές φορές το κόστος της Νίκης είναι μεγαλύτερο από το κόστος της μείωσης της απώλειας και της ανάκτησης της αρχικής λειτουργίας



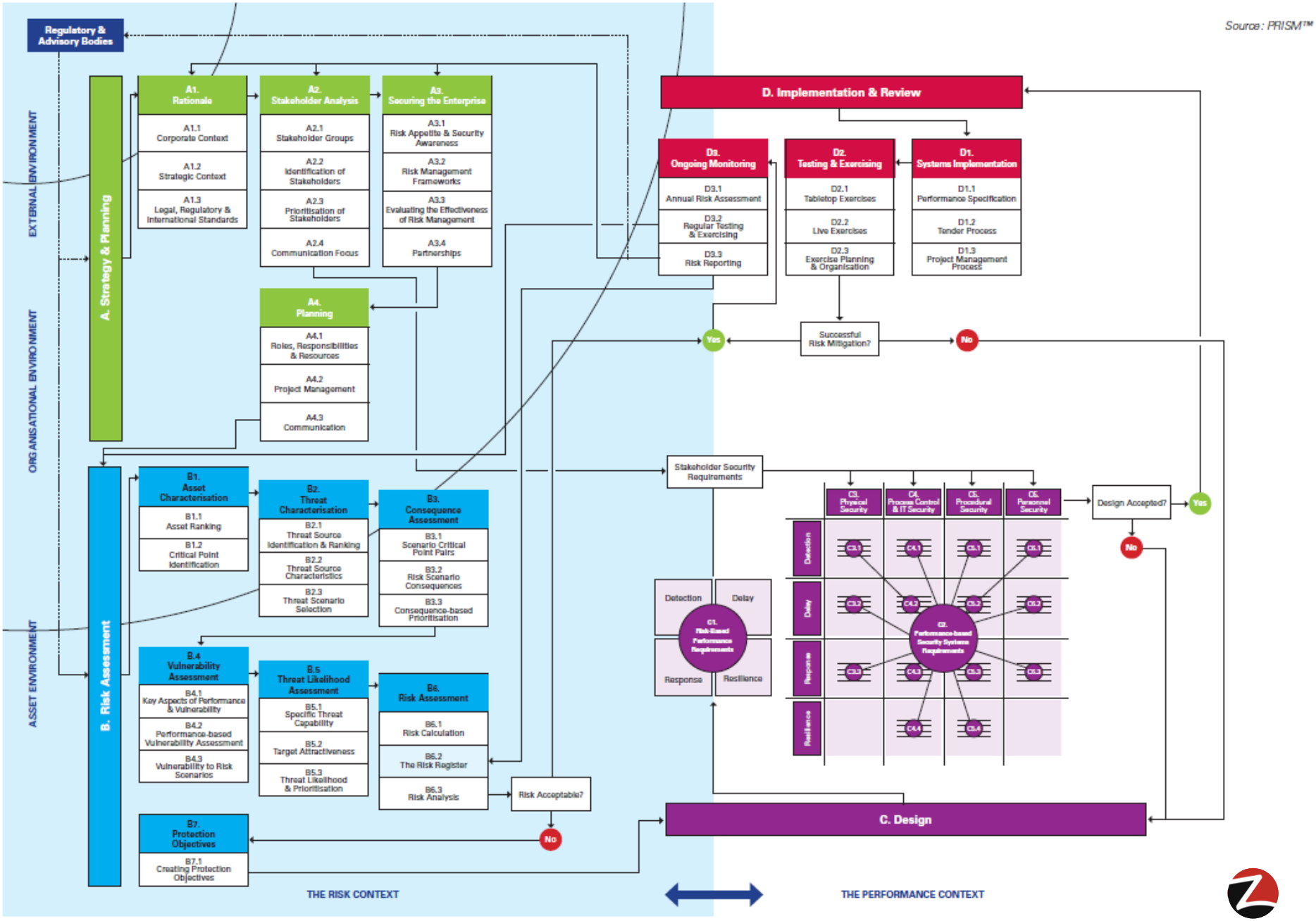
Παλαιό κτίριο πρεσβείας USA στο Λονδίνο

Νέο κτίριο πρεσβείας USA στο Λονδίνο

Κρίσιμες Εγκαταστάσεις

Η δική μας Κρίσιμη Εγκατάσταση;

Diagram A


Source: PRISM™
Regulatory & Advisory Bodies
EXTERNAL ENVIRONMENT
ORGANISATIONAL ENVIRONMENT
ASSET ENVIRONMENT
A. Strategy & Planning
A1. Rationale
A1.1 Corporate Context
A1.2 Strategic Context
A1.3 Legal, Regulatory & International Standards
A2. Stakeholder Analysis
A2.1 Stakeholder Groups
A2.2 Identification of Stakeholders
A2.3 Prioritisation of Stakeholders
A2.4 Communication Focus
A3. Securing the Enterprise
A3.1 Risk Appetite & Security Awareness
A3.2 Risk Management Frameworks
A3.3 Evaluating the Effectiveness of Risk Management
A3.4 Partnerships
A4. Planning
A4.1 Roles, Responsibilities & Resources
A4.2 Project Management
A4.3 Communication
B. Risk Assessment
B1. Asset Characterisation
B1.1 Asset Ranking
B1.2 Critical Point Identification
B2. Threat Characterisation
B2.1 Threat Source Identification & Ranking
B2.2 Threat Source Characteristics
B2.3 Threat Scenario Selection
B3. Consequence Assessment
B3.1 Scenario Critical Point Pairs
B3.2 Risk Scenario Consequences
B3.3 Consequence-based Prioritisation
B4. Vulnerability Assessment
B4.1 Key Aspects of Performance & Vulnerability
B4.2 Performance-based Vulnerability Assessment
B4.3 Vulnerability to Risk Scenarios
B5. Threat Likelihood Assessment
B5.1 Specific Threat Capability
B5.2 Target Attractiveness
B5.3 Threat Likelihood & Prioritisation
B6. Risk Assessment
B6.1 Risk Calculation
B6.2 The Risk Register
B6.3 Risk Analysis
Risk Acceptable?
No
B7. Protection Objectives
B7.1 Creating Protection Objectives
THE RISK CONTEXT
D. Implementation & Review
D3. Ongoing Monitoring
D3.1 Annual Risk Assessment
D3.2 Regular Testing & Exercising
D3.3 Risk Reporting
D2. Testing & Exercising
D2.1 Tabletop Exercises
D2.2 Live Exercises
D2.3 Exercise Planning & Organisation
D1. Systems Implementation
D1.1 Performance Specification
D1.2 Tender Process
D1.3 Project Management Process
Yes
Successful Risk Mitigation?
No
Stakeholder Security Requirements
C3. Physical Security
C4. Process Control & IT Security
C5. Procedural Security
C6. Personnel Security
Design Accepted?
Yes
No
Detection
Delay
Response
Resilience
C1. Risk-Based Performance Requirements
C2. Performance-based Security Systems Requirements
C. Design
THE PERFORMANCE CONTEXT

Strategy & Planning

Why is a security risk management plan Important, how it will be written and for what audience and how it will be updated and kept current.

Assessment

How to assess the nature and extent of security risk to identified critical Assets within a site, what mitigation strategies are required and why.

Design

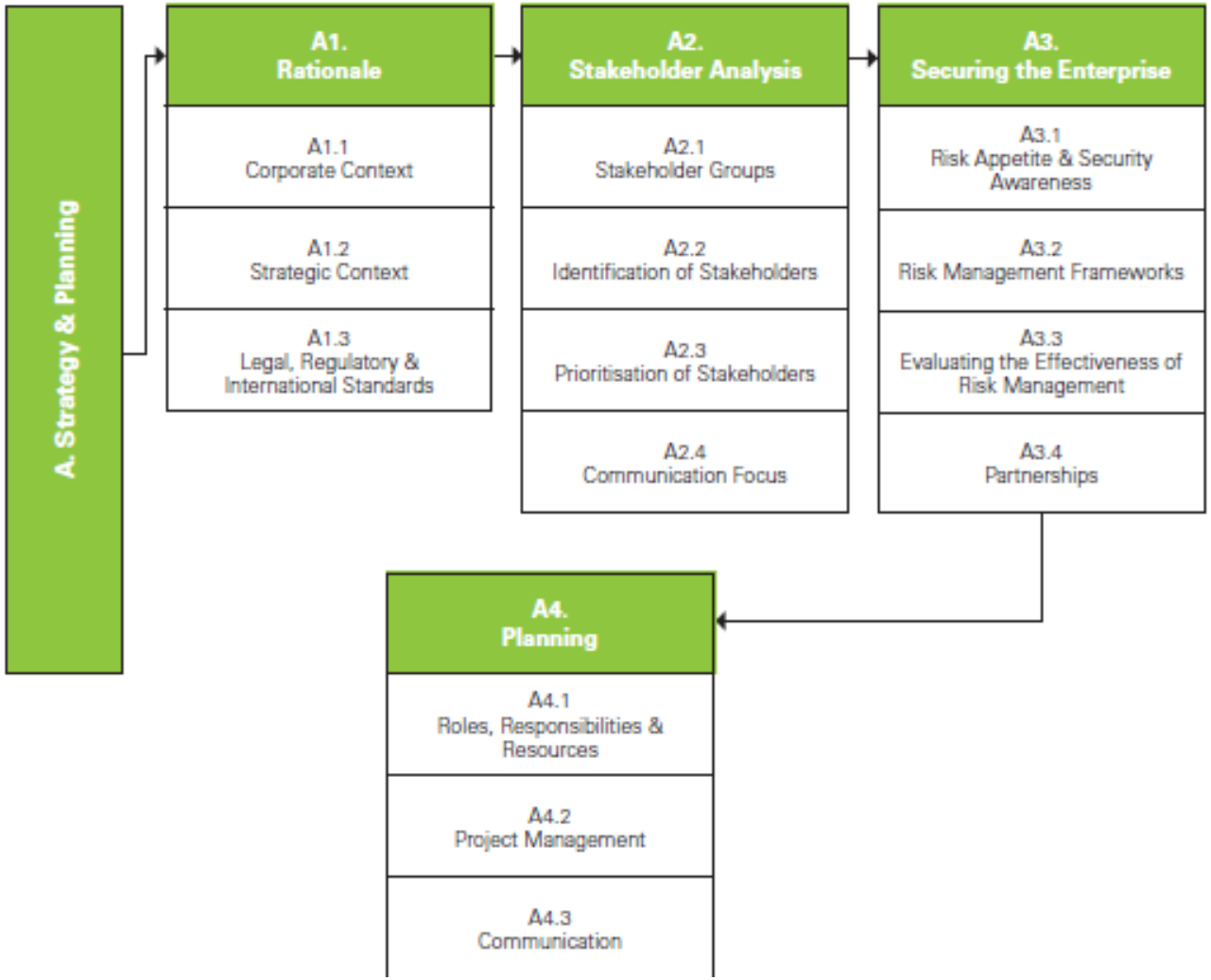
How mitigation strategies can be developed to achieve security specific outcomes that meet protection objectives and cost constraints.

Implementation & Review

How to ensure that agreed design is implemented on time and in budget; tested for effectiveness and monitored.

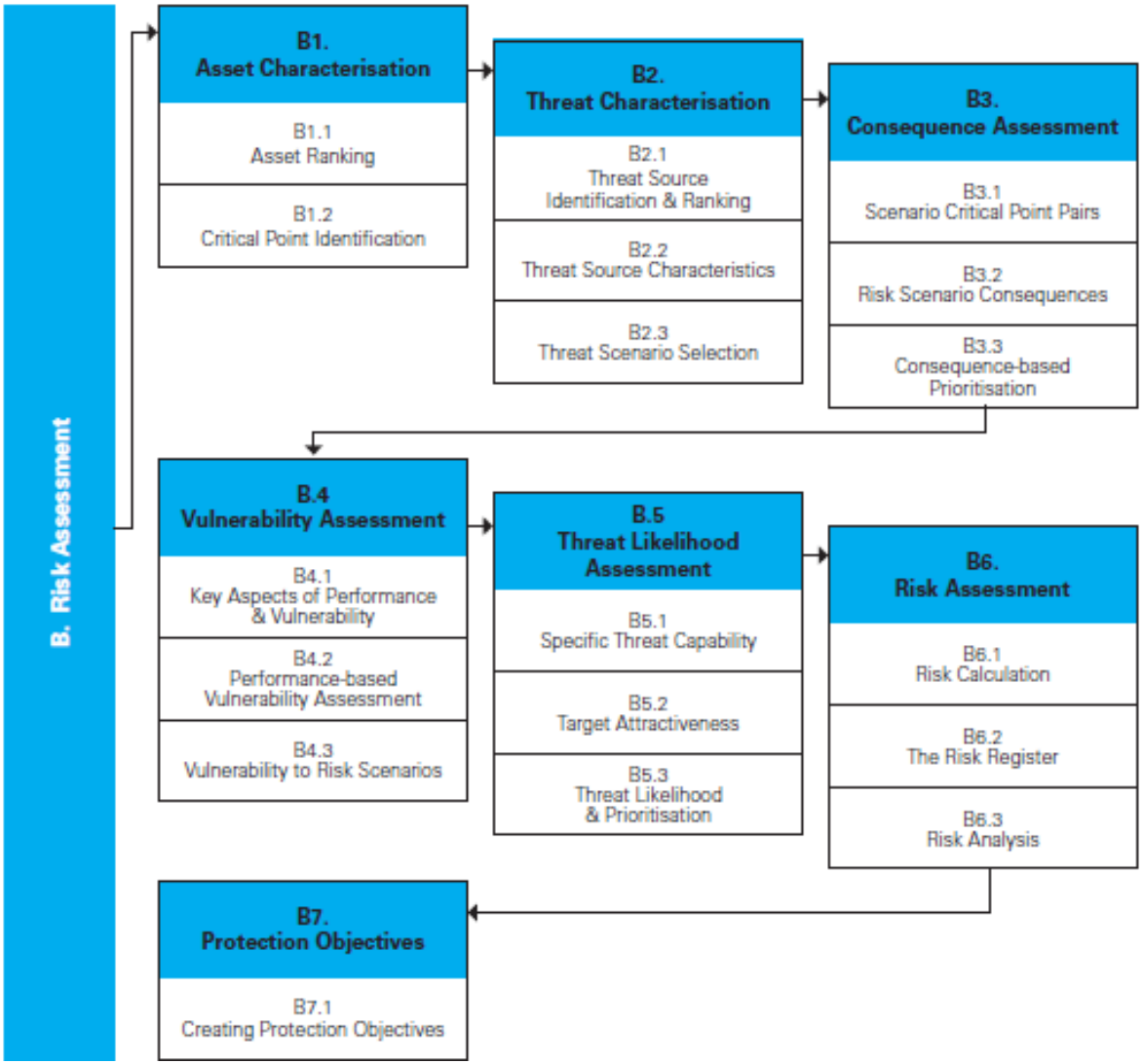
Phase A:

Strategy & Planning



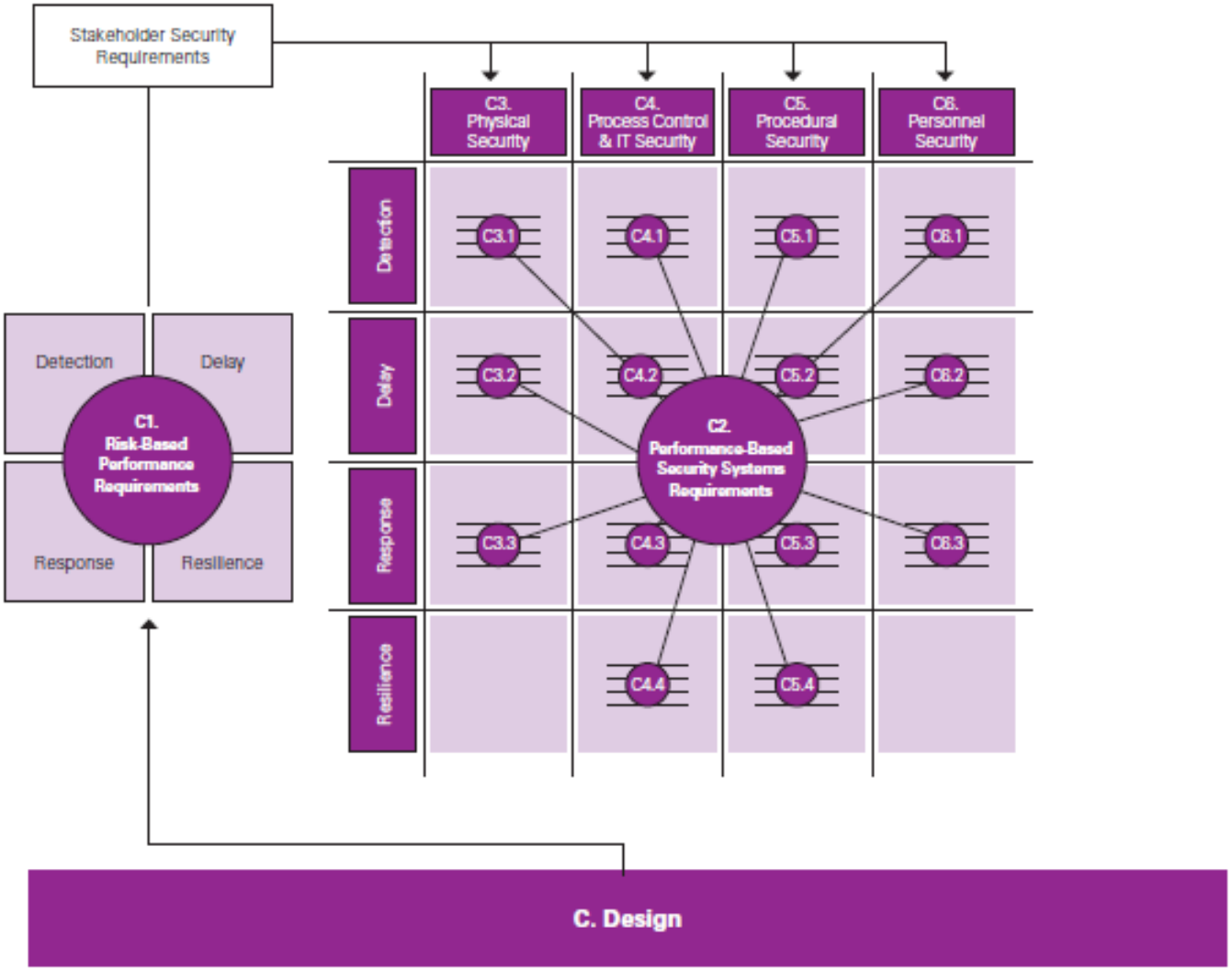
Phase B:

Assessment



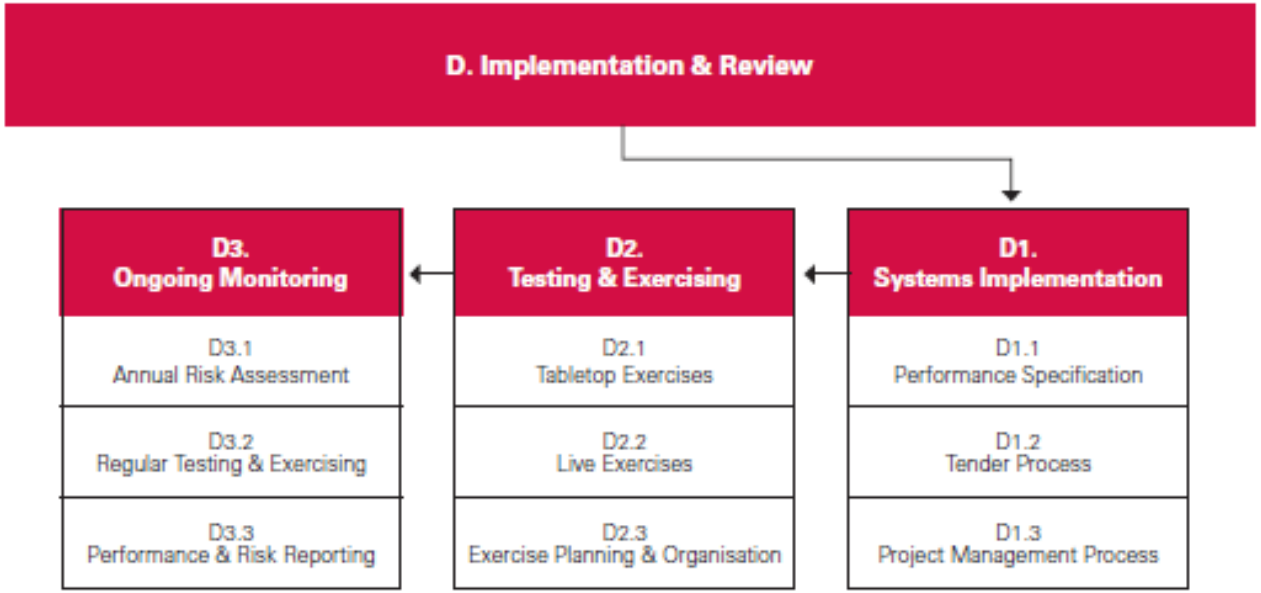
Phase C:

Design



Phase D:

Implementation & Review



Ένα μήνυμα

Ολιστική προσέγγιση

Η περιμετρική προστασία είναι ένας γάμος Τεχνολογίας, Περιβάλλοντος και της κατανόησης του Ανθρώπινου Παράγοντα

ΖΑΡΙΦΟΠΟΥΛΟΣ
ΥΠΗΡΕΣΙΕΣ ΑΣΦΑΛΕΙΑΣ & ΕΛΕΓΧΟΥ
Το Ζ της Ασφάλειάς σας

Ερωτήσεις ;

Σας ευχαριστούμε για την παρακολούθηση της παρουσίασης!

ΖΑΡΙΦΟΠΟΥΛΟΣ
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Το Ζ της Ασφάλειάς σας