DIRK MAIJ, CISSP
ONYX CYBERSECURITY

ISO27000 MICRO BOOT CAMP

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THEORETICAL PART

- WHAT IS ISO27000
- HOW DOES AN IMPLEMENTATION PROJECT

PRACTICAL PART

- MICRO IMPLEMENTATION

AGENDA

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NO MOBILE PHONES OR AT LEAST SET TO QUIET

FREE TO ASK QUESTIONS, RAISE HAND

FREE TO GIVE REMARKS, KEEP IT IN CONTEXT

PRESENTATION RULES

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THE THEORY

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WHAT IS INFORMATION ANYWAY?

INFORMATION SECURITY

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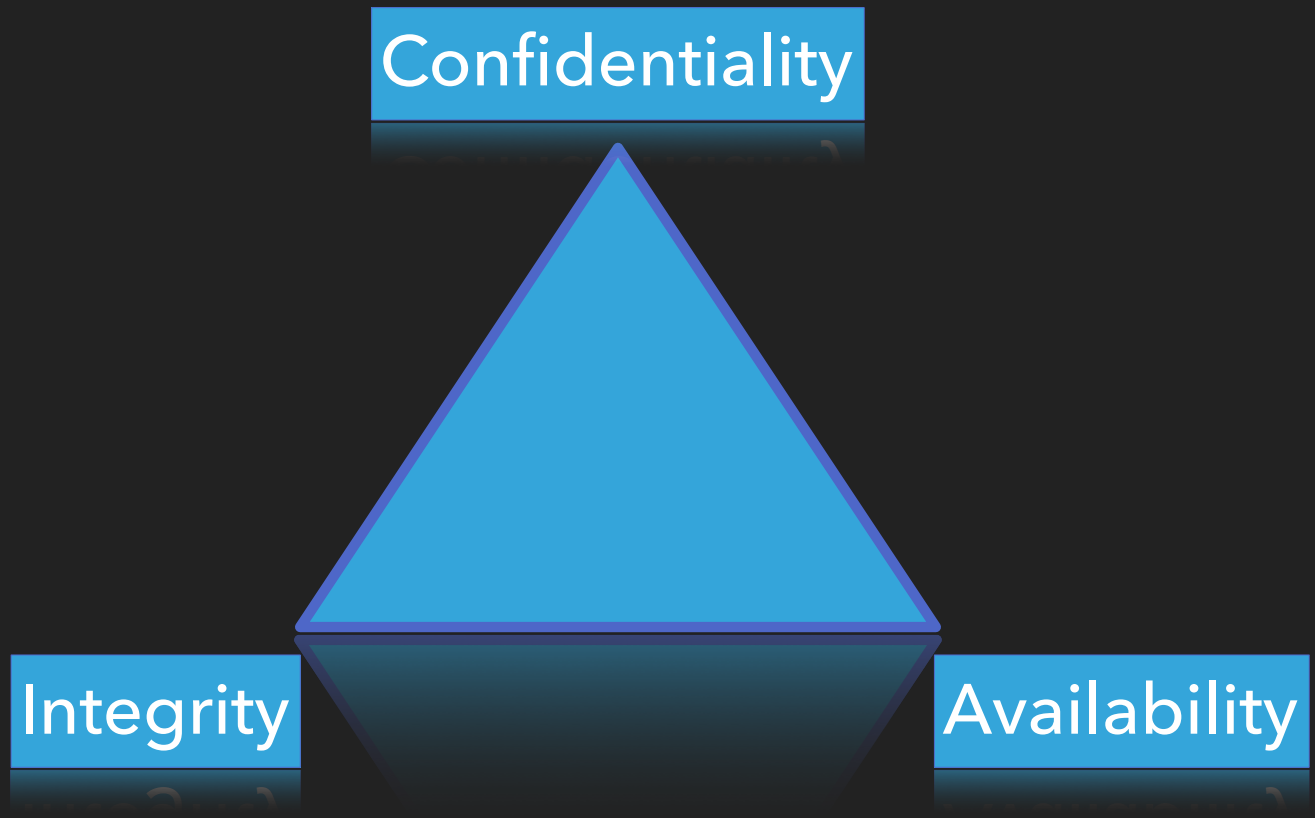
CYBER SECURITY



CIA TRIAD

INTERNATIONAL STANDARD FRAMEWORK
MOST POPULAR STANDARD WORLDWIDE
SET OF AROUND 30 DOCUMENTS
1 PARTICULARLY INTERESTING ISO 27001

WHAT IS ISO27K

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https://www.youtube.com/watch?v=Mpt5_RsLH6o

COMPLIANCE TO LAW OR REGULATION (SOX, BASEL III, PCI-DSS, ETC)
BETTER MARKET POSITION
LOWERING COST
IMPROVING COMPANY PROCESSES

WHY ISO27K?

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CYBERSECURITY FRAMEWORK (NIST)
STANDARD OF GOOD PRACTICE (ISF)
NIST SP 800 SERIES
RISK FRAMEWORKS LIKE COBIT, OCTAVE, COSO ETC

ALTERNATIVES TO ISO27K

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CERTIFICATION
CONTINUOUS IMPROVEMENT
INTERNATIONALLY ACCEPTED
RELATIVELY WELL KNOWN, SO MUCH INFORMATION AVAILABLE

MAIN ADVANTAGES OF ISO

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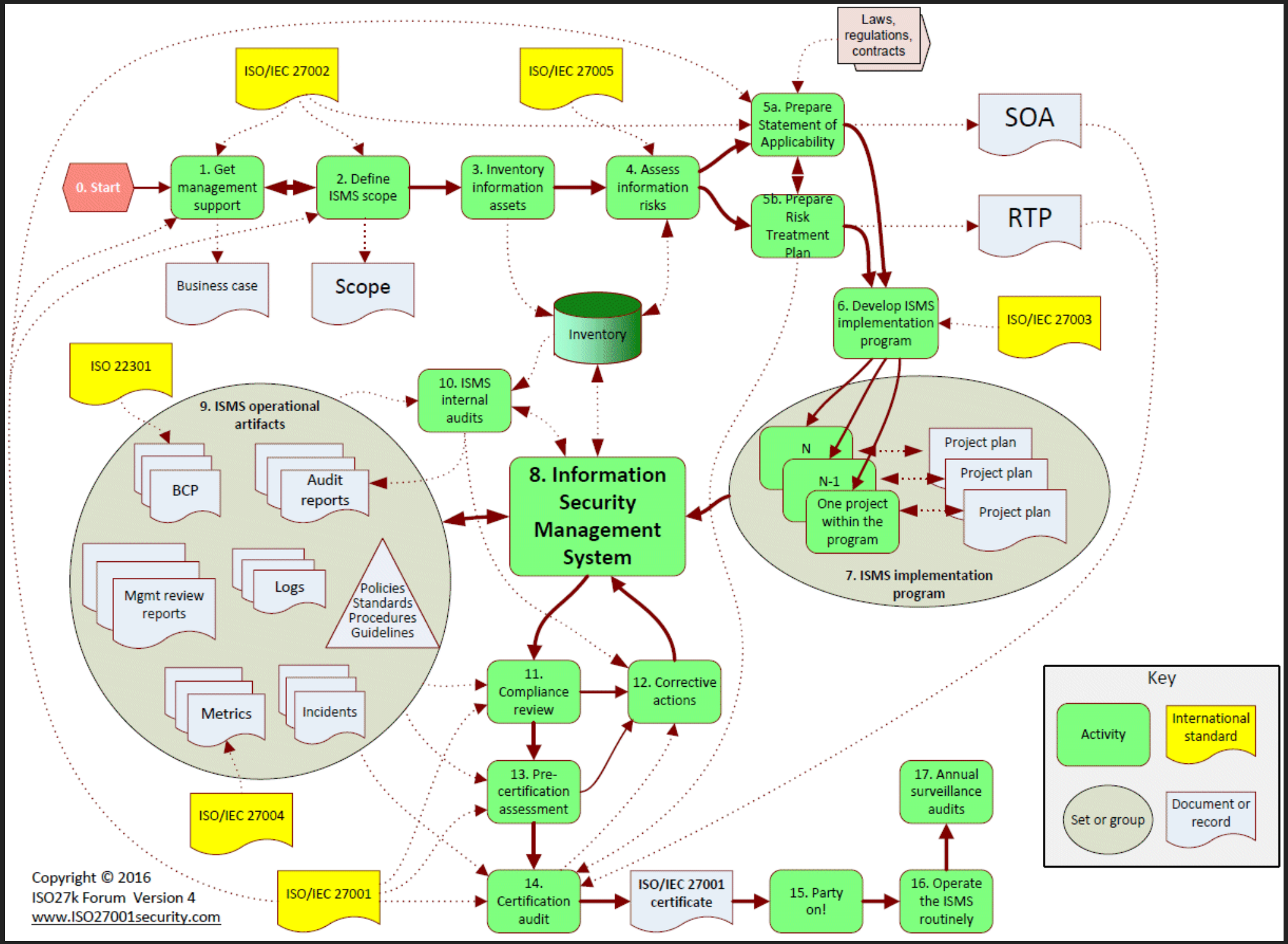
Laws, regulations, contracts
ISO/IEC 27002
ISO/IEC 27005
5a. Prepare Statement of Applicability
SOA
0. Start
1. Get management support
2. Define ISMS scope
3. Inventory information assets
4. Assess information risks
5b. Prepare Risk Treatment Plan
RTP
Business case
Scope
Inventory
6. Develop ISMS implementation program
ISO/IEC 27003
ISO 22301
10. ISMS internal audits
9. ISMS operational artifacts
BCP
Audit reports
Mgmt review reports
Logs
Policies Standards Procedures Guidelines
Metrics
Incidents
8. Information Security Management System
N
N-1
One project within the program
Project plan
Project plan
Project plan
7. ISMS implementation program
11. Compliance review
12. Corrective actions
13. Pre-certification assessment
17. Annual surveillance audits
ISO/IEC 27004
ISO/IEC 27001
14. Certification audit
ISO/IEC 27001 certificate
15. Party on!
16. Operate the ISMS routinely
Key
Activity
International standard
Set or group
Document or record
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www.ISO27001security.com

SET OF POLICIES, PROCEDURES, STANDARDS AND GUIDELINES
AGREED TO BY MANAGEMENT
IN PLACE TO PROTECT INFORMATION / ASSETS
ESSENTIALLY MANAGES RISK

INFORMATION SECURITY MANAGEMENT SYSTEM

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THE PROBABILITY OR THREAT OF QUANTIFIABLE DAMAGE, INJURY, LIABILITY, LOSS, OR ANY OTHER NEGATIVE OCCURRENCE THAT IS CAUSED BY EXTERNAL OR INTERNAL VULNERABILITIES, AND THAT MAY BE AVOIDED THROUGH PREEMPTIVE ACTION.

RISK

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ASSET BASED
ISACA RISK IT FRAMEWORK / COBIT 5
COSO
OCTAVE
CRAMM
STANDARDS OF GOOD PRACTICE
FAIR

RISK MANAGEMENT METHODS

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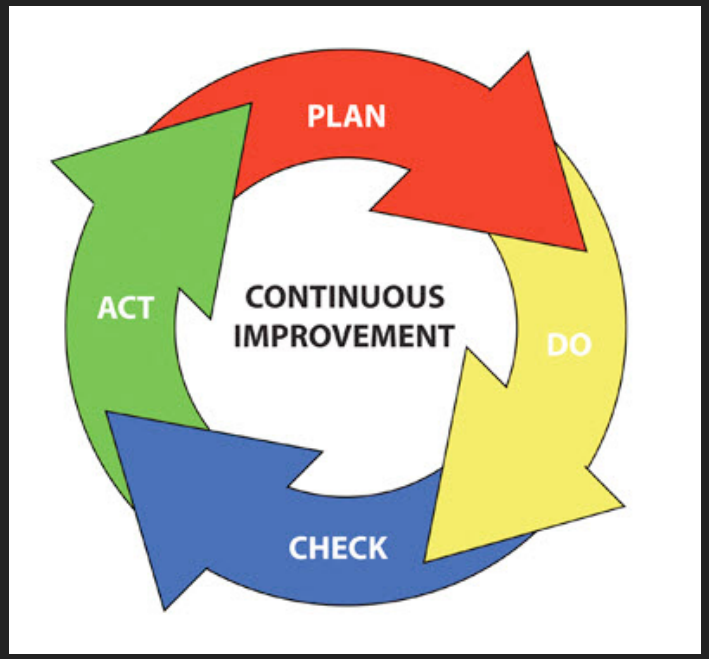

PLAN (4,5,6)
DO (7,8)
CHECK (9)
ACT (10)

PHASES OF THE PROJECT

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GET MANAGEMENT SUPPORT
DETERMINE SCOPE
CREATE INVENTORY OF INFORMATION ASSETS
ANALYSE RISKS AND DETERMINE TREATMENT

PLAN

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EXECUTE RISK TREATMENT CONTROLS
MONITOR AND MEASURE CONTROLS

DO

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ANALYSE MEASUREMENTS

REVIEW ISMS

CHECK

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PERFORM CORRECTIVE ACTIONS
ADJUST ISMS
CONTINUAL IMPROVEMENT

ACT

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CERTIFICATION

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PHASE 1: DOCUMENTATION AUDIT
PHASE 2: MAIN AUDIT
SURVEILLANCE VISITS (YEARLY)
3 YEARS VALID, AFTER THAT RECERTIFICATION NEEDED

CERTIFICATION

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https://www.youtube.com/watch?v=AskktIDYe3A

chris davenport
https://www.youtube.com/watch?

ISO27001 MICRO BOOT CAMP

IN PRACTICE

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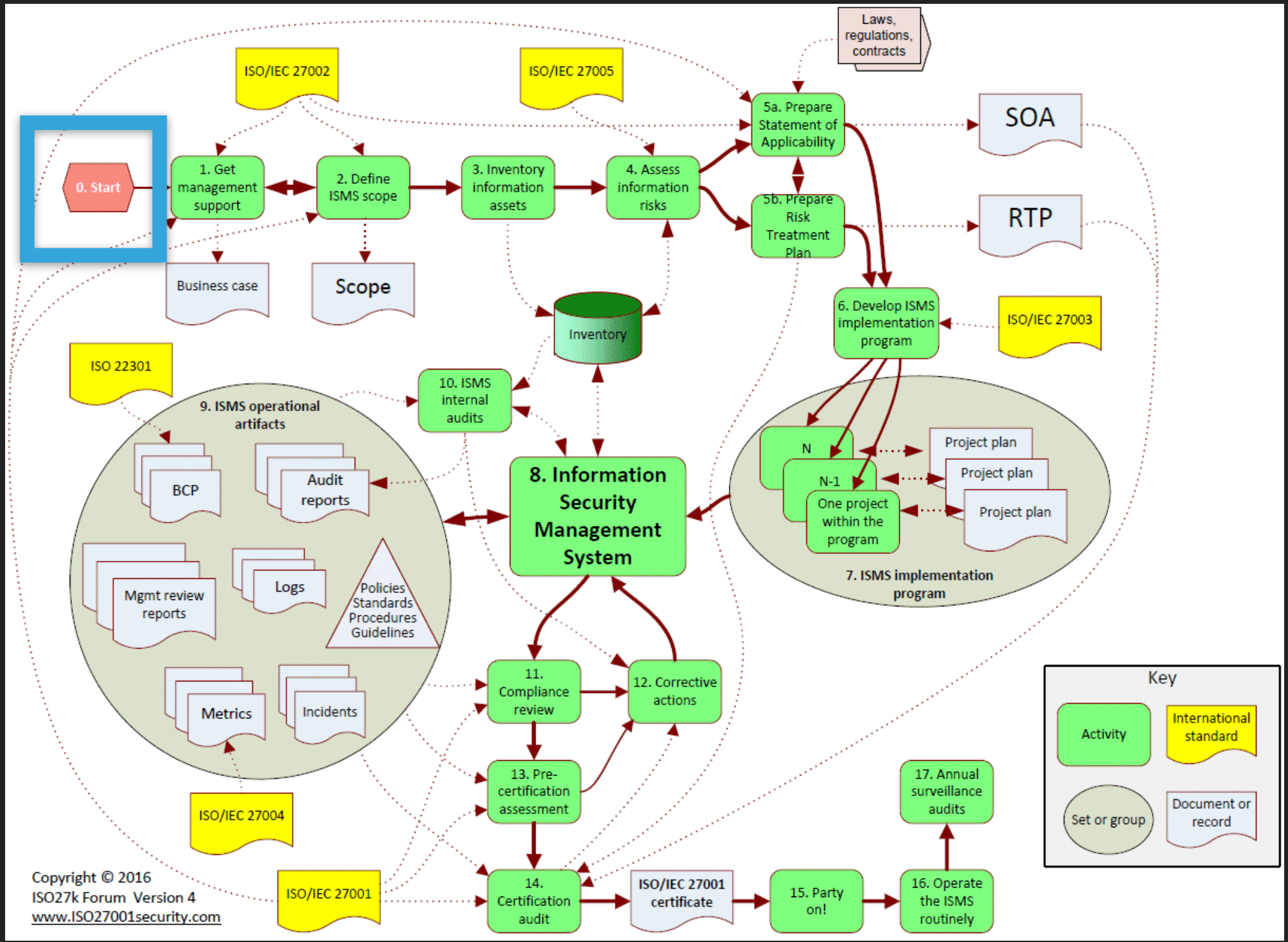
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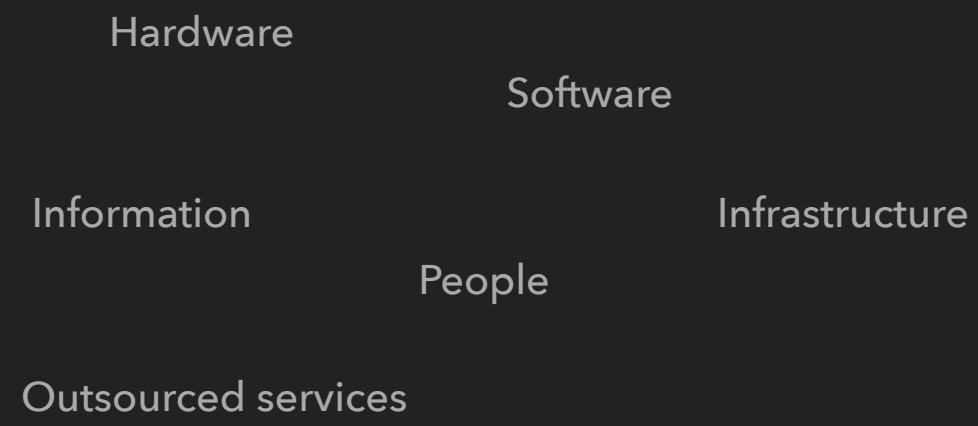

PICK 5 IMPORTANT ASSETS

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THREATS

Falsification of records

Fire

Flood

Fraud

User error

Loss of electricity

Software errors

Theft

Social engineering

Unauthorized use of copyright material

VULNERABILITIES

Default passwords not changed

Inadequate physical protection

Inadequate security awareness

Location vulnerable to flooding

Too much power in one person

Unmotivated employees

Uncontrolled download from the Internet

PER ASSET, PICK 2 THREATS AND VULNERABILITIES

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QUALITATIVE

Low

Medium

High

QUANTITATIVE

Probability %

Value $

Cost of incident $

DETERMINE LIKELIHOOD / IMPACT

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FILL RISK MATRIX

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Likelihood + Impact = Risk level

All risks get a value, determine maximum acceptance level (for instance 7)

DETERMINE RISK TREATMENT LEVEL

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All risks above risk level

- Mitigate
- Accept
- Transfer
- Avoid

DETERMINE RISKS TO TREAT

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For all mitigated risks, choose risk treatment

DETERMINE RISK TREATMENT

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RINSE AND REPEAT

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DISCUSSION

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