ISO/IEC 27002:2022 – Control Groups (Learning Summary)

This resource provides an overview of the four control groups in ISO/IEC 27002:2022.

It gives short explanations so students can understand the purpose of each type of control without needing the full paid standard.

1. Organisational Controls (37 controls)

These set the direction for information security and define how security is managed across the organisation.

Key Areas with Short Explanations

• Policies and governance

High-level direction for security and clear expectations for behaviour and responsibilities.

· Roles and responsibilities

Defines who is accountable for decisions, approvals and day-to-day actions.

• Risk management processes

Provides a structured approach to identifying, assessing and treating risks.

Supplier and third-party management

Ensures external partners meet required security standards.

Project and change management

Makes sure new systems and changes include security from the start.

• Access control rules

Sets principles for how access is granted, reviewed and removed.

Logging and monitoring strategy

Defines what needs to be logged and how activity is monitored for unusual behaviour.

Backup strategy

Sets expectations for creating, storing and verifying backups.

• Cryptographic management

Ensures encryption and key handling follow approved practice.

• Incident management structure

Defines roles, responsibilities and steps to respond to incidents.

• Business continuity planning

Provides a high-level framework for maintaining security during disruption.

2. People Controls (8 controls)

These address human behaviour, awareness and the way individuals access information.

Key Areas with Short Explanations

· Screening and onboarding

Ensures staff are suitable and trusted before gaining access.

• Security awareness and training

Teaches staff how to recognise and avoid security threats.

• Disciplinary processes

Supports consistent handling of security breaches by staff.

Offboarding and role changes

Ensures access is removed or adjusted when people leave or change duties.

3. Physical Controls (14 controls)

These protect physical environments, equipment and locations.

Key Areas with Short Explanations

Secure areas

Restricts entry to sensitive rooms and facilities.

• Physical entry controls

Uses locks, cards, logs and monitoring to protect access.

• Equipment protection

Prevents loss, theft or damage of devices and infrastructure.

• Environmental controls

Reduces risks from fire, flood, power issues or temperature changes.

· Clear desk and clear screen

Prevents exposure of information in shared or open spaces.

4. Technological Controls (34 controls)

These are implemented through technology to protect systems, networks and data.

Key Areas with Short Explanations

• User authentication

Ensures users prove their identity before accessing systems.

Access control mechanisms

Manages permissions within applications and systems.

• Endpoint protection

Defends laptops, servers and mobile devices against malware or exploitation.

Configuration management

Applies secure settings and baselines to systems.

Network security

Uses segmentation, filtering and secure communication methods.

• Logging and monitoring tools

Collects and analyses events to detect unusual activity.

• Backup implementation

Runs, tests and restores backups to ensure data recovery.

Encryption and key handling

Protects data using secure cryptographic methods.

• Change management in systems

Ensures updates and changes are controlled and reviewed.

System hardening

Reduces attack surface by disabling unnecessary features or services.

· Vulnerability management

Identifies and addresses weaknesses in systems and software.

How to Use This Resource

You can use this list to:

- Explain control groups in their own words
- Complete ISMS and Annex A-related tasks
- Justify control selection in a Statement of Applicability
- Map controls to frameworks like NIST CSF or CIS Controls
- Support assignment work without needing the paid standards