MALAYSIA
CYBER SECURITY
STRATEGY

2020
2024
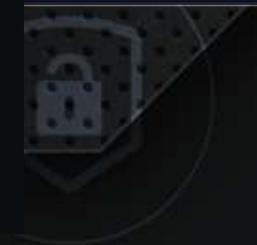
MAJLIS KESELAMATAN NEGARA
NSC
MALAYSIA

The National Cyber Security Agency (NACSA) was officially established in February 2017 under the aegis of the National Security Council. The national lead agency for cyber security matters, with the objectives of securing and strengthening Malaysia's resilience in facing the threats of cyber attacks, by co-ordinating and consolidating the nation's best experts and resources in the field of cyber security.

ROLES & RESPONSIBILITIES

Developing and implementing national-level cyber security policies and strategies.

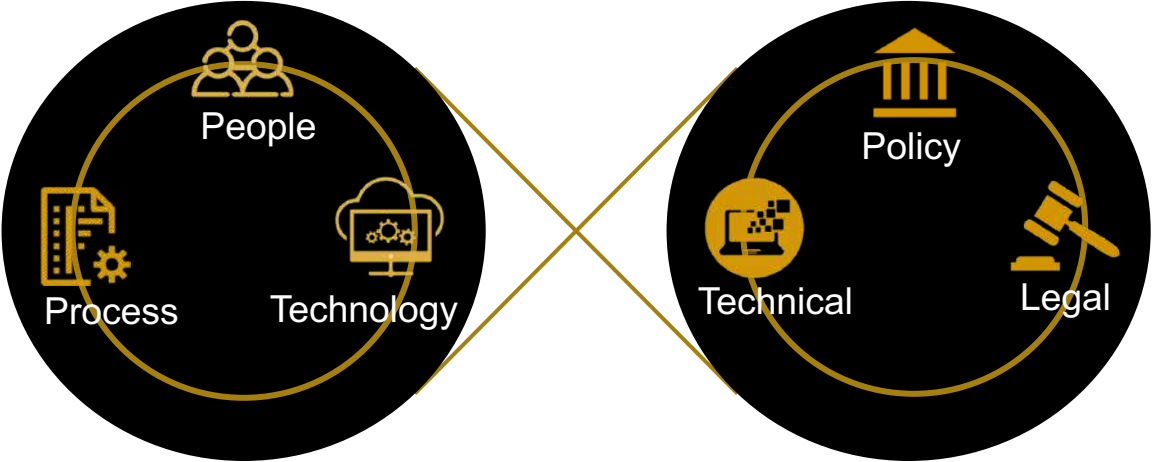Protecting Critical National Information Infrastructures (CNII).

Formulating strategic approach towards combatting cyber crimes.

Strengthening international collaboration in cybersecurity.

Promoting cyber security awareness, acculturation and capacity-building.

A comprehensive strategy to mitigate evolving cyber threats through an integrated approach and an effective model of public-private partnership.

People

Process

Technology

Policy

Technical

Legal

Economic Prosperity

Image & Reputation

Citizen Well-being

Ability of Government to Function

National Security & Sovereignty

Development & Implementation

MALAYSIA
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STRATEGY

Lessons Learnt & Areas of Improvement from the implementation of National Cyber Security Policy

1 Governance & Approach
- National, Sectoral & Organization
- Cyber Security as National Agenda
- Top down approach (Board Issue)
- Security by Design
- Star Rating/Recognition

2 Engagement & Coordination
- Continuous Engagement
- Specific Target
- Effective Coordination & Information Sharing Mechanism
- Management Level Contacts
- Effective Public-Private Partnership

3 Role & Responsibility
- Clear role of agencies
- Role of Sector Lead
- Role of Head of Organization

4 Awareness & Understanding
- Awareness & Knowledge
- Understanding the risk
- Support & Commit

Vision

Malaysia cyberspace that is Secure, Trusted and Resilient while at the same time fostering economic prosperity and the well-being of its citizen

Mission

Fortifying local capabilities to Predict, Detect, Deter and Respond to cyber threats by strengthening our cyber security governance, nurturing competent people and supporting best practices

5 STRATEGIC PILLARS

| **12** Strategies | **35** Action Plans | **113** Programmes |

Cyber Threats

Cyber Attacks on
Critical Infrastructures

Cyber Espionage

Data Breaches

Intrusion

Online Fraud

Exploitation

Terrorist use of Internet

All Critical National Information Infrastructure (CNII) or
National system and services are well-protected and secured

All Government system, data and services
are protected, trusted and secured

All SMEs in a business supply chain
are protected and secured

Cyber criminal able to be prosecuted in
an acceptable period

OBJECTIVES

Build a trusted cyber environment for national
digital initiatives and investors confident

MALAYSIA CYBER SECURITY STRATEGY

A comprehensive strategy to mitigate evolving cyber threats through an integrated approach and an effective model of public-private partnership.

5 STRATEGIC PILLARS

1 Effective
Governance & Management

2 Strengthening
Legislative Framework and Enforcement

3 Catalysing
World Class Technology, R & D and Industry

4 Enhancing
Capacity and Capability Building, Awareness and Education

5 Strengthening
Global Collaboration

ABOUT

EVERYONE

WHO
INVOLVE

MALAYSIA CYBER SECURITY STRATEGY

National	Sectoral	Organization

- Protection of Critical Infrastructure through **Active Cyber Defence**
- Strengthen Incident Management
- Cyber Risk Framework
- Effective Coordination
- Policies, Guidelines, Compliance
- Information Sharing
- Clear Roles & Responsibilities
- Supply Chain Security
- Technology Security
- Protection of SMEs
- Industries Involvement
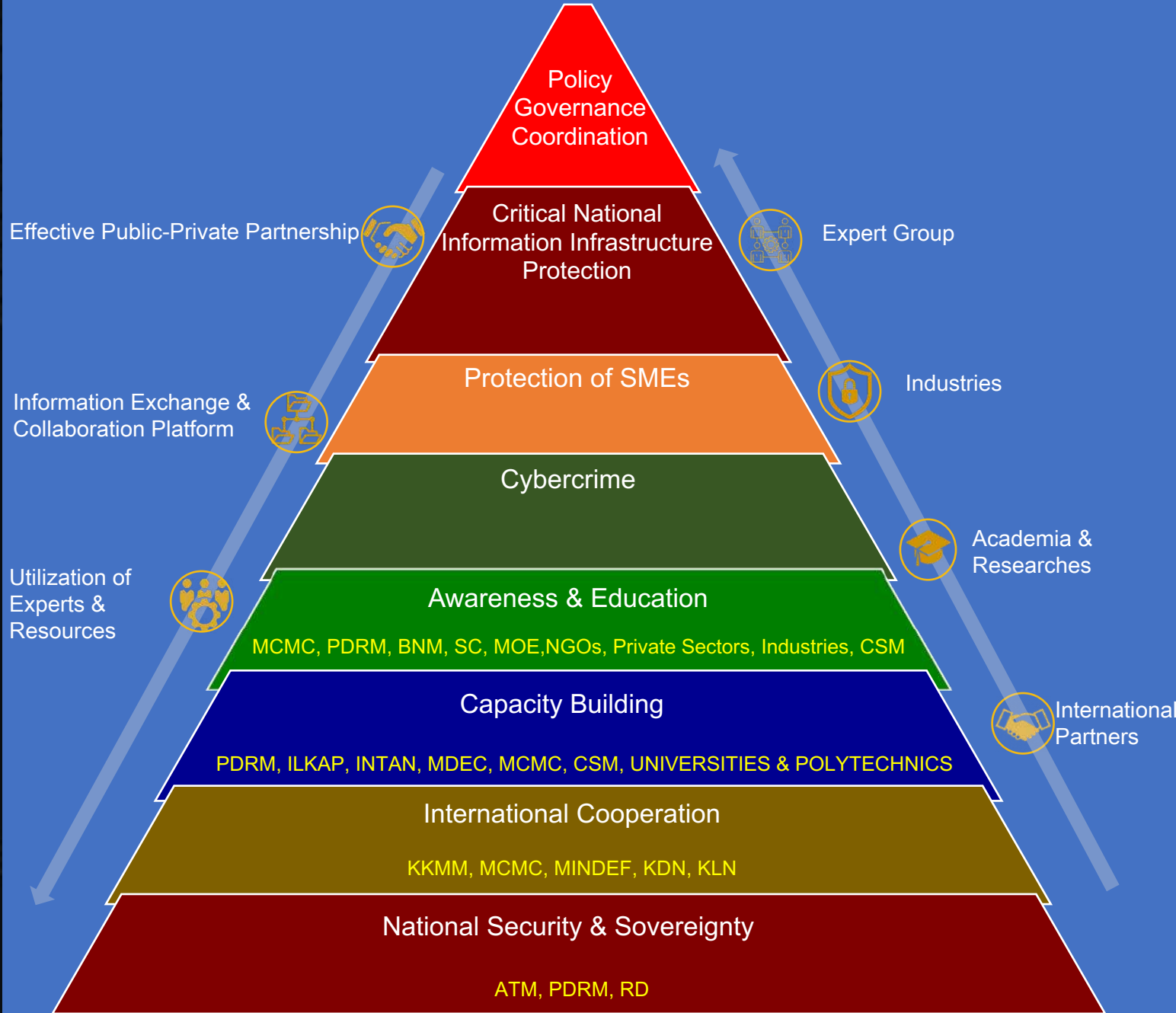
1

Effective Governance & Management

Resource Utilization

Group of Experts

Compliance

Predict

Detect

Deter

Respond

Early Warning

Threat Visibility

Integrated SOC Operation

AI & Data Analytic

Threat Intelligence

Threat Hunting

MALAYSIA
CYBER SECURITY STRATEGY

THE **ECOSYSTEM**

Clear Roles & Responsibilities

New Partnership Model

1

Effective Governance & Management

Policy Governance Coordination

Critical National Information Infrastructure Protection

Protection of SMEs

Cybercrime

Awareness & Education

MCMC, PDRM, BNM, SC, MOE, NGOs, Private Sectors, Industries, CSM

Capacity Building

PDRM, ILKAP, INTAN, MDEC, MCMC, CSM, UNIVERSITIES & POLYTECHNICS

International Cooperation

KKMM, MCMC, MINDEF, KDN, KLN

National Security & Sovereignty

ATM, PDRM, RD

Effective Public-Private Partnership

Expert Group

Information Exchange & Collaboration Platform

Industries

Utilization of Experts & Resources

Academia & Researches

International Partners

9

Whole of Nation Approach

1
Effective Governance & Management

NATIONAL
CYBER WORKFORCE

MALAYSIA
CYBER SECURITY STRATEGY

Research & Development Roadmap

Local Industry Development

Stimulate and Encourage Cross Discipline Research and Collaboration

Spearheading Innovation in the Areas of Cyber Security

Shared Centre of Excellence

Creating a Conducive Environment for Innovation and R&D.

Collaboration Platform
Government- Academia-Industry

Stimulate the creation of new local cyber security ventures through the establishment of cyber security start-up / ideation hub.

Promote the use of local ICT security products and services and support the growth and expansion of the local cyber security industry.

Generate local innovations

- Scaling-up existing cyber security technology solutions
- Drive local industry

3
Catalysing World Class Innovation, Technology, R&D and Industry Development

MALAYSIA CYBER SECURITY STRATEGY

Develop National Cyber Security Capacity and Capability Building Plan.

Develop a comprehensive plan to build adequate tools and technology through an integrated approach.

Improve cyber security awareness programme implementation approach through the implementation of the National Cyber Security Awareness Master Plan

Develop cyber security subject as one of the syllabuses at the primary, secondary and tertiary level through collaboration with Ministry of Education

Talent Development

- More industry-oriented courses and specialisations and thereby increase the number of marketable university graduate students in cyber security-related fields of study

- Specialised programmes will be established to produce more local talent

- Talent development initiatives through **new talent, up-skilling and re-skilling.**

National Cyber Security Capacity & Capability Building Plan

Talent Development

Cyber Security Education

National Cyber Security Awareness Master Plan

Adequate Tools & Technology

4 Enhancing Capacity & Capability Building, Awareness and Education

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CYBER SECURITY
STRATEGY

STRATEGY 11 — Strengthening International Collaboration and Cooperation in Cyber Security Affairs

STRATEGY 12 — Demonstrating Malaysia's commitment in promoting a secure, stable and peaceful cyberspace to uphold international security

◎ Address cyber security as a priority in foreign policy.

◎ Align domestic and International cyber security efforts.

◎ Recognise cyber security as one of the elements in diplomatic and international affairs

◎ Actively participate and contribute in key international cyber fora and strategically collaborate with international partners.

◎ Identify and establish formal & informal cooperation in cyber security

◎ Shape a concerted national position on norms, rules and principles of responsible behaviour of states and how international law applies in cyber space

◎ Continue efforts in driving regional Confidence Building Measures (CBMs)

5 **Strengthening Global Collaboration**

ASEAN REGIONAL FORUM
Promoting peace and security through dialogue and cooperation in the Asia Pacific

UNITED NATIONS

CSCAP

asean

IMPLEMENTATION OF
NATIONAL DIGITAL INITIATIVES

Trusted & Secured

Security by Design

Supply Chain Security

Comprehensive Security Measures

IoT

Digital Economy

5G

Fintech

IR4

e-Commerce

Smart City

Digital Identity

Digital Government

THANK YOU

Securing Malaysia Cyberspace