



Public Safety
Canada

Sécurité publique
Canada

BUILDING A **SAFE AND RESILIENT CANADA**



Canadian Cyber Incident Response Centre
CCIRC

ACPA 2017

20 September 2017



A WORLD GONE DIGITAL

data breaches
cybercrime
ubiquitous
vulnerabilities
asymmetric warfare
malicious code
censorship
anonymity
disruption
connectivity
pervasive
cyber theft
job losses
non-attribution
news manipulation
hackable homes
Internet of Things
pervasive risks
vulnerable control systems
self-replication botnets
mass surveillance
hackable transportation

Cyber Security

WHAT

Protection of digital information and the infrastructure on which it resides

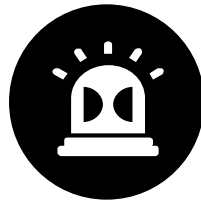
WHY

Maximize the benefits of digital life for Canadian citizens and businesses





Smartphones



Public Safety and
utilities



The Internet



Computing



Commerce

Cyber Security underpins the technology used everyday, by everyone, everywhere

Health care
monitoring



Smart Apps



Social Media



Internet of Things
devices



Transportation



Cyber Incidents

Unavoidable

Continuous

Evolve as rapidly as technology

Multiple victims in multiple ways

Business-as-usual to
business-altering

Impact can be minimized



Canadian Cyber Incident Response Centre (CCIRC)

***Strengthening Canada's
Cyber Resilience***



OUR APPROACH

TRUST

We are here to help

We understand that incidents happen

We are not a regulator or investigator

RELATIONSHIPS

Always happy to take a call, 24/7, 365

Long term relationships with our partners

Work in concert with private sector solution providers

INNOVATION

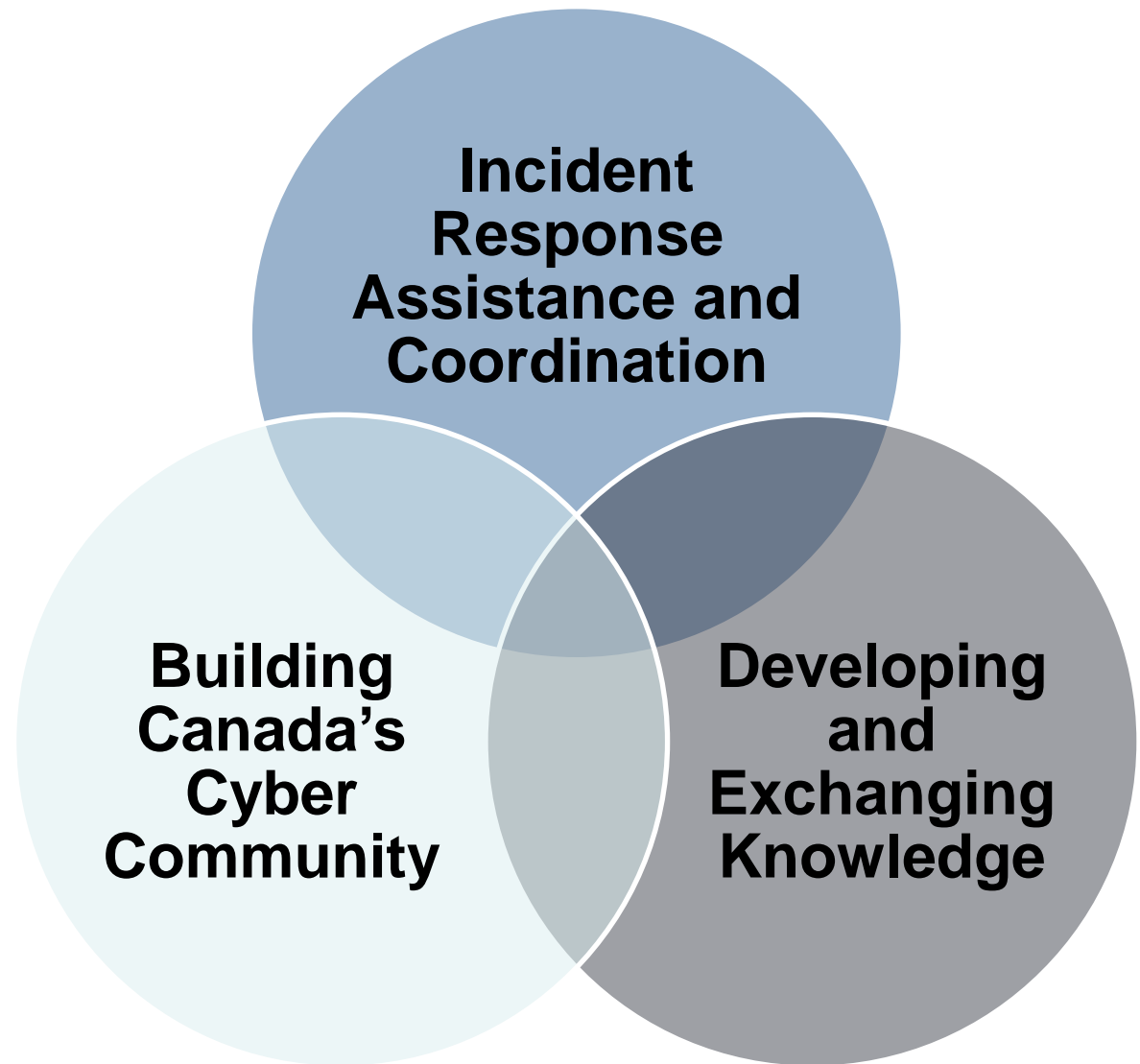
We evolve as cyber incidents evolve

Human-speed and machine-speed

Partner and outcome driven



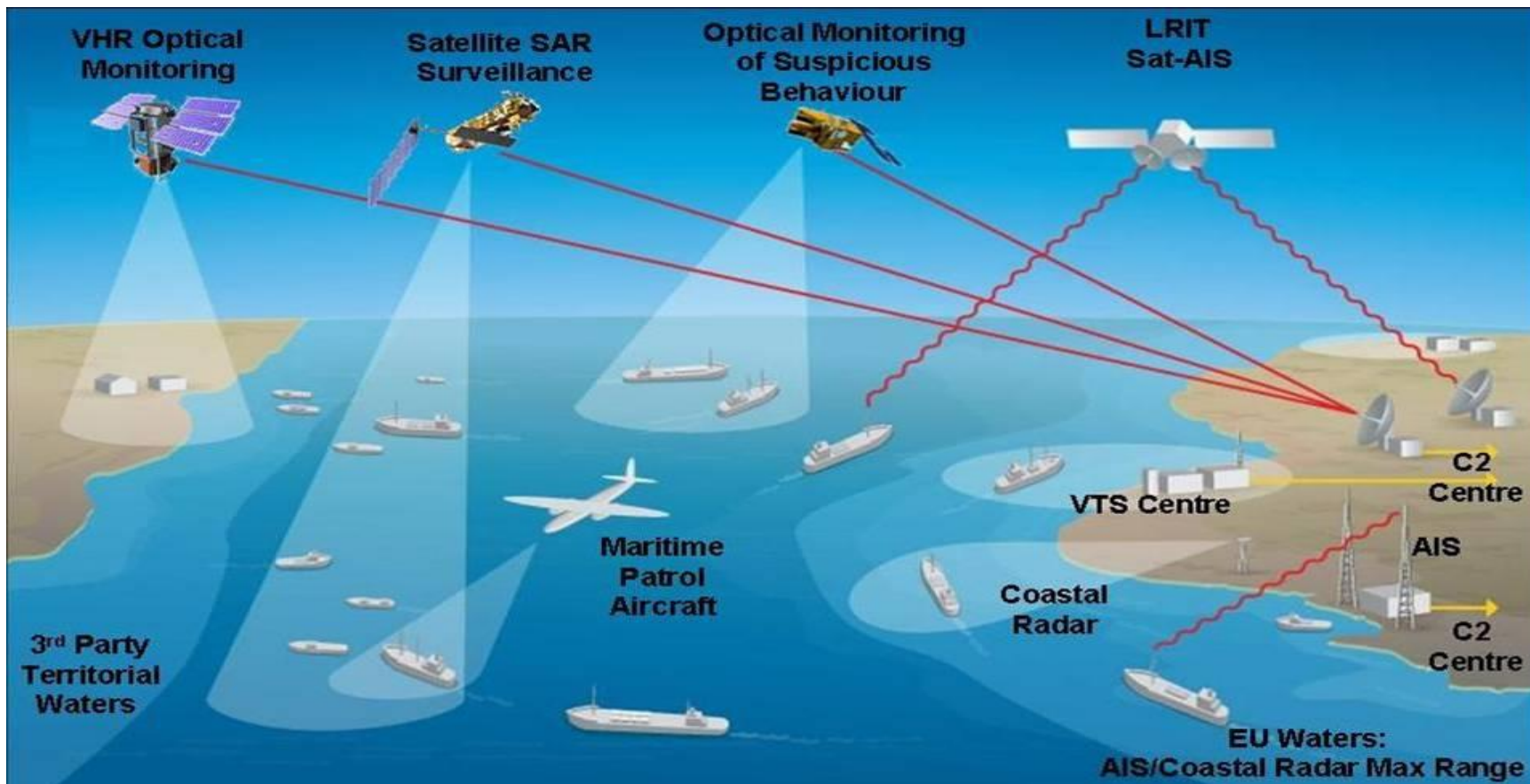
CCIRC'S CORE SERVICES



Cyber-Related Incidents in Maritime Transportation Sector



BUILDING A **SAFE AND RESILIENT CANADA**



Guidance on Protecting your Systems Against Cyber Security Risks



BUILDING A **SAFE AND RESILIENT CANADA**

These mitigation strategies will prevent as much as **85%** of targeted cyber attacks

1. Know your network infrastructure

- Undertake an inventory of all assets/endpoints connected to your network and keep it up to date
- Identify single point of failures and build redundancies

2. Restrict administrative privileges

- Use application whitelisting to help prevent malicious software and unapproved programs from running

3. Patch applications and operating system vulnerabilities

4. Test your recovery plans regularly

- Exercises are a great way to test contingency plans



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helping Canadians continuous innovation public interest
 knowledge technology analytics dynamic opportunity
 centre of excellence data-driven information exchange
 community building partnering data-driven information exchange
 trust response building talent world class
CCIRC
 ps.cyberincident-cyberincident.sp@canada.ca
 www.publicsafety.gc.ca/ccirc

