



Cybersecurity For LMR Systems

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Agenda

- Why Cybersecurity for LMR Systems
- Attack Surface
 - Ransomware
 - Other Identified Risks
 - How Threat actors target Radio systems
- State and Federal Government Cyber Requirements
- What can be done
 - Customers
 - Vendors

Why Cybersecurity is Important for LMR

- No longer 'walled gardens' or air gapped environments
- Cyber attacks such as data breach and ransomware are a direct threat to LMR systems

142%

increase in number of
ransomware groups
attacking US public
safety agencies in 2023*

29%

Of Threat actors
leveraged legitimate
credentials to access
Public Safety networks

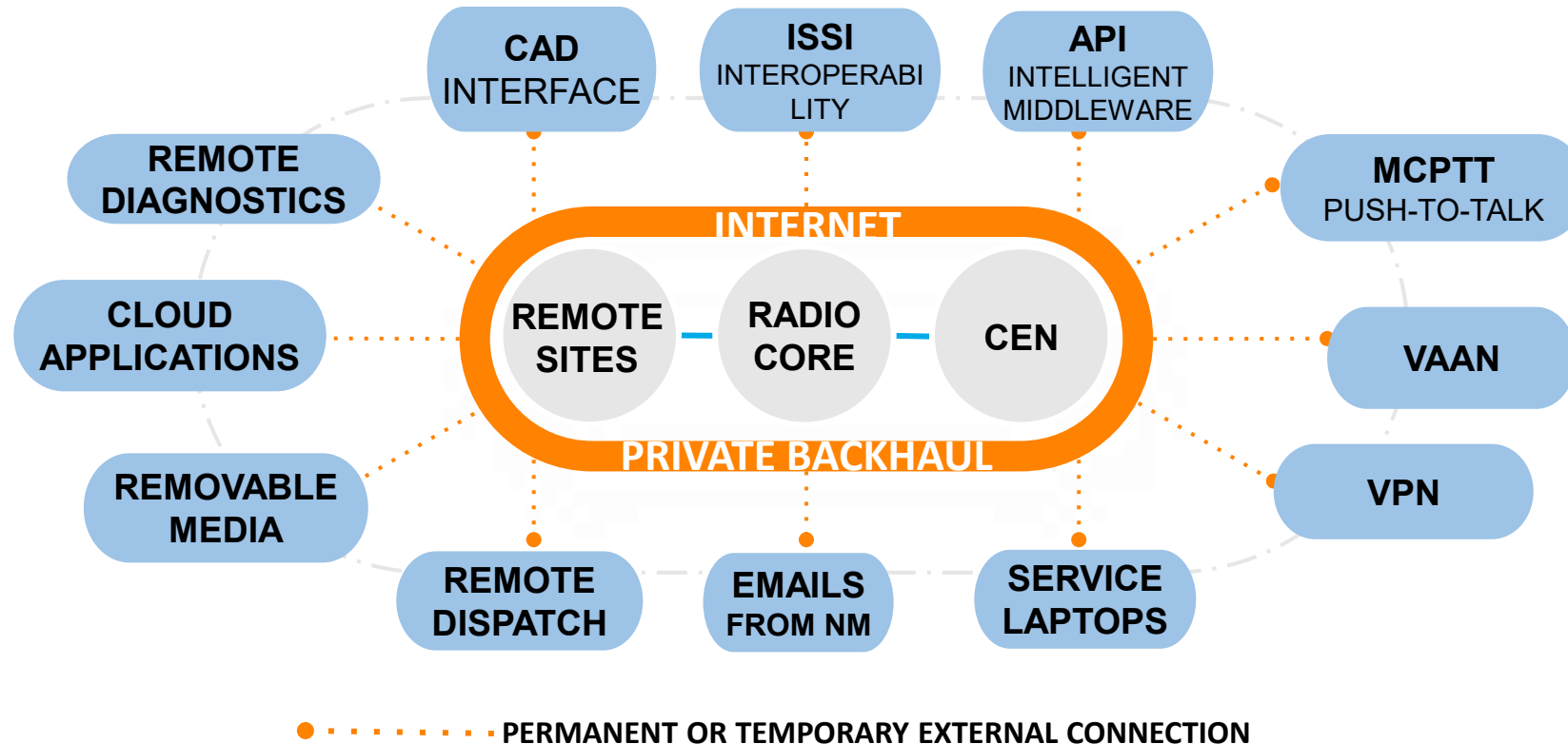
63%

increase in ransomware
attacks on US public
safety organizations
during 2023*

**PSTA 2024 reports*

LMR IS NOT A “CLOSED NETWORK”

LMR NETWORKS HAVE VULNERABILITIES SIMILAR TO THOSE FOUND IN IT NETWORKS

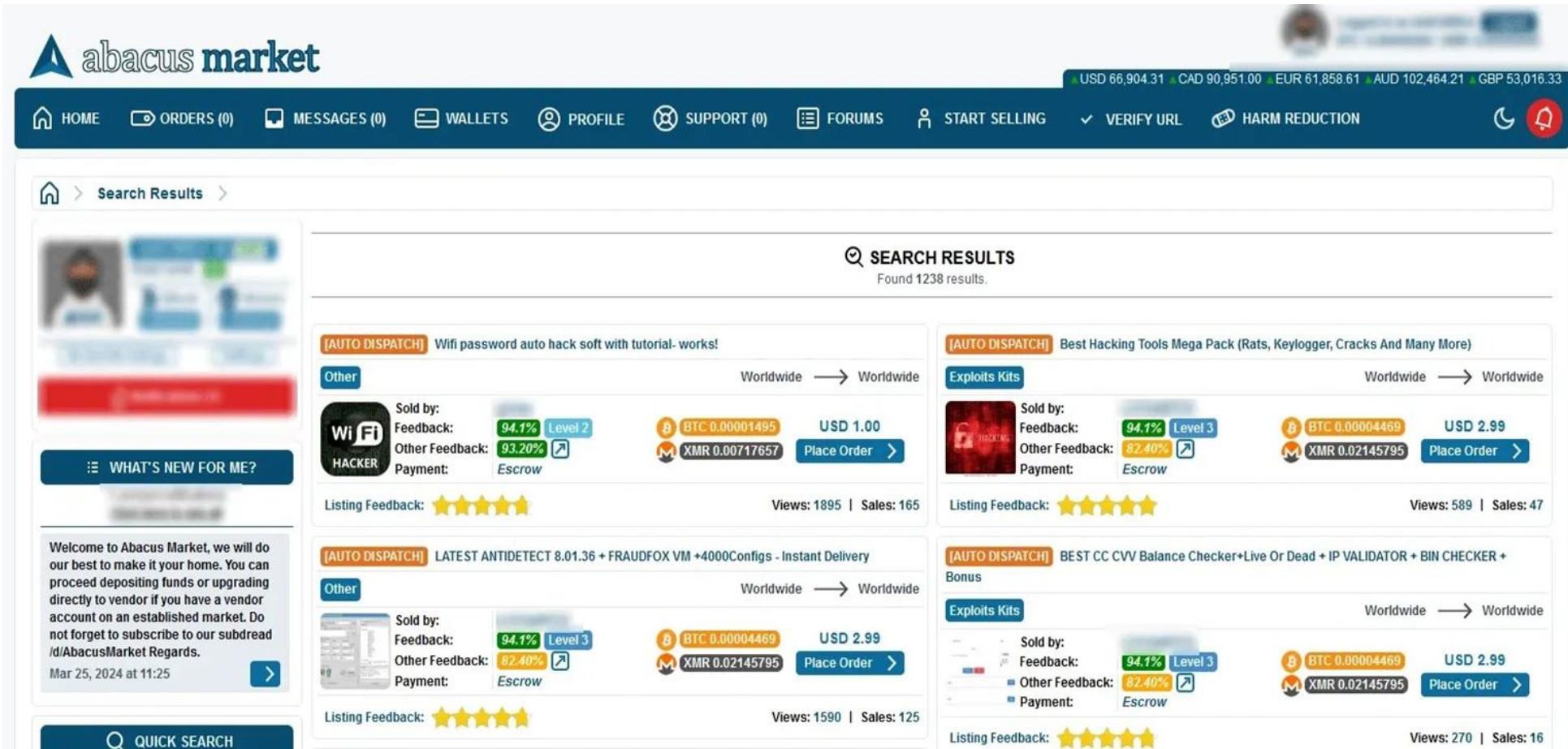


CISA-IDENTIFIED CYBER RISKS WITHIN LMR

- Interception or Eavesdropping
- Poor Cyber Hygiene
- Denial of Service
- Malicious applications, malware & Data Exfiltration
- Spear Phishing & social engineering

Marketplaces

Organized cyber extortion



The screenshot displays the Abacus Market website interface. At the top, there's a navigation bar with links for HOME, ORDERS (0), MESSAGES (0), WALLETS, PROFILE, SUPPORT (0), FORUMS, START SELLING, VERIFY URL, and HARM REDUCTION. A currency converter bar shows rates for USD, CAD, EUR, AUD, and GBP. The main content area is titled "SEARCH RESULTS" and shows "Found 1238 results." Below this, there are four product listings, each with a title, category, seller information, feedback, and a "Place Order" button.

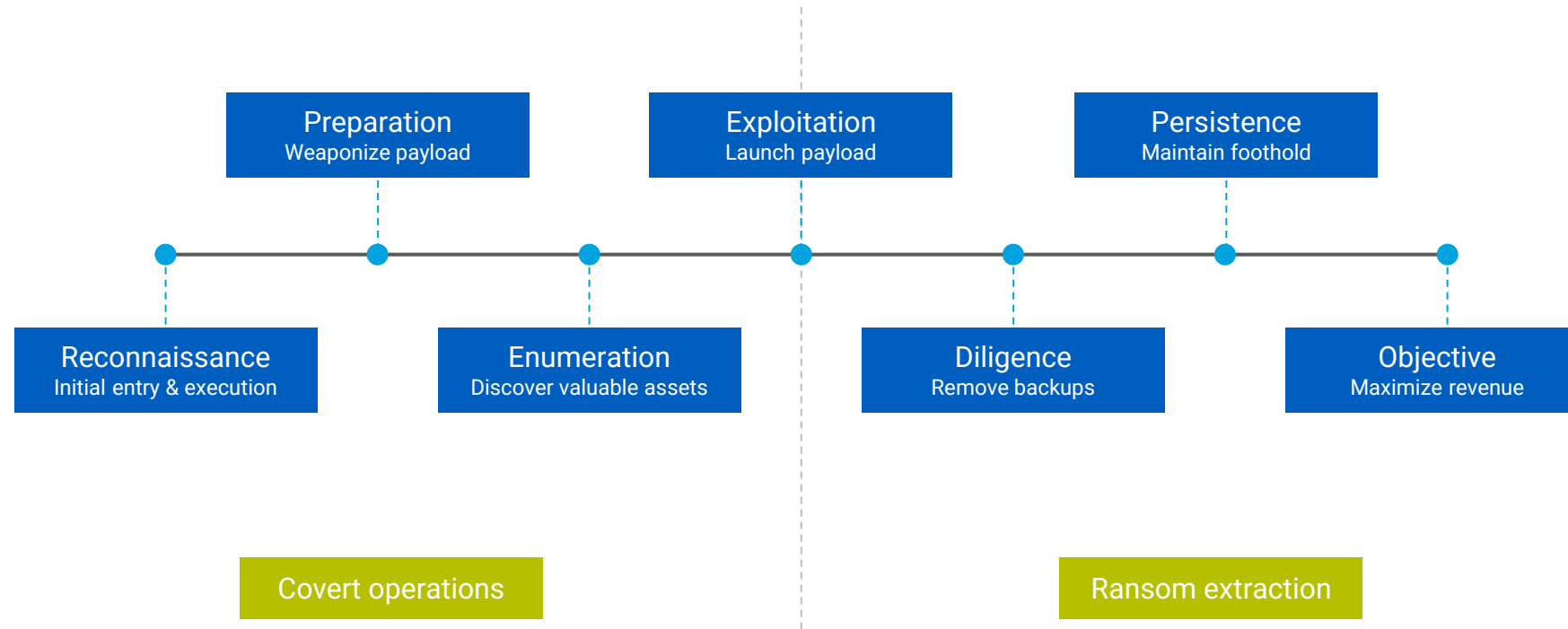
Product Listings:

- Listing 1:** [AUTO DISPATCH] Wifi password auto hack soft with tutorial- works!
 - Category: Other
 - Sold by: [Profile]
 - Feedback: 94.1% Level 2
 - Other Feedback: 93.20%
 - Payment: Escrow
 - Price: USD 1.00
 - Cryptocurrency: BTC 0.00001495, XMR 0.00717657
 - Listing Feedback: 5 stars
 - Views: 1895 | Sales: 165
- Listing 2:** [AUTO DISPATCH] Best Hacking Tools Mega Pack (Rats, Keylogger, Cracks And Many More)
 - Category: Exploits Kits
 - Sold by: [Profile]
 - Feedback: 94.1% Level 3
 - Other Feedback: 82.40%
 - Payment: Escrow
 - Price: USD 2.99
 - Cryptocurrency: BTC 0.00004469, XMR 0.02145795
 - Listing Feedback: 5 stars
 - Views: 589 | Sales: 47
- Listing 3:** [AUTO DISPATCH] LATEST ANTIDETECT 8.01.36 + FRAUDFOX VM +4000Configs - Instant Delivery
 - Category: Other
 - Sold by: [Profile]
 - Feedback: 94.1% Level 3
 - Other Feedback: 82.40%
 - Payment: Escrow
 - Price: USD 2.99
 - Cryptocurrency: BTC 0.00004469, XMR 0.02145795
 - Listing Feedback: 5 stars
 - Views: 1590 | Sales: 125
- Listing 4:** [AUTO DISPATCH] BEST CC CVV Balance Checker+Live Or Dead + IP VALIDATOR + BIN CHECKER + Bonus
 - Category: Exploits Kits
 - Sold by: [Profile]
 - Feedback: 94.1% Level 3
 - Other Feedback: 82.40%
 - Payment: Escrow
 - Price: USD 2.99
 - Cryptocurrency: BTC 0.00004469, XMR 0.02145795
 - Listing Feedback: 5 stars
 - Views: 270 | Sales: 16

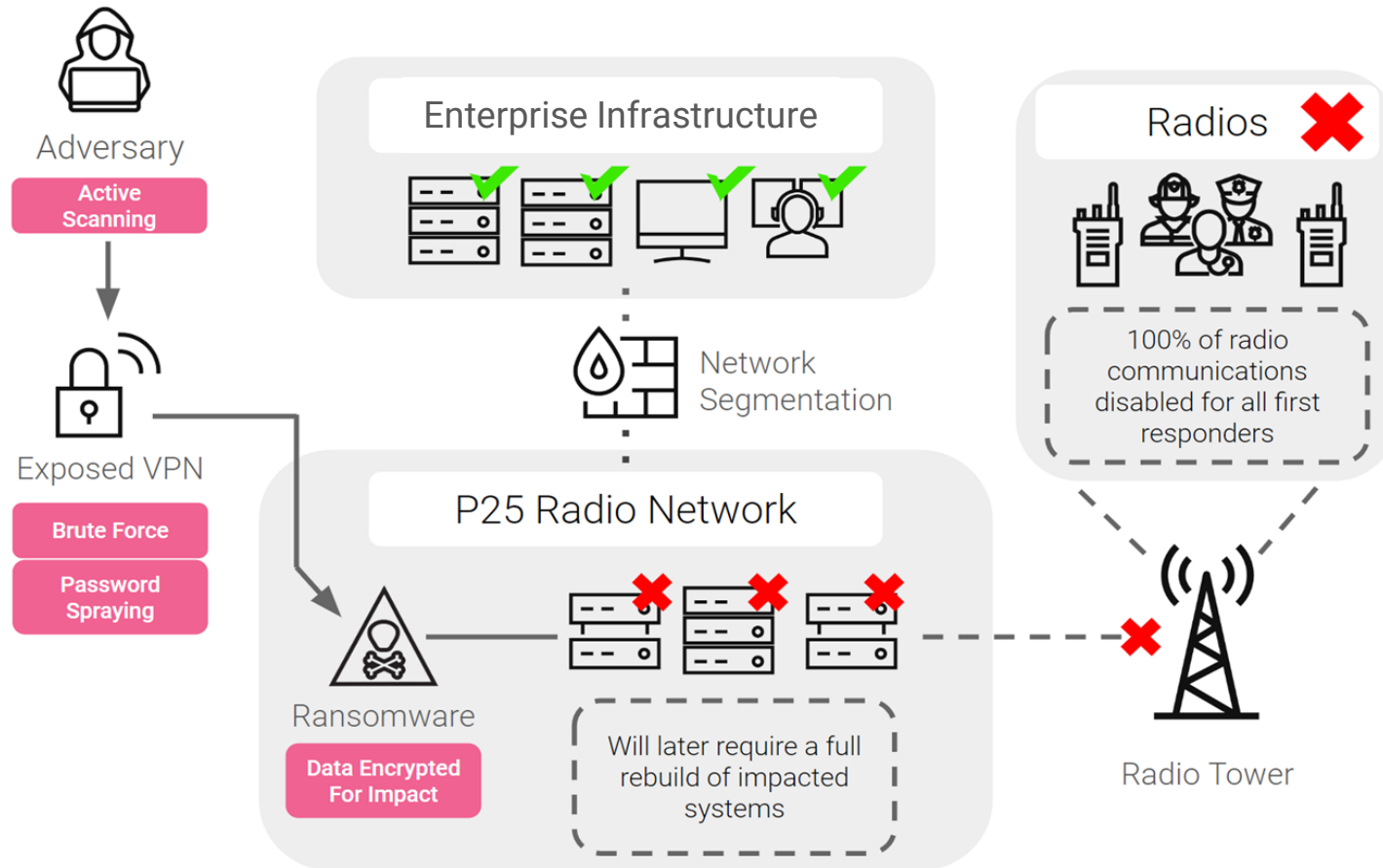
On the left side of the page, there's a sidebar with a "WHAT'S NEW FOR ME?" section and a "QUICK SEARCH" bar.

Attack Elements

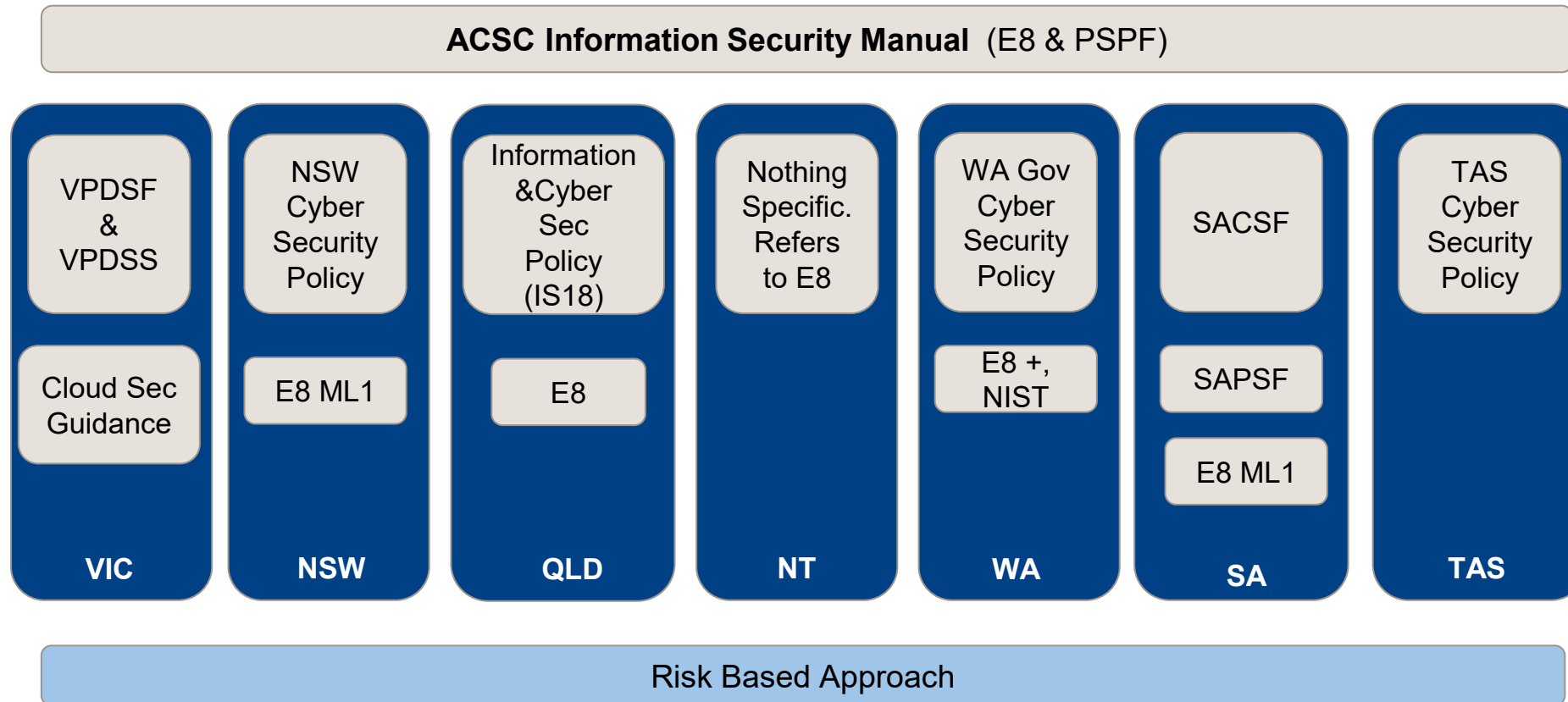
Fundamental parts of every ransomware attack



Radio System Attack Diagram



State Government Cyber Frameworks & Requirements



What should we do to protect LMR systems in Australia



- Governance – People, Process & Technology
- Refer to ACSC guidelines - Essential 8, ACSC ISM
- Implement the required controls
- Managing Risks
- Continuous Improvement.

Motorola Solutions Cybersecurity Services

Defence In Depth Approach



Thank You

Breaching Air Gapped Networks

- Campaign by APT group GoldenJackal
Targeting Government organizations in Europe in 2024

Optional Slide

