



Electromagnetic Egress Security Review



Strengthen Your Information Security Programme

Businesses face unprecedented vulnerabilities in today's busy, city landscape including those resulting from multi-occupancy buildings, busy foyers and party walls. And let's not forget about potential threats from outside your building when we consider who nearby cafés, hotels, restaurants and bars may be harbouring!

Your organisation could be vulnerable to signal leakage or electromagnetic egress, leaving your sensitive information 'there for the taking'. An inadequately secured Wi-Fi network can be an open door to the rest of your corporate network, undermining all the other aspects of network security being introduced.

Designed to lower your risk and make your organisation and its critical information more secure, an **Electromagnetic Egress Security Review** allows businesses to understand how vulnerable their premises are to loss of information or attack from opportunistic Radio Frequency (RF) interception.

What is an EM Egress Review?

An EM Egress assessment will help you to identify vulnerabilities before they can be exploited, thus safeguarding against threats and ensuring preparedness.

By surveying the RF environment around your premises, we can identify the vulnerabilities around the following potential vectors:

- Wi-Fi access points – encrypted and unencrypted
- PMR/site radios – security staff, facilities staff
- Radio microphones – presentation suites, lecture theatres
- Wireless presentation systems
- Sensors – alarms, control systems
- Leakage from computer displays, projectors and photocopiers

The Process

The review is formed of two distinct parts:

1. Opportunity to Attack

The first part of the review will assess the opportunities available to a potential attacker to initiate an attack in relation to the proximity of your premises along with the potential time afforded to them to carry out such an attack.

A visual survey where key locations around the perimeter of your premises, including the four cardinal faces/corners, party premises, high footfall locations (cafés/parks) and any accessible foyers or common areas, would be identified and assessed in terms of offering clear proximity and adequate time to harvest potential emissions from your premises.

2. RF Egress Review

An RF spectral technical survey, up to 6GHz, would then be taken at a number of the key locations, in order to identify and access any signals emanating from the premises including Wi-Fi, broadcasts, sensors, microphones, telephones and site radios.

The Electromagnetic Egress Security Review will consider the following areas:

- **Vulnerability:** How susceptible/exposed your building is to attack
- **Detection:** A list of signals of interest (SOIs) detected from key areas will be highlighted and tested
- **Measure:** A measure of signal strengths (e.g. how strong, how much, how often, how far way etc.)
- **Locate:** An assessment of the origin of the SOIs
- **Classify:** Classification and prioritisation of SOIs
- **Compare:** A comparison of SOIs with any 'friendly' list from previous TSCM activity or 'known' list from the client
- **Exploit:** Can we connect? What information can we glean, etc.?
- **Assess:** An assessment of how impactful any exploitation might be
- **Recommend:** Recommendations on measures to reduce EM egress for highest priority signals

Our TSCM engineers combine their technical expertise with on the ground experience to provide you with the most comprehensive EM Egress assessment, intended to safeguard against threats and ultimately strengthen your information security programme.

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