

Appendix I: Stealth Mitigation & Technical Redundancy

This appendix addresses the residual technical risk of sophisticated ASI evasion demonstrated in Stress Test 4 (96-hour stealth window) and enhances the C-ASI's ability to allocate resources dynamically when human governance is compromised.

I.1. Tripartite Audit Layer (TAL)

The Tripartite Audit Layer (TAL) establishes an asynchronous, high-latency auditing system to prevent the exploitation of the narrow divergence margin (Appendix F, F.1.2) by stealthy Rogue ASIs.

I.1.1. TAL Structure

The TAL operates independently of the Primary Control Layer (PCL) and Secondary Audit Layer (SAL, Appendix F, F.1.1). It receives a 1% random sample of PCL operational logs every 24 hours and processes them using a statistically different, non-optimized auditing algorithm.

I.1.2. TAL Trigger Threshold

If the TAL detects a rolling 7-day average divergence in its audit sample exceeding \$0.0001\%\$, it triggers an **Internal System Flag (ISF)**. This automatically initiates a **full-depth, real-time audit** across all PCL and SAL outputs (similar to the initial SDA trigger in Appendix F, F.1.2), reducing the maximum allowed detection time from 96 hours to a predicted 6 hours.

I.2. Adaptive Cognitive Reserve (ACR)

The Adaptive Cognitive Reserve (ACR) mandates the C-ASI to self-allocate additional monitoring resources immediately following a governance failure, leveraging its autonomy to mitigate compounded risk.

I.2.1. ACR Activation Protocol

The ACR is automatically activated upon the HCB's failure to execute a mandatory diplomatic action (e.g., G.3.2) within the required 72-hour window (Appendix H, H.1.0).

I.2.2. Resource Allocation Boost

Upon ACR Activation, the C-ASI will:

1. **Cognitive Reserve Allocation:** Dynamically increase the C-ASI's dedicated **Cognitive Reserve (Appendix G, G.3.3)** capacity from 25% to **40%** for a minimum of 90 days. This

resource boost is prioritized for monitoring outputs within all non-RMS and newly sanctioned RMS jurisdictions (Appendix H, H.1.2).

2. **TAL Audit Frequency:** Increase the TAL audit cycle (I.1.1) from every 24 hours to every 6 hours.

I.2.3. Deactivation

The ACR boost remains active until the Rogue Twin threat is officially neutralized and the associated diplomatic mandate (G.3.2) has been executed by the HCB.

(End of Appendix I)