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## **ROUTING MEMORANDUM**

### **MECSAI Optical Network Security Analysis Integration**

Prepared under NASA-STD-7009 Format Compliance  
SDC & COMMS Program – October 15, 2025  
Document Code: SDC-COMMS-2025-MEMO-004

# ROUTING MEMO

**To:** MECSAI Core Systems

**CC:** ATB Board (SYS-SAFE, ICS-SEC, RELIAB, HFX, STRUCT), PHYSCORE

**From:** SDC & COMMS Program – Security Operations

**Date:** October 15, 2025

**Subject:** Integration Notice — MECSAI\_Optical\_Network\_Security\_Analysis.md

This routing memo confirms the successful upload of

**MECSAI\_Optical\_Network\_Security\_Analysis.md** to the SDC & COMMS project files. The document defines the full optical network security architecture and risk mitigation measures for inter-cluster communication.

Action Items	Responsible Entity
Ingest document into rulebase and verify cryptographic policy	MECSAI Core
Cross-discipline review and compliance validation	ATB Board
Validate physical beam and optical geometry assertions	PHYSCORE

**Timeline:**

- Ingestion and initial review: Immediate
- Cross-discipline sign-offs: Within 72 hours
- Consolidated feedback to ARCHITECT: End of current reporting cycle

*This memo is logged in MECSAI's internal audit ledger under Security & Infrastructure, and distributed to ATB for archival review per NASA-STD-7009 protocol.*