1. Course Title

LINC-E IS Administrator

2. Identification Number (ID)

901

3. Purpose of the Course

The course is designed to give NATO Deployable CIS (DCIS) Operators confidence in securely operating and maintaining with the DCIS Limited Interim NRF Capability – Enhanced (LINC-E) to support Information Systems (IS) supported by DCIS. Operators will learn to integrate Packet-Based Communication Access Services, Wired Local Area Transmission Services. To securely and efficiently operate the system, students will apply select Information Assurance Service aspects within the NATO Consultation, Command and Control (C3) Taxonomy in federated mission networks.

Training will enable students working at Operations and Maintenance (O&M) Levels 1 and 2. Successful students may request operator-level Service Management and Control (SMC) privileges on NATO networks.

This is the Core Enterprise Services (CES) element of the LINC-E System Level courses; it is conducted in conjunction with the Communications Services (ComS, Course No 902) element, and the Transmission Services element (LINC-E DSGT Operator, Course No 903) to support Crew Training.

This course is a System category course and should be considered after the pre-requisites and before the Special category specified, as illustrated, below:
4. Learning Objectives

Given the pre-requisites – see paragraph 16 – upon completion of the course, the qualified student will be able to:

a. Describe the context of NATO Services in DCIS, and how this capability / system fits within this structure.
b. Describe the context of Federated Mission Networking (FMN), and how DCIS and this capability / system fits within this structure.
c. Describe the technical elements of this capability / system and relate his or her Information Systems technology experience to NATO CES.
d. Describe NATO SMC procedures and tools and their relevance to this capability / system and DCIS in federated networks.
e. Demonstrate the use of select NATO SMC tools at Operator Level.
f. Describe the CES Unified Communications and Collaboration supporting solution and how it interfaces to the NATO network. Configure end devices supporting this collaboration.
g. Demonstrate and apply the techniques for installation of CES to support the DCIS infrastructure.
h. Describe and install the NATO Virtualisation solution within the DCIS CES environment.
i. Apply practical testing, bringing together the three sub elements of this capability / system (Transmission Services, Communication Services and select CES) to integrate all, establishing services from this capability / system to the Operations Gateway and between two systems.

5. Qualification

Upon completion of the course, students will be qualified to support NATO DCIS Exercise and Operations operating this capability and supporting Engineers. Successful students may request privileges on NATO DCIS Networks through their assigned unit and using the established procedures with NCI Agency.

6. Student Criteria

The Student must:
- Have been assigned to a NATO or National Post where the relevant NATO DCIS Services will be employed.
• Meet the Background Knowledge Prerequisites.

7. Rank

The Student must be:
• Selected Officer
• Senior Enlisted in an DCIS Supporting position
• Civilian equivalent

8. Language Proficiency

According to STANAG 6001: English SLP 3332

9. Security Clearance

NATO Secret (Students must provide proof of clearance upon registration)

10. Course Length

10 Working days (2 weeks of 5 days each)

11. Special Instructions

Students not meeting the assignment and background knowledge criteria may attend ONLY with the explicit recommendation of the NCI Agency Network Services and IT Infrastructure (NS & II) Service Line DCIS Service Operations Manager, provided they have met the security clearance requirement.

12. Class Size

• Maximum
• Recommended
• Minimum

6/6/4

13. Nomination Procedures

As posted on www.nciss.nato.int
14. Pre-course Study Material

Not Applicable

15. Location

The course is conducted at the NATO Communications and Information Systems School (NCISS), Latina Italy.

Limited (one capability / system, only) mobile training may be requested through the established procedures.

16. Background Knowledge Prerequisites

The student must:

- Have passed Foundation Level (Deployable Information Systems Foundation DISF, ID 961) or.....
- Equivalent commercial IS Training courses

The student should have completed Deployment Training at their unit location, to include safe handling of equipment (e.g. as On-the-Job Training) on this capability / system before attending this course.
The following modules will be covered and include both theory and practical, hands-on lessons:

- Entry Test against theory pre-requisites
- Introduction to the capability / system in the NATO DCIS Federated Context (lecture)
- Introduction to the capability / system hardware and media (lecture and lab)
- Packet-based Services, protocols and configuration (lecture and lab)
- Daily capability / system functionality checks (lecture and lab) with Q&A session
- Information Assurance on CES devices (lecture and lab)
- Operation, Maintenance and SMC on Core Enterprise Service devices (connection, backup/restore, troubleshooting – lecture and lab)
- Installation of Virtualisation and Server Applications, to the guidelines encompassed within the configuration baseline.
- Installation, Configuration and troubleshooting of various server roles and feature (Exchange, DNS, AD, etc.)
- End-of week practical exercises (lab)
- Introduction and configuration of CES Unified Communication and Collaboration Service devices and protocols (lecture and lab)
- Introduction and configuration of CES end-user devices.
- Final Exam (theory)

Final Exam and Crew Exercise establishing CES, and Communications Services, to include Transmission Services (practical)