

{TESS+} VHF Training

Introduction

Read more about {TESS+}: www.wfp.org/telecommunications-security-standards

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Session objectives

- Introduce trainer and participants
- Agree on ground rules and parking lot
- What is {TESS+} ?
- Learn about the objectives of this training
- Review the course agenda



Introduction

- Trainer:
- Participants:

Introduction

- Ground rules:
 - Mobile phones
 - General administration
 - Timing
- Parking lot
- Main training objective:
 - Train participants to design, program and maintain a VHF radio Security Communications System (SCS) conforming to UN standards

What is a SCS?

- SCS (Security Communication Systems) are an essential part of humanitarian operations as a security mitigation measure and backup communication system
- Based on the UNDSS USG communique (refer to guidance on future security telecoms system), the SCS for humanitarian organisations envisages one of the following scenarios:
 - A: full reliance on public mobile phone networks for the security communications system
 - B: mobile phone networks are available but prone to downtime
 - C: reliable public mobile networks are not available in the operational area

What is a SCS?

- SCS solutions:
 - VHF/UHF private radio networks: where necessary, VHF and UHF radio networks are established and maintained
 - Long range communication: communication is required outside of common operational areas, SCS devices such as portable satellite devices, **HF is phased out**
 - Security Operations Centre (SOC): establishing the tools that security assistants need to carry out work including emergency communication devices VHF, UHF, satellite communications, internet connectivity, office equipment, printers, desks and backup power.



What is {TESS+} ?

- {TESS+} is a permanent and institutionalised support service to the UN Security Management System (UNSMS) and NGO community, with a mandate, budget, service deliverable and governance structure
- {TESS+} works closely with ICT personnel of UNSMS organisations through ICT Working Groups (ICTWGs), and security personnel of the UNSMS and NGO stakeholders
- {TESS+} mandate:
 - Provide active field support
 - Guide and assist the UNSMS to establish pragmatic and cost effective SCS
 - Longer term standardisation of SCS systems.

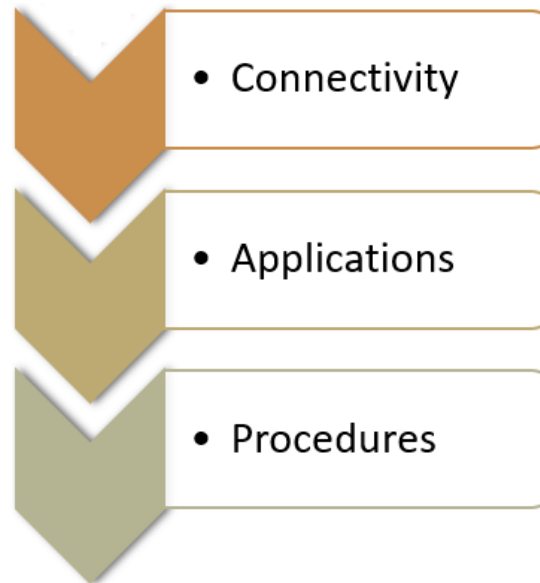


What is {TESS+} ?

- {TESS+} key services :
 - Normative services (standard design, documentation, assessment and monitoring)
 - Field support services (hands-on remote/onsite technical guidance, training, capacity building)
 - Operational process support services (global and field level)

- {TESS+} service layers:

- Connectivity layer
- Application layer
- Procedure layer



Training objectives of this course

- Introduction to radio basics and two-way VHF radio comms
- Introduction to UN VHF standards and Security Communication Systems (SCS)
- Program end-user radios using standard codeplugs
- Assign callsigns and SelV IDs to users based on the standard callsign allocation sheet
- Support end-users to access services on the radio network
- Install, maintain and programme radios and repeaters according to UN standards
- Perform technical site assessments

Agenda – {TESS+} VHF training course

Module 4: Installation and maintenance

- » Installation best practice and maintenance
- » Technical site assessment



Introduction

- » The Telecommunication Security Standards {TESS+}
- » UN Security Communications System (SCS)



VHF Training

Module 3: Radio programming

- » Standard radio procedures and callsigns
- » Standard codeplugs
- » Motorola radio programming
- » iCOM radio programming



Module 1: RF basics

- » Basic RF theory
- » Overview of two-way VHF/UHF radio networks



Module 2: Standards for VHF/UHF radios

- » Basic network design
- » Radio configurations
- » Standard radio equipment
- » End user support

Student resources

- UNDSS USG communique regarding guidance on future security telecommunications system / July 2018
- UNDSS USG communique regarding further guidance on security communications system / April 2019
- {TESS+} recommendations on the phase-out of HF radio as a security communications systems tool – strategy paper / January 2021

Questions and remarks

