{TESS+} VHF Training

Module 2: Basic VHF/UHF network design

Read more about {TESS+}: <u>www.wfp.org/telecommunications-security-standards</u> Email: <u>TESS@wfp.org</u>



Session objectives

• Overview of basic VHF/UHF network design



Technical standards for VHF/UHF supporting SCS

- Experience over the past years:
 - Different incompatible full digital VHF/UHF networks
 - Complex design
 - Expensive deployment and running costs
 - Features of digital VHF/UHF radios are not required

- {TESS+} has re-defined the VHF network architectural standards, as follows:
 - Analogue VHF user access
 - Supporting backbone configuration (repeater network) is an **open** architecture which can be either legacy analogue VHF repeater systems, or DMR, dPMR, TETRA digital systems
 - This {TESS+} standard was endorsed by the IASMN in 2019.



Technical standards for VHF/UHF supporting SCS

- The new {TESS+} open standard for UN common security VHF radio networks only mandates two basic user requirements:
 - basic PTT (push-to-talk) where users can reach all other users and the SOC (Security Operations Centre) in the UN security communications network.
 - current standard SelV (selective calling system) features send the user call ID, stun/unstun radios remotely, silent interrogate, generic "emergency" feature.



Stun Un-stun







VHF/UHF network standards



Student resources

• SCS VHF-UHF standards V63



Questions and remarks



