



“Peace Operations in the Digital Era – Opportunities and Challenges for the Global Training Community”

“Strengthening Peacekeeping through technology training”

UN-C4ISR Academy for Peace Operations

“Technology in Peacekeeping & Capacity building”

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“With the structural aspects of the reforms now well consolidated, it is imperative to keep the foot in the pedal to achieve the cultural change we need for greater collaboration across pillars and tangible results for people on the ground.”

UN Secretary-General António Guterres

1) Triangular Partnership + A4P



"Strengthening Peacekeeping through technology training"



Established in 2015 as UN Signals Academy as an outcome of the first Partnership for Technology in Peacekeeping Symposium (2014 Brindisi, ITA)



The Academy is located at the Regional Service Centre Entebbe (RSCE), Uganda



152 Member States have endorsed the Declaration of Shared Commitments on UN Peacekeeping Operations, in which recognizes "triangular partnerships" as an innovative approach



Triangular Partnership Programme

-  United Nations
-  Troop Contributing Countries
-  Supporting Member States

- Support Action for Peacekeeping (A4P) initiative and objectives
- Enhance preparedness of military and police C4ISR specialist and other targeted uniformed personnel prior to and during deployment in UN Missions
- Support gender objectives to increase women participation in UN Peacekeeping (WOC)

NAME CHANGE

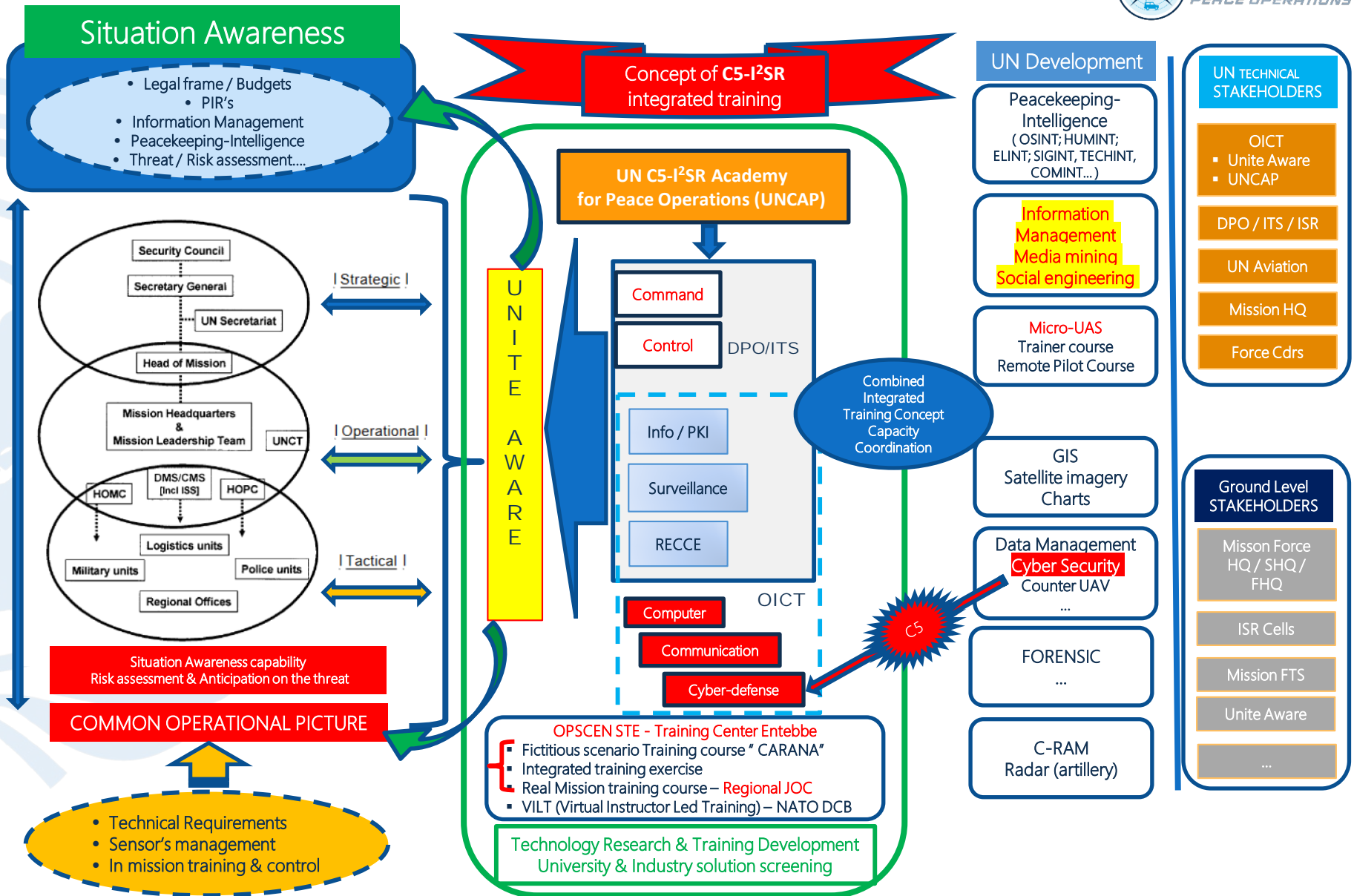
Re-renaming of the program and its training center to **United Nations C4ISR Academy for Peace Operations (UNCAP)** in 2020 represents its new level of ambition for UN field operations preparedness and an enriched, evolving C4ISR and camp security technologies curricula.

The **United Nations C4ISR Academy for Peace Operations (UNCAP)** is committed to excellence in preparing peacekeepers for their roles; and in enhancing their operational readiness and performance on key technologies and method.

Evolution on the threat impose a constant adaptation of the training. UNCAP move to UN Command, Control, Communication, Computer & Cyber defense – Information management /Peace-keeping Intelligence (PKI), Surveillance & Reconnaissance – **C5-I²SR**



Moving to an C5-I²SR “integrated training concept”





UNCAP TRAINING STRATEGY OF DEVELOPMENT

"Integrated training concept" 2022 – June 2023

Training session English or French 10 days		Training session English or French 10 days			Training session English or French 10 days				Training session English or French 10 days					
W O C Police Military C4-ISR	M - U A S RPC	W O C Police Military C5-ISR	M - U A S + ToT	C Y B E R Pilot Course	W O C Police Military C5-ISR	M - U A S + ToT	C Y B E R User	G I S - Pilot Course	W O C Police Military C5-ISR	M - U A S + ToT Module ISR	C Y B E R ToT	G I S - User	I N F O Managmt - Pilot Course	P K I - Pilot Course
UN Fundamentals UN Communication Systems & procedures		UN Fundamentals UN Communication Systems & procedures			UN Fundamentals UN Communication Systems & procedures				UN Fundamentals UN Communication Systems & procedures					
Basics: UA + Info Management + PKI Reporting / Sit Awareness / COP		Basics: UA (Planning process) Cyber + GIS + Info Management + PKI Reporting / Sit Awareness / COP			Basics: UA (Planning process) Cyber + GIS + Info Management + PKI Reporting / Sit Awareness / COP				Basics: UA (Planning process) Cyber + GIS + Info Management + PKI Reporting / Sit Awareness / COP					
Integrated Exercise + Observer		Integrated Exercise + Observer			Integrated Exercise + Observer				Integrated Exercise + Observer					

2022

MCC/MPP
EOD

- Electromagnetic Spectrum Management
- C4ISR orientation course
- NATO Master trainer course - VILT
- NATO DCB

2023

Micro UAS Master trainer course
France

Area of expertise



The Academy delivers courses and learning events both in-person, in mission, e-learning, online, and “as a Service” in areas that were identified as crucial for UN peacekeepers.

To strengthen peace operations through technology training, the Academy focuses its learning and training portfolio on the following Five (5) thematic areas.

- **C5-I²SR - Command, Control, Communications, Computers & Cyber defense (C5)**
 Unite Aware training course, GIS, Cyber defensive, Information management /Peacekeeping-Intelligence management (PKI), Surveillance, Reconnaissance (SR – method & tools)
- **SITUATIONAL AWARENESS & COP (Common Operational Picture)**
 The core Unite Aware application suite captures, processes, and presents operational data from multiple, mission-wide sources for visualization and analysis to inform crisis, operational, and longer-term decision-making. UNCAP is in charge of delivering the UA training at the user & ToT level (UNFICYP – Dec 2022)
- **SUPPORT GENDER OBJECTIVES (WOC)**
 To increase the participation of women in peacekeeping operations, an extension of the WOC (Women Outreach course) to all Command Center areas of expertise.
- **CAMP SECURITY**
 Early Warning technologies include terrestrial radars, sense & warn systems, surveillance cameras, and UAS.
- **R&D**
 Technology Research & Training Development, research center & University partnership, Industry solution screening, sponsoring...



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UNCAP strategy for 2022 & 2023

- **Development of partnerships** with contributing countries
- Add a 5th "C" to become "**C5-I²SR**" Academy for Peace Operations"
- Permanent Trainers capacity: the creation of the "**UNCAP Training Tiger Team**"
- Development of "**e-learning**", "**online training**", "**VILT**", Extended Reality
- Maintaining the **4 "integrated training sessions"** / per year
- **Increasing the number of training modules & courses related** to: P1-Unite Aware, P2-GIS, P3-Cyber, P4-Info Management, P5-PKI, ISR technology & tools, ICT, Spectrum management, MCC/MPP, EOD...
- **Increase the level of collaboration** and coordination between Peacekeeping training centers and UNCAP – Sharing the "**UN Training Master Plan**" - (creation of a workgroup ?) – NATO DCB program



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➤ **Sharing UNCAP facilities (ITS):**

- 1) OPSCEN-STE – Unite aware + mission training + online training
- 2) Innovative Laboratory – Cyber Defense & Forensic training
- 3) Virtual Instructor-Led Training (VILT) - NATO DCB program
- 4) MCC / MPP
- 5) Classroom

➤ **Increasing the cooperation & synchronization between UN training entities (ITS, UNGSC...)**

➤ **Funding a dedicated UNCAP new facility in Entebbe (VILT, OPSCEN-STE, Innovative Laboratory, ICT equipment, and training capacity...)**



3) UNCAP facilities & equipment

UNCAP training facilities must be regrouped in a new building

- UAS#2-WOC#7 - integrated exercise (March 2022)
- Unite Aware Pilot Course (April 2022)
- UAS#3-WOC#8 – (July 2022)
- 6 micro-UAS courses

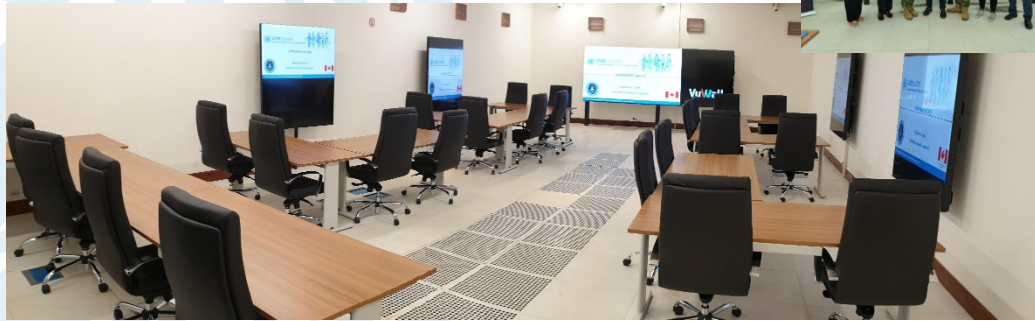
Micro UAS Training Kit Procurement (December 2021) – 6 unit



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OPSCENT-STE



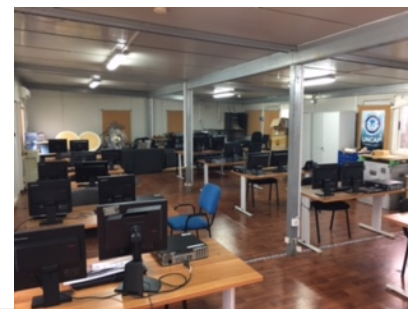
VILT- online training + mobile KIT
(Virtual Instructor Led training)

Technical room must be determined by RSCE

MCC – (Modular Command Center)



Classroom





3) UNCAP facilities & equipment



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Purpose

- To be used as a sand box environment for testing new and emerging technologies before deployment to the production environment.
- Link it to the other UNSA/UNCAP training environments such as MCC and OPSEN center
- Provide learners with real-hands on learning skills using hosted simulators, and Virtual machines.
- Provide a mini and test lab for technology

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Equipment capacity

Ability to host over 30 participants during a live simulation exercise in class (can be increased if more storage disks are purchased)

Can host several applications such as a pen-test environment for cyber security, networking e.t all.

Hosts cisco 4500 catalyst network switches x2 for Higher Availability and complex switching capabilities.

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Hosts cisco 3650 series catalyst switches x 4 for access and network distribution purposes.

Hosts one cisco 5008 series wireless controller for training purposes

Synergy 12000-compute modules for computing power

HPE 3par 4800- storage

Connected to high-speed reliable fiber optic cable using nexus fabric extender 5500 series

Separate from the production environment.

UN C4ISR Academy for Peace Operations

Operational activities / Technology Training / UNCAP Entebbe



MICRO-UAS INSTRUCTOR COURSE # 1 : 08 to 19 NOV 2021, ENTEBBE



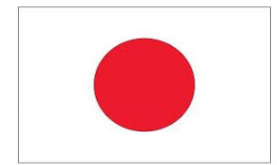
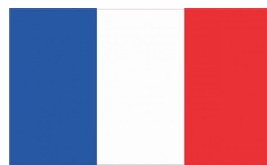
First Name	Last Name	Mission	Final Results
Viktor	Piskunov	MINUSCA	Instructor
Aristide	Ouessebanga	MINUSCA	Assistant
Charles	Kanyi	MINUSCA	Assistant
Yongping	Zhao	UNISFA	Remote Pilot
Arvin Willy	Fajaro	UNISFA	Instructor
Meron	Asegiew	MINUSMA	Remote Pilot
Amanuel	Kebede	MINUSMA	Instructor
Hesbon	Otieno	UNSOS	Assistant
Louis	Ogwei	UNSOS	Assistant
Tesfaye	Gurmu	RSCE /RFTS	Assistant
James	Anguyo	UPDF	Assistant
Jason	Arinaitwe	UCAA	Assistant



4) Contributing countries



UNCAP Host country



CANADA
DENMARK
FRANCE
GERMANY
INDIA
JAPAN
NATO
UGANDA
USA

- OPSCEN-STE / C4ISR courses
- Remote learning / Classroom courses
- UNCAP / UAS & ICT
- MCC (Modular Command center)
- UNCAP / WOC #7 & #8
- C4ISR Courses / WOK #9 #10 / MCC (Modular Command center)
- Capacity building & training (DCB)
- Logistic / micro-UAS training range
- AFRICOM

Newcomer: Israel



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NATO Communications and Information Agency
Agence OTAN d'information et de communication