UNITED NATIONS C4ISR ACADEMY FOR PEACE OPERATIONS

ANNUAL REPORT 2020

Annual Activity Report 2020

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EXECUTIVE SUMMARY

The United Nations C4ISR Academy for Peace Operations (UNCAP) annual report covers the project activities implemented in 2020, including use of extra-budgetary funds. It begins with an overview of the programme and is followed by more in-depth accounts of UNCAP areas of activity over the past year. Additional information is provided in the form of annexes.

Given the immense global impact of COVID-19 pandemic, we cannot review the past year in isolation without contextualizing the work of the Academy in the midst of the pandemic and how the Academy is responding to COVID-19.

Our first priority has been the health and well-being of our staff and our learning community. Accordingly, until conditions permit us to return to in-person trainings, we have been delivering our learning online, and focusing on new areas of work to meet the needs of UN missions and uniformed personnel.

[1] Academy for Peace Operations (UNCAP) represents its new level of ambition for UN field operations preparedness with an enriched, evolving C4ISR and camp security technologies curricula.

Despite the challenges faced through the year, progress has been achieved with the successful implementation of the UN Technology Training Portal, which brings a common approach to both Field Civilians and Uniformed Information Communications Technology capacity building at the United Nations.

A Mission Operational Centre Simulated Training Environment (OPSCEN-STE) was also established to deliver Situational Awareness "Unite Aware" application suite "scenario-based" training in 2021.

Our programme catalogue was expanded to include technologies, such as Micro Unmanned Aerial Systems (Micro Drones).

And last but not least, the programme changed its name in 2020, from United Nations Signals Academy (UNSA) to United Nations C4ISR Academy for Peace Operations (UNCAP).

The UN C4ISR Academy programme will continue to expand in 2021 and beyond through new strategic or technical partnerships and the UNCAP training audience will expand to include ICT Senior Non-Commissioned Officers.

1 C4ISR: Command, Control, Communications, Computers, Intelligence - Surveillance - Reconnaissance

BACKGROUND

The highly volatile and complex peacekeeping environment is demanding better operational responsiveness from UN peacekeepers, which implies efficient Command & Control (C2) and situational awareness capabilities, and a common operational picture. With over 160,000 authorized personnel deployed in often remote and high-risk locations, UN-supported peacekeeping operations require strong communications and technological capabilities to support the flow of information between leadership, military, police and civilians, and to protect peacekeepers from the increasing threats

Command & Control communications is critical for both normal and crisis operations and is considered both a life support activity and a force multiplier. With multiple TCC and PCC's, using national systems that are in many cases non-interoperable, the role of the UN is to provide cross-cutting communication systems, support and interoperability, to facilitate the afore mentioned Command & Control. This requires staff officers and contingents to be familiar with operating and supporting UN equipment and to have a common understanding of UN standard operating procedures.

As highlighted in the Final Report of the Expert Panel on Technology and Innovation in UN Peacekeeping: (2014), "The use of modern technology to help peacekeeping missions establish and maintain situational awareness, carry out their mandates, and protect themselves is neither aspirational nor luxury. The availability and effective use of such technology represents the essential foundation - the very least that is required today - to help peacekeeping missions deploy to and manage complex crises that pose a threat to international peace and security"[2].

Launched in the fall of 2015 as an outcome of the Partnership for Technology in Peacekeeping (PTP) initiative[3] , the programme was established as the United Nations Signals Academy, renamed to the UN C4ISR Academy for Peace Operations, to address identified gaps in Troop and Police Contributing Countries (TCCs/PCCs) capacity.

The overall objective of the programme is to enhance the preparedness of military and police personnel to be deployed into UN peacekeeping missions through the provision of standardized, mission-specific and gender-inclusive hands-on C4ISR training on UN owned equipment (UNOE) and UN standard operating procedures, with the following overarching benefits:

2 http://www.performancepeacekeeping.org/

3 The UN Department of Field Support (DFS) created the Partnership for Technology in Peacekeeping (PTP) in 2014 as a platform to facilitate dialogue on technology in peacekeeping between the UN and a wide range of partners, including member states, regional organizations and the academia. The third international PTP Symposium was held in November 2016 in Seoul, South Korea. The fourth in May 2018 in Berlin, Germany. The fifth in Astana, Kazakhstan.

- Greater coordination and inter-operability;
- Enhanced women participation in peace and security;
- Economies of scale for missions' operations;
- Strengthened C4ISR strategic partnerships;
- Local ownership

In line with the recommendations of the High-Level Independent Panel on United Nations Peace Operations (HIPPO)[4], the project adopts a Triangular Partnership Model of cooperation between TCCs/PCCs, supporting UN Member States, who provide training expertise, equipment, extra-budgetary funding and other resources, and the UN Secretariat. The UNCAP programme uses the same model adopted by the African Rapid Deployment Engineering Capabilities (ARDEC) project[5].

The programme contributes to the achievement of the following UN Sustainable Development Goals (SDGs): achieve gender equality and empower all women and girls (Goal 5), promote just, peaceful and inclusive societies (Goal 16) and revitalize the global partnership for sustainable development (Goal 17), in particular target 17.6: "enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation".

In 2020 the programme was renamed as United Nations C4ISR Academy for Peace Operations (UNCAP).

4 http://www.un.org/en/ga/search/view_doc.asp?symbol=S/2015/446

5 The UN African Rapid Deployment Engineering Capabilities (ARDEC) project is a triangular partnership project launched in 2015 to support African troop contributing countries (TCCs) in creating or enhancing their Horizontal Military Engineering Contingents capacity to enable them to undertake engineering support to peacekeeping missions.

WHO WE ARE

ESTABLISHMENT

Established in 2015 as UN Signals Academy as an outcome of the first Partnership for Technology in Peacekeeping Symposium (2014 Brindisi, ITA)
Rebranded in 2020 as UN C4ISR Academy for Peace Operations (UNCAP).

LOCATION

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

UNCAP is a DOS-led and OICT-managed programme that supports DPO A4P objectives

GOALS

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

MODEL

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

BENEFITS

- TROOP / POLICE CONTRIBUTORS: Better coordination & interoperability between contingents from different countries
- FINANCIAL CONTRIBUTORS: Opportunity to flexibly support enabling capacity in peacekeeping missions
- UNITED NATIONS: Enlarged pool of uniformed personnel with strengthened UN communication and technological capacities
- CROSS-CUTTING BENEFITS:
  Enhanced performance and efficiency of C4ISR staff, in line with UN standard operational requirements
  Improved gender equality among C4ISR personnel
  Economies of scale for missions' operations

WHAT WE OFFER

Provide standardized and mission-specific training on field technologies to UN military and police personnel as follows:

- Classroom-based courses at our training facilities in Entebbe
- Mobile Training Teams
- E-Learning aimed at delivering individual remote training and complementing in-person courses.

Our Model: Triangular Partnership

As direct outcome of the 2014 UN Peacekeeping Summit, the Triangular Partnership Programme was established in 2015 to enhance the preparedness and effectiveness of peacekeeping missions. The Programme aims to support peacekeeping operations by strengthening the capacity of military engineering, medical, and C4ISR staff officers and TCC's signals units through provision of professional training and equipment.

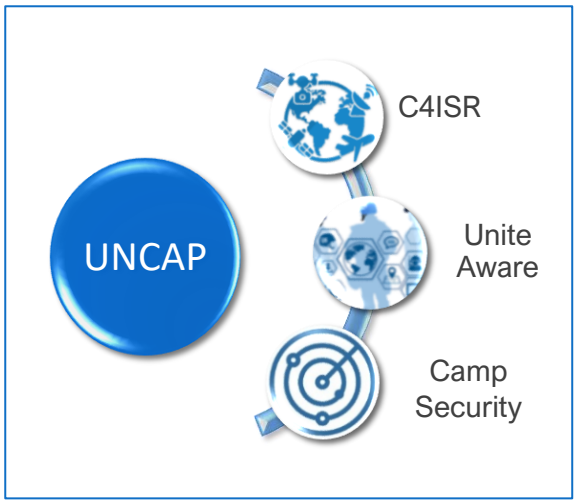
Now in its sixth year, the Programme has expanded to include field medical and C4ISR & Camp security trainings in both English and French, engineering training courses in French language, and extended its scope to Asia and its surrounding regions

By endorsing the "Declaration of Shared Commitments on UN Peacekeeping Operations," more than 150 Member States committed to "better prepare, train and equip uniformed personnel by pursuing innovative approaches, including triangular partnerships".

Our Areas of Expertise

The Academy delivers courses and learning events both in-person and online in areas that were identified as crucial for UN peacekeepers.

With a view to strengthen peace operations through technology training, the Academy focuses its learning and training portfolio on the following three thematic areas:



- C4ISR

  Command, Control, Communications, Computers (C4)

  Intelligence, Surveillance, Reconnaissance (ISR)

- SITUATIONAL AWARENESS

  The core Unite Aware application suite captures, processes, and presents for visualization and analysis, operational data from multiple, mission-wide sources, to inform crisis, operational and longer-term decision making.

- CAMP SECURITY

  Early Warning technologies including terrestrial radars, sense & warn systems, surveillance cameras and UAS.

2020 ACTIVITIES & ACCOMPLISHMENTS

Our Name: from UN Signals Academy to UN C4ISR Academy

Established in 2015 as the United Nations Signals Academy, the renaming of the programme and its training centre 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 used for UN Command, Control, Communications, Computers (C4), Intelligence–Surveillance - Reconnaissance (ISR) and Camp Security.

UNITED NATIONS
C4ISR ACADEMY FOR
PEACE OPERATIONS

Our Programme: Streamlining and Strengthening Our Portfolio

UN C4ISR Academy is constantly working to improve and expand its catalogue of courses and learning offerings to respond to rapidly evolving technology trends and peacekeeping priorities.

In 2020 the Academy conducted a review of their curriculum, consolidated and streamlined its activities under three key areas of learning, identified strategic and in-demand courses and knowledge products, and designed new learning opportunities to better fit the needs of UN peacekeepers.

The curriculum review was informed by surveys and workshops with the aim of standardizing the learning content/material and teaching process.

The revised courses content and new offerings were promoted to all thirteen peacekeeping missions.

New classroom-based courses developed during the year included:

- UN Peacekeeping Micro Unmanned Aircraft System (UAS) Instructor Course
- UN Peacekeeping Micro Unmanned Aircraft System (UAS) Operator Course
- UN Peacekeeping C4ISR Orientation Course for U6-S6 Staff Officers
- UN Peacekeeping C4ISR Orientation Course for TCC Signals Units' Senior Non-Commissioned Officers (NCOs)
- UN Peacekeeping Spectrum Management Course

Our Catalogue: Digital Skills Development Programme

The Office of Information and Communications and the UNGSC Service for Geospatial, Information and Telecommunications Technologies (SGITT) launched the *Digital Skills Development Programme for ICT Field Professionals*. The programme aims at developing the capabilities, skills and competencies of the field digital solutions support workforce at large.

Starting from this year, field ICT learning is consolidated into one approach responding to the needs of both civilian and uniformed staff. Therefore, for the first time, the catalogue lists the learning activities conducted for uniformed personnel at the UN C4ISR Academy, in coordination with Member States, at its facilities in Entebbe for military

Learning activities are proposed as on-demand onsite or online with the aim of bringing the right products, to the rights people the right at the right time.

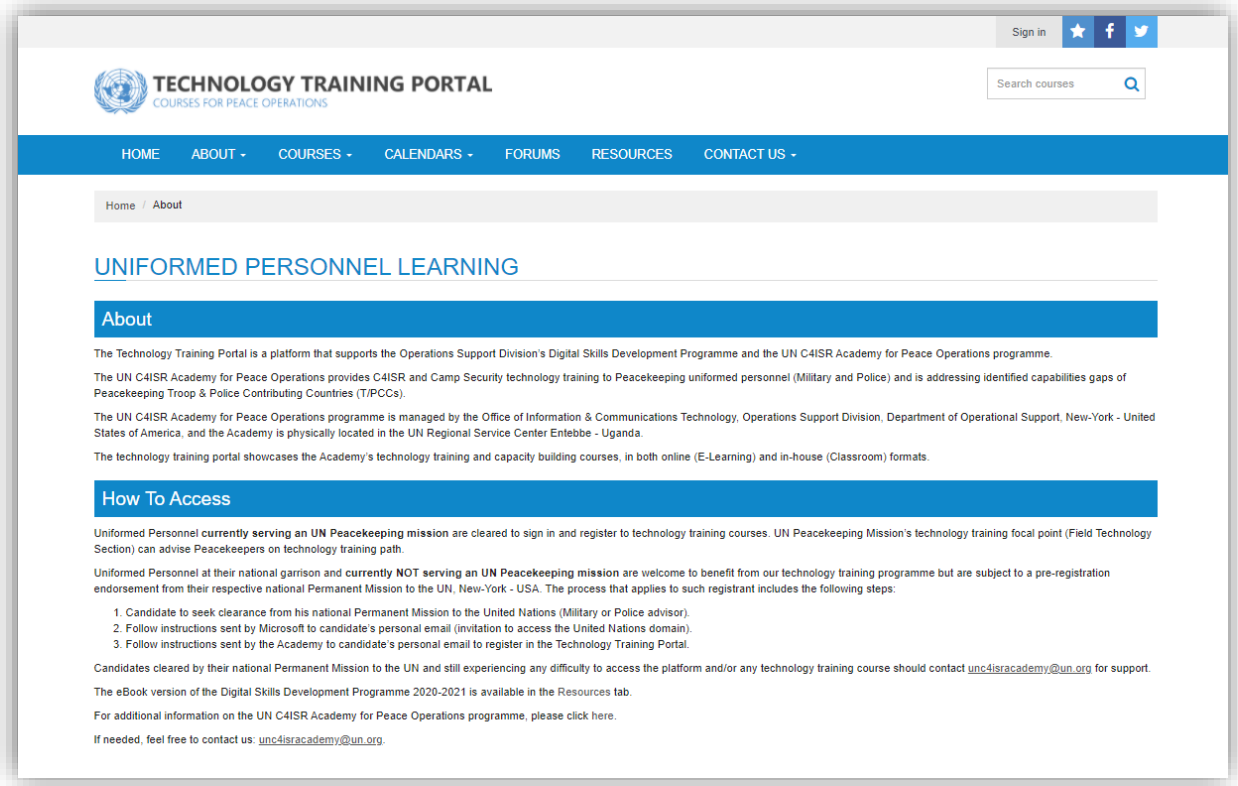
The full version of the Digital Skills Catalogue is available at https://technologytraining.un.org/elibrary

Our Platform: Technology Training Portal

The launch of the Technology Training Portal – Courses for Peace Operations, was a major achievement in 2020. Available at https://technologytraining.un.org, the portal is a one-stop shop for training courses in support of UN Peace Operations.

Utilizing the Technology Training Portal, our uniformed colleagues now have the opportunity to be better prepared to fulfil their duties prior to their Peace Operations' deployment and to build their skills as required after arriving in the Mission area.

Online courses are not aimed at substituting but at complementing



It is aligned with the Digital Skills Development Programme for field ICT Professionals, and the UNCAP Training Catalogue.

This year with travel to training courses not possible because of the COVID-19 global pandemic, efforts were made to successfully deliver large parts of the technology training catalogue online. These courses reached a broader audience and were cheaper to administer.

classroom courses and will reinforce traditional training through its flexibility in terms of reach, time, mobility and language.

In 2020 three courses were developed with funding from the Government of Denmark and published on the Technology Training Portal:

- Basic of Radio Operations
- Unite Aware Foundation

- Unite Aware Visualization (Maps) Beginner

More courses are under development, as per the table below and all courses will eventually be available in both English and French.

Category	Course
C4ISR	UN PKO ICT Satellite Communications Foundation
	UN PKO ICT Microwave Digital Line of Sight Foundation
	UN PKO ICT Network Foundation
	UN PKO ICT Routing Foundation
	UN PKO ICT Infrastructure & Servers Foundation
	UN PKO ICT Cloud Computing & Storage Foundation
	UN PKO Spectrum Management Foundation
	UN PKO Micro UAS Foundation
	UN PKO M-Products Foundation
Situational Awareness	UNITE AWARE Data Entry Beginner
	UNITE AWARE Data Entry Advanced
	UNITE AWARE Visualization Beginner
	UNITE AWARE Visualization Advanced
Camp Security	Ground Radar & C-RAM Operator

Our Operations Centre Simulated Training Environment (OPSCEN-STE)

Within the framework of both UN C4ISR Academy and Situational Awareness programmes, OICT developed a new component of its training programme in Entebbe called the "Operations Centre - Simulated Training Environment" (OPSCEN-STE).

The objective of the OPSCEN-STE is to deliver UN Peace Operations scenario-based and simulation-based training on the new Unite Aware technology platform, designed to support better situational awareness and decision-making and to equip missions' operations centres' personnel with the adequate knowledge and skills to optimize the platform to respond and adapt to simulated events that emulate real mission situations.

The target audience includes all personnel working in or about to be deployed to missions' operations centres in any capacity, including Chief Operations Centres, operations officers, duty officers, information management officers, GIS staff or any staff based on mission specific requirements , and uniformed personnel at Mission HQ, Sector and Battalion/Formed Police Unit (FPU) Level.

The Unite Aware technology platform was successfully piloted in MINUSCA in 2019 is planned to be rolled out to all UN Missions beginning in 2021.

Phase one of this project concluded with the setup of the OPSCEN-STE, funded by the Government of Canada. The procurement and delivery of equipment was affected by the delays resulting from the global pandemic; however, the setup of the simulation centre was finalized at the end of 2020.

The implementation of practical training courses represents the next step towards the development of a standard Joint Operation Centre (JOC) training and is tentatively scheduled to start in Q4 2021.

Impact and benefits of this project include:

- Pre-deployment training in a strategic location and in a near real mission environment.
- Interoperability: integration of civilians, TCCs and PCCs in a UN joint environment.
- Efficiency: alignment of training plans with troop pre-deployment schedules.
- Customization: course content tailored to mission specific requirements.
- Economies of scale generated from training in a strategic location.

- Innovation: a space for sharing experience, exchanging ideas and testing new features; and
- Multifunction: Training facility used for other tabletop and operational exercises and simulated events.

Our Partners in the Field: In-Mission Training

Micro Unmanned Aircraft Systems (UAS)

Notwithstanding the onset of travel restrictions in 2020, UNCAP, in partnership with UNGSC, delivered in-mission Micro UAS operator training in support of UNSOS (UN Support Office in Somalia) and MONUSCO (Mission de l'Organisation des Nations Unies pour la stabilisation en République démocratique du Congo). After developing the course as part of "UAS as a Service" offered through the UNGSC business service catalogue, the instructors travelled to Somalia in January and to DRC in February 2020.The course is fully aligned with International Civil Aviation Organisation syllabi, and is augmented with UN specific training such as electro-optical and infrared systems, night flying, convoy overwatch, mapping and the conduct of vulnerable point clearance checks.

In Somalia the training team delivered two courses each of five days duration, delivered through a mix of practical and theoretical classes and included the use of a flight simulator. In total, 44 Micro UAS operators were trained with students representing a wide range of units and organisations such as UNSOS Field Technology Section (FTS), United Nations Mine Action Service (UNMAS), United Nations Department for Safety and Security (UNDSS), Public Information Office, Aviation Safety and African Union Mission to Somalia (AMISOM) Police. The second course was made up of AMISOM personnel from the Sectors as well as from the Force HQ. Somali Security Forces (SSF) personnel attended as part of efforts to support joint operations between SSF and AMISOM. While the training area was restricted in size due to the proximity to the international airport, the support of the FTS team and Aviation Safety ensured that the course was conducted with safety in mind.

The use of simulator training for flight familiarization in the classroom was critical to the successful delivery of the course. Students were taught how to use the UAS controllers and how to adjust the control input according to the position of the UAS. Operating at night using the thermal sensor allowed students to practice tracking a security breach in a camp in low light conditions.

In MONUSCO the course was adapted based on lessons learned from Somalia and the course was extended by a day to six days. This allowed students and instructors to make a journey of an hour each morning to the Guatemalan Special Forces (GUASFOR) camp, located outside GOMA. The support and hospitality of the GUASFOR unit was critical to the courses success. The training area was vast and secure and allowed for the comprehensive training for the students on all aspects of Micro UAS use. Sixteen students were trained including nine from the Military component of the mission.

The ability of the training team to communicate in several languages was an advantage as well as the participation of military operational staff as well as FTS technical and GIS staff

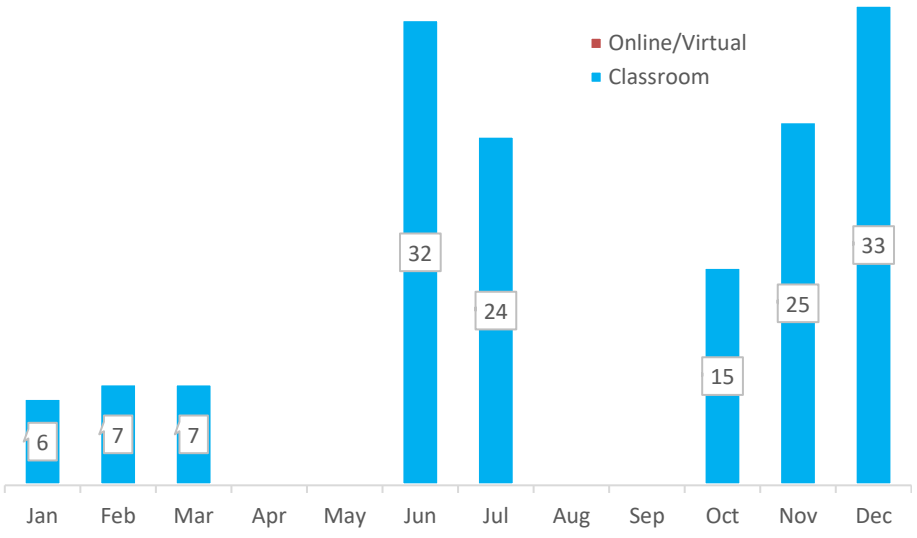
2021 will see the first 'Training of Trainers' (TOT) course conducted at the UN C4ISR Academy for Peace Operations (UNCAP), tentatively planned for Q3 and involving support from member states UAS experts. The intent is for UNCAP to host up to three TOT courses per year as well as supporting the mobile training team in conducting in-mission and bespoke training.

The following Information & Communications Technology training courses were delivered in the Field Missions by Field Technology Section trainers in 2020:

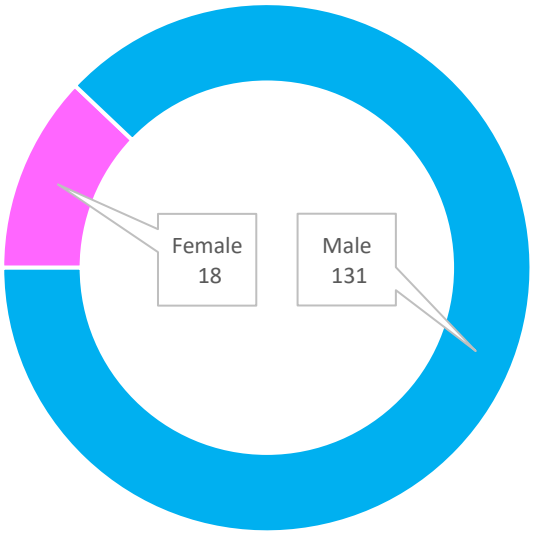
MINUSCA

TRAININGS CATEGORY AND SUB-CATEGORY	NUMBER OF TRAINEES	NUMBER OF TRAININGS	DAYS TRAINING
COMMUNICATIONS SYSTEMS	95	10	
HF	61	7	1
SATCOM	34	3	1
ISR	39	6	
MICRO UAS	39	6	5
INFORMATION SYSTEMS	12	1	
O365	12	1	1
C2 & SITUATIONAL AWARENESS	3	1	
UNITE AWARE	3	1	2
GRAND TOTAL	149	18	

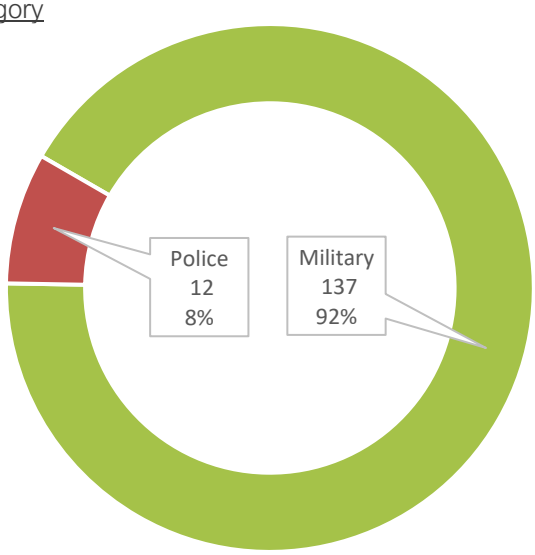
Trainees by Month & Delivery Method



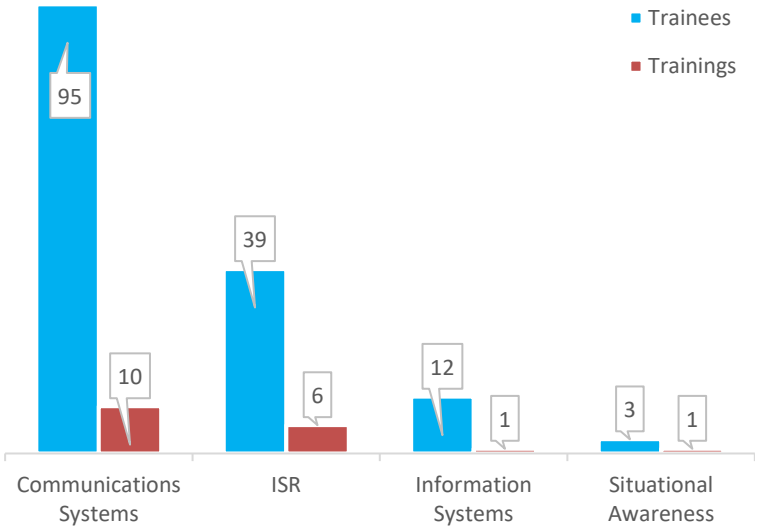
Trainees by Gender



Trainees by Staff Category



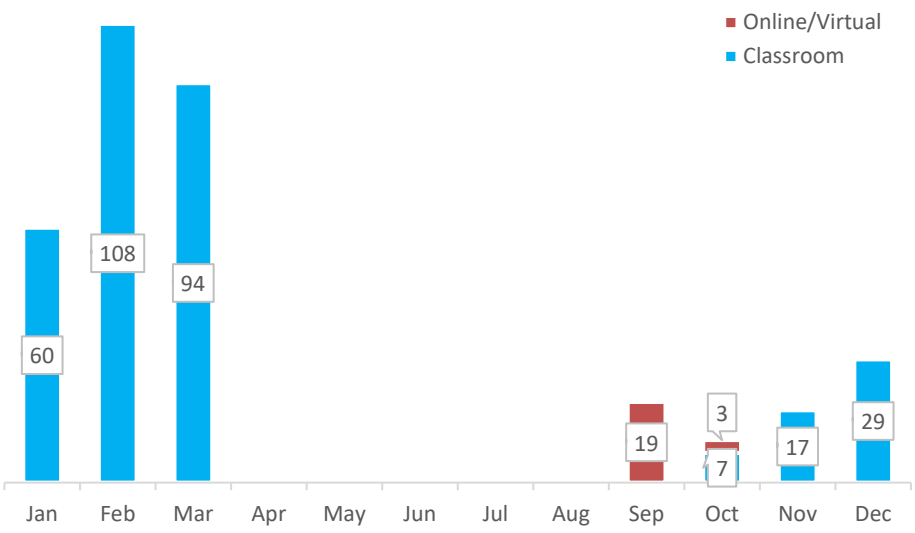
Trainees & Trainings by Course Categories



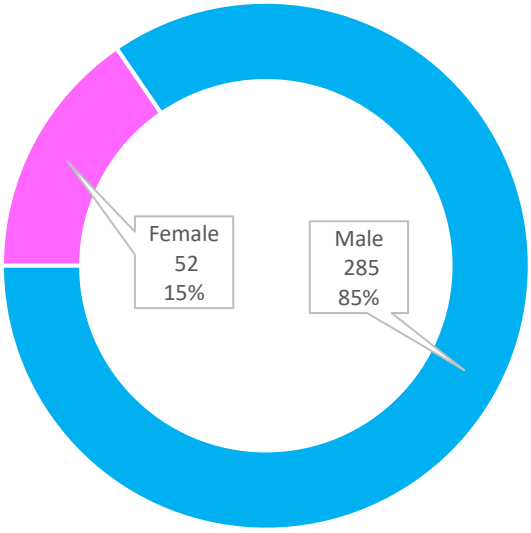
MINUSMA

TRAININGS CATEGORY AND SUB-CATEGORY	NUMBER OF TRAINEES	NUMBER OF TRAININGS	DAYS TRAINING
INFORMATION SYSTEMS	225	57	
O365	86	27	1-2
UN APPLICATIONS	80	22	1
COMPUTER	59	8	1
COMMUNICATIONS SYSTEMS	112	14	
UHF	112	14	1-2
GRAND TOTAL	337	71	

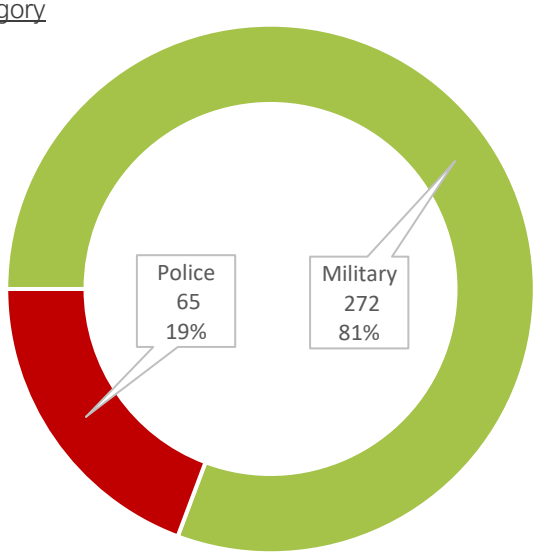
Trainees by Month & Delivery Method



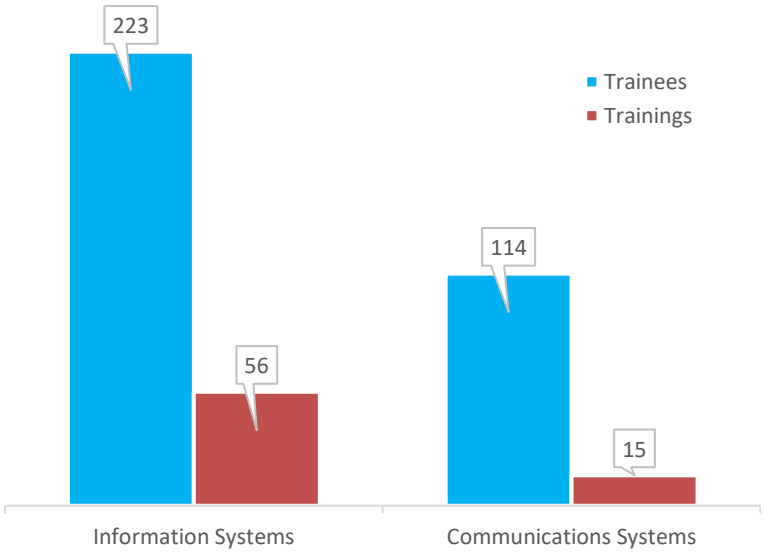
Trainees by Gender



Trainees by Staff Category



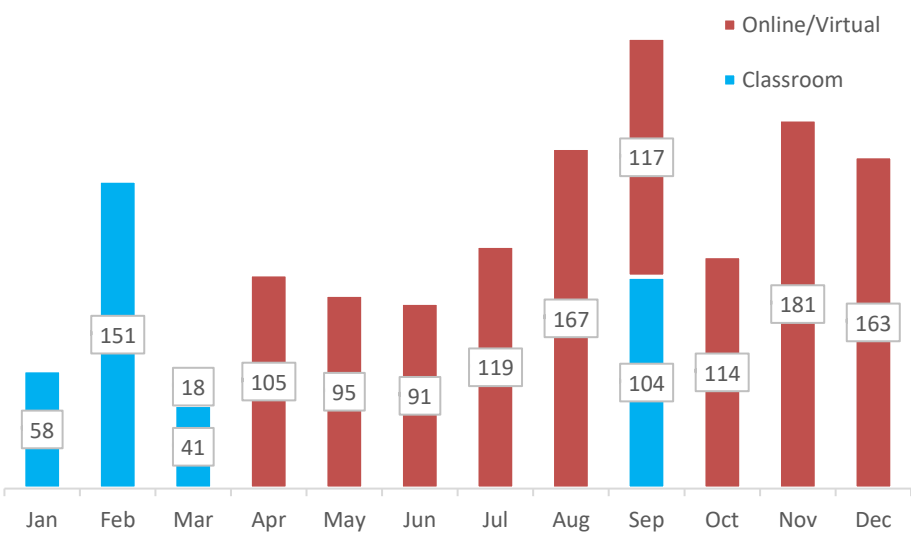
Trainees & Trainings by Course Categories



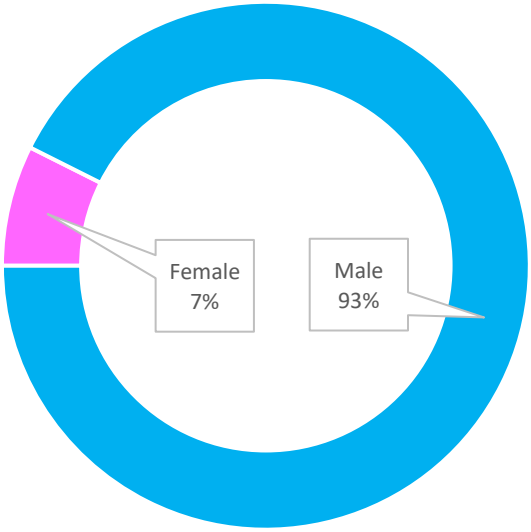
UNSOS

TRAININGS CATEGORY AND SUB-CATEGORY	NUMBER OF TRAINEES	NUMBER OF TRAININGS	DAYS TRAINING
CLASSROOM	354	24	2
INFORMATION SYSTEMS	246	14	
COMPUTER	129	8	2
O365	87	4	1
ICT SECURITY	30	2	2
COMMUNICATIONS SYSTEMS	55	7	
HF	55	7	1
C2 & SITUATIONAL AWARENESS	53	3	
MCOP	23	1	5
OPERATION ROOM MANAGEMENT	15	1	4
MICRO UAS	15	1	4
ONLINE/VIRTUAL	1170	69	
N/A	708	24	
INFORMATION SYSTEMS	238	18	
O365	119	8	
COMPUTER	81	6	
ICT SECURITY	38	4	
COMMUNICATIONS SYSTEMS	199	25	
VHF	107	17	
NETWORK	73	5	
HF	10	1	
M-PRODUCTS	9	2	
ISR	22	1	
ISR	22	1	
C2 & SITUATIONAL AWARENESS	3	1	
JOC	3	1	
GRAND TOTAL	1524	93	

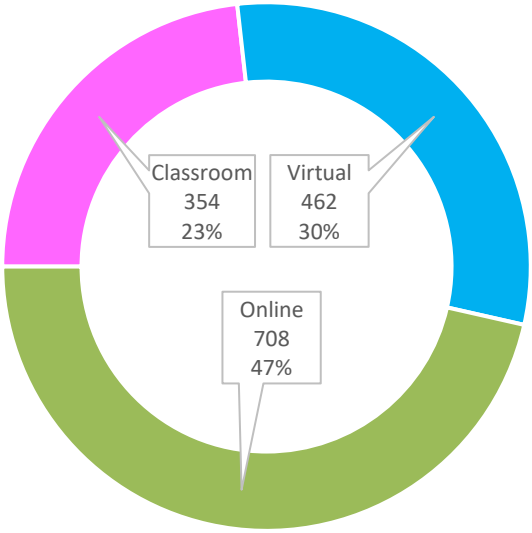
Trainees by Month & Delivery Method



Trainees by Gender



Trainees by Delivery Method



STRATEGIC PARTNERSHIPS

Extra-Budgetary Funding

Canada

The Government of Canada is a committed partner of the UNCAP programme. Canada has provided extra-budget grants to the UNCAP programme in 2019 and 2020 to support the setting up of an Operational Centre Simulated Training Environment (OPSCEN-STE) within UNCAP premises in Entebbe. From 2021, this new facility will be delivering operational-focused scenario-based practical training to Mission's operators by using the Unite Aware technology platform that enhances situational awareness and decision making. In addition, Canada has committed to provide additional funding in support the development and delivery of C4ISR training courses at the UNCAP. Canada has committed to further contribute to the UNCAP objectives of delivering training courses in the French language. and to support A4P gender objectives through the Women's Outreach Course which aims to induct female military and police officers into UN prior to their deployment in Peacekeeping

Denmark

The Government of Denmark is a committed partner of the UNCAP programme. Denmark has provided a extra-budgetary grants for 2020 has funded:

- the development of a Technology Training platform (Learning Management System) designed to offer online training to T/PCCs and Field Missions
- the development of C4ISR E-learning courses

Japan

The Government of Japan has been a committed partner of the UNCAP programme since its inception. Japan has provided consistently provided extra-budgetary grants to the UNCAP programme for the period 2016-2019. Extra-budgetary funds from Japan will fund the seventh edition of the Women's Outreach Course (WOC) at the Regional Service Centre Entebbe (RSCE) in Uganda, planned to be delivered as soon as in-person activity can resume, hopefully in 2021. The Women's Outreach Course is a direct response to Security Council Resolution #2122 (2013), which encourages troops and police-contributing countries (T/PCCs) to increase the participation of women military and police officers in UN peacekeeping operations and address gender imbalance.

Technical Partnerships

Contributing to the UNCAP programme can take many other forms. The Academy needs support from Member States and partnering International Organizations in the form of course material sharing, provision of trainers or mentors, provision of technology, provision of logistic support to practical courses, and hosting in-person training courses at national Peacekeeping Training Centers.

▪ Uganda

In 2020, the Government of Uganda and the Ugandan People's Defense Forces (UPDF) have issued an Authorization-to-Operate micro-drones for training purpose to the UN C4ISR Academy for Peace Operations.

In addition, UPDF have commit to provide a safe and secure micro-drone practical training area in the close vicinity of UN base Entebbe along with some logistical support.

Such technical partnership with Uganda is critical and will allow the UN C4ISR Academy to deliver micro-drone instructor or operator training to UN Field missions' personnel from 2021.

▪ France

In 2020, the Government of France and the French Armed Forces have committed to partner with the UN Department of Operational Support (DOS) and the UN C4ISR Academy for Peace operations for the provision of C4ISR course material, the provision of micro-drone instructors in support of practical course to be delivered in Entebbe and the hosting of a preliminary training session of UN micro-drone instructors in France.

Such technical partnership with France represents an important enabler to allow the UN C4ISR Academy to deliver CIS and micro-drone instructor or operator training to UN Field missions from 2021.

A framework agreement between the United Nations and the French Armed Forces is expected to be signed early 2021.

▪ North Atlantic Treaty Organisation (NATO)

In the Defence Capacity Building (DCB) package for United Nations (UN) Peacekeeping Training, approved by the North Atlantic Council (NAC) in March 2020, NATO committed to support the UN in the field of C4ISR including Signals and Information & Communications Technology (ICT).

Specifically, the DCB package calls for a strategic partnership between the NATO Communications and Information (NCI) Agency through the NCI Academy in Oeiras, Portugal and the UN C4ISR Academy for Peace Operations (UNCAP) in Entebbe, Uganda.

The goal of the UNCAP is to strengthen the capacity of uniformed C4ISR personnel, through specialized training on key technologies, equipment and systems, as well as on UN procedures and operating environments.

This DCB Trust Fund project seeks funding from NATO Member States to enable the NCI Agency to support the UNCAP. The project responds to identified shortfalls and proposes a range of activities along four main objectives: 1. Tailoring and sharing existing NATO course material with the UNCAP, and developing UN-specific e-learning courses; 2. Delivering training-of-trainer courses at the UNCAP in Entebbe; 3. Providing consultancy support to the UNCAP and mentoring its instructors; 4. and supporting the development of a Virtual Instructor-Led Training (VILT) capability.

Pending the allocation by NATO Member States of DCB Trust Fund resources to the NCI Academy, the implementation of this 2-year technical partnership is expected to start during the first quarter 2021.

Challenges

On March 21st, 2020, the Government of Uganda tightened containment measures to prevent the spread of the COVID-19 by closing the borders except for cargo and goods, and by March 30st, 2020, the President of Uganda initiated a 14 days nationwide curfew from 7pm to 6:30am, which was subsequently extended three more times. It was not until the 1st October 2020 that Uganda opened again its borders and Entebbe International Airport.

Subsequently, the United Nations Regional Service Centre (RSCE), which hosts the UN C4ISR Academy for Peace Operations, was closed as from 20 March 2020 and started re-integrating staff back to the office as from 19 October, 2020 with a capacity on 20% as part of Phase 1.

Given the above, the pandemic restrained training activity and disrupted the yearlong planned training calendar.

In addition, it is to be reminded that the UNCAP programme relies entirely on the generous support from Member States. Without extra budgetary funding, the UNCAP programme could be at risk and thus it is critical that the circle of partnering Member States grows to better support A4P, T/PCCs capacity building and gender objectives.

2021 ACTIVITIES PLANNING

In 2021 and beyond, the UN C4ISR Academy for Peace Operations (UNCAP) is going to further strengthen its operational capacity by:

- Starting training operations at the newly commissioned "Mission Operational Centre Simulated Training Environment" (OPSCEN-STE) at Regional Service Centre Entebbe (RSCE) in partnership with Canada. This is a key element to enhance situational awareness and decision making in field operations.
- Expanding the course offer to include all basics of Information & Communications Technology, training on Intelligence – Surveillance - Reconnaissance systems including micro-drones.
- Developing additional eLearning courses on basics of ICT, situational awareness tools, micro-drones and to make those courses accessible to Troop and Police Contributing Countries and Missions through two technical partnerships with France and the NATO Communications & Information Academy.
- Offering training in other UN official languages, in French language in particular.
- Expand UNCAP training audience to include ICT Senior NCOs.
- Further develop the circle of UNCAP strategic and technical partners.

Innovation

Introducing new and modern methods to deliver training and develop capacity so support both Remote Learning and Classroom-based training are being introduced.:

▪ Virtual Instructor-Led Training (VILT)

Virtual Instructor-Led Training (VILT), is training delivered through a virtual environment when the instructor and learner are in separate locations. A virtual learning environment aims to simulate a traditional classroom to make the online training experience effective and adaptable to learners.

VILT is one of the fastest-growing approaches to online learning and the Academy will incorporate VILT as part of a larger, blended training strategy for UN peacekeepers.

In addition to VILT, UNCAP is planning to integrate as much as possible the usage of Extended-Reality technology and equipment in support of its training programme.

▪ Mobile Training Team

The increased use of Command, Control, Communications, Computers, Intelligence - Surveillance - Reconnaissance (C4ISR) and camp security technologies in UN Peace Operations has underlined the high demand for provision of specialized training to enhance the preparedness of military, police and civilian peacekeeping C4ISR personnel that are deployed or to be deployed into UN peacekeeping missions. Currently, UNCAP technology training courses are delivered either online or in-person at the Academy in Entebbe.

The Academy is planning to establish a Mobile Training Team (MTT) to address specific technical or operational pre-deployment training needs of an individual or multiple Troop or Police Contributing Countries (TCC/PCC). MTTs may also be deployed in-Mission to address time-critical and specific technology training and capability development needs during different life cycles of a mission, focusing on newly deployed uniformed personnel or TCC/PCC units.

6th International Partnership for Technology in Peacekeeping Symposium

In 2014 the UN Department of Operational Support (DOS) created the Partnership for Technology in Peacekeeping (PTP) initiative as a platform to facilitate dialogue on technology in peacekeeping between the UN and a wide range of partners, including member states, regional organizations and the academia.

The 6th Partnership for Technology in Peacekeeping international symposium (PTPS) was planned to take place from 23 to 26 June 2020 in Pretoria, South Africa. However, given the risks related to the COVID-19 pandemic, the 6th PTP Symposium was postponed several times and the UN Secretariat and the host-country South Africa are tentatively planning to conduct the Symposium at the end 2021.

The UN C4ISR Academy for Peace Operations will play a critical role in the next PTP Symposium as it will lead one of the thematic Working Groups focusing on "Technology Training and Capacity Building".

The UN provides common technologies and platforms across many functional areas to ensure that the diverse composition of its mission components can operate together to implement mandates.

A significant output of the first Partnership for Technology in Peacekeeping symposium was the establishment of the newly renamed UN C4ISR Academy for Peace Operations. The Academy ensures

that a strategic and coherent approach is taken to the training and "Action for Peacekeeping" (A4P) capacity-building objectives of the uniformed personnel of Troop and Police Contributing Countries.

Topics to be explored in this working group will include:

- Peacekeeping technology training requirements
- The current status of UN C4ISR Academy for Peace Operations partnerships and gaps
- Support requirements and opportunities
- Partnerships in learning with organizations that have similar objectives
- Technologies and innovation in support of learning
- Technology Training and other requirements in UN official languages (English and French)

Funding Appeal Project Proposals

▪ Action for Peacekeeping (A4P) Project Proposals

As highlighted in the Action for Peacekeeping (A4P) Initiative's Declaration of Shared Commitments on UN Peacekeeping, extra-budgetary funding (XBF) support is critical to the Departments of Peace Operations (DPO) and Operational Support (DOS)' efforts to sustain and modernize UN Peacekeeping, better address the challenges peacekeeping faces today and improve the impact of peacekeeping missions on the ground.

Without donor contributions it is very difficult for the Departments to explore new innovations and ideas. A number of the latest innovations in UN Peacekeeping have been only possible through the generosity of donors.

In 2020, the UN C4ISR Academy included three project proposal among the joint Departments of Peace Operations and Operational Support funding appeal for 2021. The projects aim to implement A4P priority commitments during 2021, specifically Improving Peacekeeping Partnerships, by funding the Academy's technology courses development and delivery, the procurement of necessary C4ISR equipment and funding a Technology Training Chief position.

The full project proposal is available in Appendix #2

▪ UN Peace and Development Trust Fund (UNPDF) Project Proposals

The United Nations Peace and Development Trust Fund (UNPDF) was established in 2016, following the pledge by the Government of the People's Republic of China to contribute US$200 million dollars to the United Nations over a ten-year period. The United Nations and the Donor Government aim to work together to achieve the goals of the Charter of the United Nations through implementation of innovative, forward-looking and pro-active projects and activities financed by the Trust Fund.

UNPDF has two sub-Funds. The Secretary-General's Peace and Security Sub-Fund, is aimed at financing projects and activities related to the maintenance of international peace and security. And the 2030 Agenda for Sustainable Development Sub-Fund, is intended to finance activities in support of the 2030 Agenda and the Sustainable Development

Goals adopted by Member States in September 2015.

Since its inception, UNPDF has supported projects and activities around the world, covering areas including peacekeeping security, rapid response system, prevention and mediation, counter-terrorism, strengthening partnership between the United Nations and regional organizations, poverty alleviation, science and technology, small- and medium-sized enterprise, education, health care, etc.

In 2020, the Department of Operational Support (DOS), Office of Information & Communications Technology (OICT), Operations Support Division, submitted five project proposals for funding, two of them related to UN C4ISR initiatives, with the following objectives:

- To fund a Spectrum Management expert position at UN HQ level for a period of one year to develop and deliver a UN Peacekeeping Spectrum Management governance, policy and training package.
- To fund the development of a Mobile Training capacity to deliver C4ISR and camp-security technology training at Mission level or T/PCC level for a period of two years.

The full project proposals are available in Appendix #2.

APPENDIX 1
FUNDING & FINANCE

Contribution from Canada

(Restricted)

Contribution from Denmark

(Restricted)

Contribution from Japan

(Restricted)

APPENDIX 2

DPO-DOS 2021 Extra-budgetary funding request to Member States

PROJECT PROPOSALS

A4P DPO-DOS extra-budgetary fund request 2021
Project Proposal Submission

UN C4ISR Academy for Peace Operations
Technology course development & delivery

(a) Brief description of the project

(i) Objective of the project:

The United Nations C4ISR Academy for Peace Operations (UNCAP) was established in 2015, as an outcome of the first Partnership for Technology in Peacekeeping symposium. It provides comprehensive training to participating military and police personnel that are scheduled to be deployed to peacekeeping missions, at both the management/officer and technician level. The project objective is to contribute to the further development of the Academy by incorporating training in new technologies including in the area of Information & Communications Technology (ICT), Intelligence - Surveillance - Reconnaissance (ISR), situational awareness, camp and personnel security & protection. This project proposes funding for inhouse and the development of e Training courses.

(ii) Why the project is necessary and how it relates to the implementation of the A4P commitments.

The Academy is a key enabler and aligns with several key priorities of "Action for Peacekeeping (A4P)" by providing high level technology training to support effective performance and accountability, improve safety and security of peacekeepers, and strengthening the protection of civilians. Training is a core objective of A4P.

(iii) What is the expected impact of the project?

Better response to Peacekeeping challenges with technology training.

(b) Expected Outcomes, Outputs and Proposed Activities

Outcomes	Outputs	Proposed Activities
Improved mandate implementation, protection of personnel and premises, and command and control resulting from responsible and comprehensive implementation of technologies in UN Peace Operations	- Increased number of trained personnel, as well as improved course curriculum, training aides, distance learning platforms, training equipment, training facilities and infrastructure. - Training in at least three new technology including micro-drones, situational awareness, spectrum management. - The provision of hand-on and practical training	- Delivery of 4 in-house technology training of trainer courses in Entebbe. - Delivery of 6 online technology courses - Delivery of technology training in Missions - Delivery of technology training in both English and French language

	in conjunction with the required theoretical background designed to improve the performance and efficiency of military signals and police ICT units	

(c) Implementation Timeline

This funding request covers the expansion for the period of one calendar year.

(d) How does this project relate to internal and external United Nations partners?

This project aims to facilitate DPO requirements for effective command & control of uniformed personnel operations throughout the Area of Responsibility of any peacekeeping mission and stakeholders are DPO, partnering Member States and International Organizations and DPO Integrated Training Service (ITS).

(e) How gender aspects been included in the design and implementation of the project? How does it help the Department to implement their Women, Peace and Security and Gender Parity commitments?

The programme includes a specific project supporting A4P gender objective and to increase female participation in technology training. The UN Signals Academy developed a specific Women's Outreach Course (WOC) and has trained to date 177 female officers, some of them having already deployed in UN peacekeeping missions. From 2021 the WOC will be delivered both in English or French language.

(f) Brief explanation of any risks that the implementation of the project may face and how to mitigate them, including with regards to the impact of COVID-19.

A minor risk for the project is the eventual delay of the course calendar due to unforeseen circumstances such as COVID-19 pandemic, procurement timelines or availability of trainers or candidates. The mitigating factor for these risks are OICT's use of project management standards (Prince 2) and the effective coordination with national trainers and field missions.

(g) Proposed Budget

Item	Brief Description	Total Amount
Training Activity 1	Enhancement of Learning Management System & course hosting cost	US$150,000
Training Activity 2	Development of E-course units	US$250,000
Training Activity 3	Translation of technology courses from English to French language	US$250,000

Training Activity 4	Women's Outreach Course for female U6-S6 officers - Delivery of 2x micro-drone instructor - operator course - Delivery of 2x Spectrum Management courses. Each course for two events requires $250,000 in funding.	US$250,000
		US$900,000
PSC (13%)		US$117,000
		Total: US$1,017,000.00

A4P DPO-DOS extra-budgetary fund request 2021
Project Proposal Submission

UN C4ISR Academy for Peace Operations
Micro-drone procurement in support of training & capacity building

(a) Brief description of the project

(i) Objective of the project:

The Office of Information and Communications Technology (OICT), UN HQ New-York, is responsible for defining strategic direction for Information & Communications Technology (ICT) and some non-ICT technologies to the UN Secretariat. Technology is key to enabling international peace operations and to supporting the implementation of mandates. In addition to providing communication capabilities, technology can be a tool for conflict prevention and management, and for increasing the safety and security of peacekeepers and civilians through enhanced situational awareness that supports more informed decision-making.
The objective of this project is to procure and equip the UN Signals Academy with the adequate hardware, software, simulators and ancillaries necessary to deliver micro-drones theoretical and practical training to respond to T/PCC capacity building requirements and to UN missions' operational requirements and evolving mandates.

(ii) Why the project is necessary and how it relates to the implementation of the A4P commitments.

The project fits within the framework of the training and capacity building component of the UN Signals Academy programme launched in 2015 to implement the recommendations from the Final Report of the Expert Panel on Technology and Innovation in UN Peacekeeping (2015). The proposal is also aligned with the Letter from the Secretary-General providing recommendations on a mechanism to fill capability gaps in response to Security Council Resolution 2378 (2017) as well as with the recommendations from the Report of the High-Level Independent Panel on United Nations Peace Operations (2015). Both identify enhancing specialized uniformed capabilities through targeted training and capacity building support and triangular partnership projects as a high-level priority.

(iii) What is the expected impact of the project?

Better response to Peacekeeping challenges with micro-drone technology solutions.

(b) Expected Outcomes, Outputs and Proposed Activities

Outcomes	Outputs	Proposed Activities
Improved mandate implementation, protection of personnel and premises, and command & control resulting from	Enhanced training on micro-drone technology. Better efficiency of micro-drone trainers and	Deliver a minimum of 2 in-house and 2 in-mission micro-drone instructor or operator

responsible and comprehensive implementation of technologies in UN Peacekeeping	operators in field missions. Better situational awareness and decision making.	course both in English or French language

(c) Implementation Timeline

This funding request covers the period of one calendar year.

(d) How does this project relate to internal and external United Nations partners?

The direct beneficiaries of this project are UN field missions and T/PCCs.

(e) How gender aspects been included in the design and implementation of the project? How does it help the Department to implement their Women, Peace and Security and Gender Parity commitments?

The project is related to technology and is gender neutral.

(f) Brief explanation of any risks that the implementation of the project may face and how to mitigate them, including with regards to the impact of COVID-19.

a. COVID-19 related measures may impact travel of UN personnel and participants. Required personnel travel may be mitigated by extensive tele-working arrangements (e.g. Virtual meetings).
b. Procurement of necessary resources can take significant time, jeopardizing the timely implementation of the project. The dedicated staff is anticipated to facilitate fast and smooth procurement process.

(g) Proposed Budget

Item	Brief Description	Total Amount
Procurement of micro-drone equipment	Procurement of hardware, software, simulators and ancillaries	$150,000.00
Sub Total	Sub-total before PSC	$ 150,000.00
Programme Support Costs (13%)		$ 19,500.00
Grand Total	Total including PSC	$169.500.00

A4P DPO-DOS extra-budgetary fund request 2021
Project Proposal Submission

UN C4ISR Academy for Peace Operations
Technology Training Chief (P4)

(a) Brief description of the project

(i) Objective of the project:

The United Nations C4ISR Academy for Peace Operations was established in 2015, as an outcome of the first Partnership for Technology in Peacekeeping symposium. It provides comprehensive training to participating military and police personnel that are scheduled to be deployed to peacekeeping missions, at both the management/officer and technician level. The project objective is to contribute to the further development of the Academy by incorporating training in new technologies including in the area of Information & Communications Technology (ICT), Intelligence - Surveillance - Reconnaissance (ISR), situational awareness, camp and personnel security & protection.

(ii) Why the project is necessary and how it relates to the implementation of the A4P commitments.

The Academy is a key enabler and aligns with several key priorities of "Action for Peacekeeping (A4P)" by providing high level technology training to support effective performance and accountability, improve safety and security of peacekeepers, and strengthening the protection of civilians.

(iii) What is the expected impact of the project?

Better management of the local UNCAP programme, prompter development and delivery of technology courses and overall better response to Peacekeeping challenges with technology training.

(b) Expected Outcomes, Outputs and Proposed Activities

Outcomes	Outputs	Proposed Activities
Improved mandate implementation, protection of personnel and premises, and command & control resulting from responsible and comprehensive implementation of technologies in UN Peace Operations	- Increased number of classroom-based courses at the UNCAP Entebbe - Increased number of e-Learning course published on OICT Technology Training platform - Management of the OPSCEN-STE training facility and Unite Aware	- Funding of staffing for 1 year

	scenario-based courses. - Enhanced coordination with trainers from Member States and missions	

(h) Implementation Timeline

This funding request covers a period of 1 year.

(i) How does this project relate to internal and external United Nations partners?

This project aims to facilitate DPO requirements for effective command & control of uniformed personnel operations throughout the Area of Responsibility of any peacekeeping mission. The project is continuously monitored and all stakeholders (DPO, partnering Member States and International Organizations) are updated on any development that affect the operation of the Academy. Training is a core objective of A4P. This project is fully coordinated with the DPO Integrated Training Service (ITS).

(j) How gender aspects been included in the design and implementation of the project? How does it help the Department to implement their Women, Peace and Security and Gender Parity commitments?

Female candidates will be encouraged to apply for that position.

(k) Brief explanation of any risks that the implementation of the project may face and how to mitigate them, including with regards to the impact of COVID-19.

A minor risk for the project is the eventual delay for the availability of suitable candidates. The mitigating factor for this risk is an efficient recruitment and communication campaign.

(l) Proposed Budget

Item	Brief Description	Total Amount
Staffing	Funding of a Technology Training Chief position (P4) in Entebbe for 1 year	US$,300,000
PSC (13%)		US$39,000
		Total: US$339,000

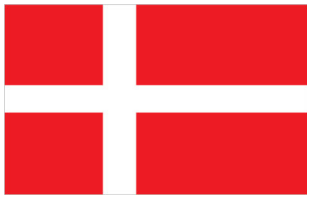
SPECIAL THANKS

The UN Department of Operational Support and the Office of Information & Communications Technology thanks our Donors & Partners

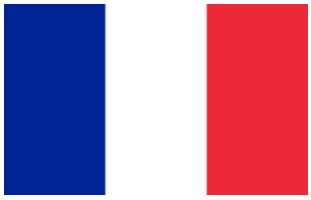
The achievements of 2020 would not have been possible without the continuing support of and collaboration with our key donors, allies and partners with whom we have shared visions, strategies and ideas.

Canada

Denmark



France



Germany

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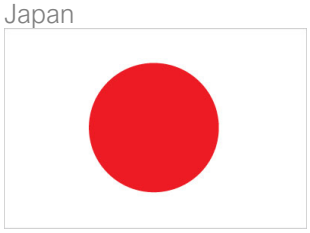
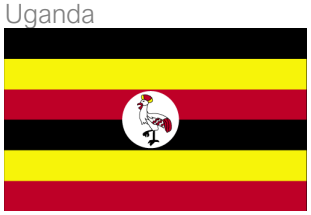


Uganda



NATO Communications & Information Academy

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