

Topics for Moderated Discussions
Sixth International Symposium
Partnership for Technology in Peacekeeping: “Informed - Aware - Effective”
The City of Tshwane (Pretoria), Republic of South Africa
21-24 June 2022

The symposium agenda and content have been designed to ensure interactive dialogue amongst the participants through moderated thematic discussions. The topics of these discussions are focused on areas of opportunity where technology solutions and innovation can be applied to the real-world challenges faced by peacekeeping operations today. Additional topics may be added based on the feedback of the participants during the event. The format of the symposium will include open plenary sessions with guest speakers, working groups consisting of smaller groups of participants based on areas of expertise or interest, and panel discussions. The outcomes of these activities will be presented in plenary sessions and are expected to drive the technology agenda supporting peace operations and lay the foundation for practical engagements and initiatives over the next 12-month period.

Topic 1: Protecting Peacekeepers

This working group will discuss the threat spectrum against UN Peace Operations and the status of technologies currently utilized including camp security and protection, early warning systems, Unmanned Aircraft Systems (UAS), Counter-Unmanned Aircraft Systems (C-UAS), TOB/Patrol/Convoy protection, and Counter Improvised Explosive Devices (C-IED).

The threats from Improvised Explosive Devices (IEDs) and their networks in current and future peace operations are increasing as technology evolves.

Unmanned Aircraft Systems (UAS) have a multitude of use cases. These include security and protection, patrols, reconnaissance and surveillance, mapping, and others.

Basic security technologies have been provided to date through the mainstreaming approach implemented by the Office of Information and Communications Technology on integrated camp security and early warning systems in both static and mobile camps.

The discussion will present the status of efforts in these fields, identify new technology ideas that can enable peacekeepers on the ground to more effectively face current and near future threats. It will also cover transport security measures, including how to secure mobility and C-IED options.

The topics to be explored in this working group will include

- The best practices of Member States on awareness and protection technologies
- How available technologies can be most effectively integrated into the day-to-day operations of field missions
- The effective use and limitations of UAS to improve awareness and analysis, and the optimal strategy for adopting and integrating UAS in a UN field environment

Topic 2: Information-Driven Peace Operations

In the age of information, the challenges to peace operations are many: how to leverage the variety of data now available to deliver value and inform short-term and more strategic decision-making; how to merge the myriad of external and internal data streams; how to integrate and standardize intuitive systems and tools. The recently endorsed Strategy for Digital Transformation of UN Peacekeeping and the Secretary-General's Data Strategy provide the higher-level guidance, existing substantive and command and control solutions and practices inform, and information security provides guard rails. The option for migration to cloud computing services provides opportunity. Can big data analysis and data science methods move peace operations to the next level?

This working group will explore means by which the objectives of the Strategy for Digital Transformation of UN Peacekeeping and the Secretary-General's Data Strategy can be supported. Existing solutions as well as ideas around next steps will be discussed. Global trends in advanced analytics, threat analysis, predictive modelling, geo analytics, statistical algorithms, and “what-if” analysis powered by high-performance systems will be investigated, alongside ICT architecture, connectivity, data hosting and access.

The topics to be discussed in this working group will include

- The best practices of Member States in analyzing operational data and translating that data into actionable and effective products to guide crisis and leadership decision-making
- Utilizing current initiatives to drive future data-driven operations
- Propose future steps based on the Strategy for Digital Transformation of UN Peacekeeping and Secretary-General's Data Strategy
- The approach to integrate advanced technologies such as artificial intelligence (AI) and machine learning (ML) into existing systems and develop supporting processes and procedures
- The role of Member States to positively impact UN mandate implementation in this context

Topic 3: Integrated Training and Capacity Building

The United Nations provides a wide range of technologies and platforms across many functional areas within UN Peace Operations to better implement mandates.

A significant output of the first Partnership for Technology in Peacekeeping symposium held in 2014 was the establishment of the UN C4ISR¹ Academy for Peace Operations (UNCAP) in 2015.

¹ UNC4ISR - Command, Control, Communications, Computers (C4), Intelligence – Surveillance – Reconnaissance (ISR)

The technology training programme delivered by UNCAP (in person, online and onsite in UN missions) is focused on alignment with the requirements of UN Peace Operations, and the development of training projects related to UN C4ISR in response to the operational needs expressed by the deployed forces.

With support of partnering Member States, an Operation Centre Simulated Training Environment has been created at UNCAP in Entebbe, Uganda. A wide range of eLearning products are being developed to support technology training objectives, their adoption, and sustainability.

C4ISR and camp security technology courses are now being delivered to uniformed and non-uniformed personnel with plans to expand to terrestrial radars, electronic spectrum management and cybersecurity, among others.

The topics to be discussed in this working group will include

- Status of UN C4ISR Academy for Peace Operations program
- UNCAP's current partnerships, results/impact, and gaps
- UNCAP's support requirements and opportunities
- Innovation in support of technology training delivery
- Moving to a UN C4ISR integrated training concept

Topic 4: Eco-Responsibility

The deployment of thousands of civilian, police and military personnel into peacekeeping environments requires significant logistical support. The environmental impact of these deployments can only be mitigated through shared responsibility with troops and police contributing countries (TCC/PCC), and by enabling technology to develop smart camps that minimize the UN's environmental footprint.

Peacekeeping operates in the most challenging of locations, with very little infrastructure, often requiring the building of new facilities. Five service domains are applicable when developing a smart camp concept for Peacekeeping Operations: 1) safety, security and emergencies, 2) accommodation and offices including solid and wastewater management, 3) transportation and logistics, 4) information and communications technology, and 5) resources and environment specifically water and energy. In some places, like northern Mali where water is a scarce resource, the local community may see the UN mission as a resource competitor.

In response, the UN Department of Operational Support (DOS) is implementing a six-year strategy on environmental management in line with the basic principles stated in the Secretary-General's Data Strategy for Action by Everyone, Everywhere: "promote care, excellence, collaboration, responsibility and stewardship by everyone, everywhere in the UN family."

UNISFA is developing a model camp at Dukkra leveraging FRIM and the latest sensor and smart technologies and best practices. This camp will show the way for the next generation of UN smart camps.

The topics to be discussed in this working group will include:

- Initiatives related to energy, fuel, water and wastewater, and environmental impact
- Broader strategic environmental issues, such as the potential of global and local environmental monitoring
- Role of analytics and “smart” technologies applied to peacekeeping camps and Member States’ experiences. This area is of interest given that peacekeeping environments provide a unique opportunity to test and pilot innovative initiatives

Topic 5: Telemedicine

Improving peacekeepers’ access to quality healthcare is a top priority for DOS and the Department of Peace Operations’ Action for Peacekeeping initiative (A4P).

The UN is exploring opportunities to use telemedicine to provide high-quality remote medical support in the UN Peacekeeping context to eliminate the barriers of geographical distance and challenging operational contexts with limited resources.

Telemedicine could support first response on the front lines, monitoring during medical evacuations, and connecting healthcare practitioners among level 1, 2, and 3 UN hospitals and clinics by establishing a digital network to support the flow of medical information.

A broad range of communications technologies can be leveraged including real-time interactive audiovideo solutions, plug-and-play interoperable digital medical devices, portable ruggedized telemedicine kits and store-and-forward applications capable of streaming data using terrestrial or wireless transmission technologies. In addition, aircraft, drones and other means can be utilized to deliver medical-related goods and services.

Improving the quality of medical care for peacekeepers using telemedicine was a concept introduced at the Fifth Partnership for Technology and Peacekeeping symposium in Kazakhstan. This year’s symposium will provide an opportunity to build upon the progress made since then.

The topics to be discussed in this working group will include:

- Building on the knowledge gained to date through existing telemedicine initiatives
- Engaging with Member States on how to operationalize the use of telemedicine technology in UN Peace Operations
- Specific technology solutions that address existing challenges and offer frontier solutions
- Opportunities for peacekeeping operations to leverage advanced medical facilities outside missions’ areas of operation.