FACTSHEET:

DPKO/DFS 2015-16

IMPLEMENTATION STRATEGY FOR THE RECOMMENDATIONS OF THE EXPERT PANEL ON TECHNOLOGY AND INNOVATION IN UN PEACEKEEPING

I. OVERVIEW

The threats faced by United Nations peacekeeping operations are evolving rapidly. Mandates are becoming increasingly complex and the operating environments into which missions deploy are ever more challenging. It is therefore critical to ensure that peacekeeping operations possesses the right tools to meet the challenges they face, so that peacekeeping remains an efficient and effective enterprise in years to come.

In mid-2014 an Expert Panel on Technology and Innovation in UN Peacekeeping was appointed by the Under-Secretaries-General of Peacekeeping and Field Support to consider how modern technology could be leveraged to enhance the operational effectiveness of peacekeeping missions. and overcome some of the emerging challenges they face. The Panel's report, released in February 2015, argues for wider deployment of technology in peacekeeping and proposes a new approach that enables innovative problem solving. The Panel's message was echoed by the High-Level Independent Panel on Peace Operations, which recommended that the UN "embrace innovation and the responsible use of technology to bridge the considerable gap between what is readily available to and appropriate for UN peace operations and what is actually in use in the field today". In his report on the implementation of the High-Level Panel's recommendations, the Secretary-General pledged that technology would be a key element of the peacekeeping reform agenda.

In 2015, DPKO/DFS elaborated a strategy to implement the recommendations of the Expert Panel and initiated a progressive exercise to introduce new tools, working methods and operational approaches to technology in peacekeeping. The strategy, which operates in line with the broader ICT Strategy for the Secretariat, seeks to bring about a cultural shift towards embracing technology and innovation, including through continual and strengthened cooperation and dialogue with Member States and other stakeholders.

The strategy seeks to deliver the following outcomes:

→ *A new approach to identifying technological solutions that puts missions, users and substantive offices in the driver's seat;*

→ *A partnerships platform to enhance dialogue and cooperation with Member States, think-tanks and the academic community;*

→ *Technical activities to strengthen the underlying technological backbone of peacekeeping, including enhanced connectivity, better tools for interoperability across uniformed contingents and modernised information management;*

→ *A strengthened framework around the use of strategic technologies that includes clear principles for use, clarified roles and responsibilities and a risk management framework for the identification, acquisition and deployment of new technologies;*

→ *New tools to help peacekeeping missions meet ongoing and emerging operational challenges and threats;*

→ *Foundations for a longer-term, comprehensive technology and innovation strategy.*

Institutional Arrangements and Links to Strategic Agendas: The Expert Panel recommended that DPKO/DFS processes for engaging with field missions and identifying requirements for new technologies be conducted in a more systematic, strategic and integrated manner. To achieve this goal, DPKO/DFS established an internal working group for advancing technology and innovation by leading prioritisation and sequencing exercises, advising on divisions of labour and comparative advantages while encouraging a collaborative, consultative and mutually-enabling approach to the strategy's implementation. Substantive offices at Headquarters and field missions play a primary role by identifying needs and priorities for new and innovative solutions to challenges arising from mandates and operational requirements within the missions.

Strategic Agenda

HIPPO Implementation

ICTD Strategic Planning

Uniformed Capabilities Development Agenda

Startegic Force Generation and Capability Planning

Technology and Innovation Strategy

Serves as a key conduit for technology partnerships

Partnership for Technology in Peacekeeping

Are responsible for engaging with Business Owners to identify operational needs, design requirements and roll-out plans

Implementing Entities

Business Owners

Mission Enablers (CITS, Eng, etc.)

Mission Operations

Are the offices with the core responsibility for the operating space, including substantive offices

Are the primary beneficiaries of this new strategy and play a role in engaging with the core implementing entities to activate the use of new technologies and innovative practices as the end user in the field

II. EMBRACING TECHNOLOGY AND INNOVATION

Goal: *Achieve a cultural shift toward innovation in the peacekeeping enterprise. Enhance DPKO/DFS capacity to plan for, budget for and manage strategic technologies and innovative solutions in response to needs in the field, in full compliance with financial rules and regulations.*

Stakeholder Outreach: Member States have a critical role to play in modernising the technological capacities of peacekeeping operations, including through their contributions of military and police units.

The Strategy facilitates enhanced and more strategic dialogue with Member States on technology and innovation to develop priorities, leverage technical expertise and training support and generate new contributions of technologies and/or more technologically-advanced units. Key mechanisms include the DPKO/DFS Partnership for Technology in Peacekeeping and the Strategic Force Generation and Capability Planning Cell. Engagement with global think-tanks and academic networks will also be scaled up to enrich the Departments' capacity to design, test and integrate innovative solutions.

Training and Capacity-building: To integrate new technologies in peacekeeping operations, all personnel must have access to training in the operation and maintenance of new systems and tools deployed throughout missions to meet emerging requirements and implement innovative solutions. The Strategy foresees the development of exercises, new specialised training materials, and partnerships with Member States to train and equip units to higher standards of technological capacity.

Signals Academy: DFS, in partnership with TCCs and other Member States, is establishing a training academy in Entebbe to augment capacities of military signals units prior to deployment. The Signals academy aims to standardise the basic curricula for signals units as well as tailored training for specific mission operating environments. This approach will improve the performance and capabilities of signals units, which are increasingly required to deploy in non-permissive environments.

III. TECHNOLOGY INFRASTRUCTURE, PLANNING AND MANAGEMENT

Goal: *DPKO/DFS possess the required hardware, software connectivity and policy framework to provide a strong backbone for the deployment of new and innovative technological solutions for peacekeeping operations. Planning and budgeting processes allow for the identification, procurement and implementation of new technologies at a level of speed and responsiveness that meets the requirements of the high-tempo operating environments of many peacekeeping operations.*

ICT Infrastructure: Enhanced enabling technologies, including hardware, connectivity, and corporate systems and platforms, are underlying requirements for innovative solutions to operational challenges. By scaling up current pilot technologies for enhancing connectivity beyond existing satellite networks, the available coverage and bandwidth available to missions will dramatically improve. Technology must be deployed with appropriate guidance and training to ensure its effective and appropriate use in line with UN principles, mission mandates and strategies.

Enhancing Connectivity in the Field:
DFS has sought to add the use of next generation low-orbit satellites to its communications solutions portfolio, where fault-tolerant terrestrial links are either only available as a secondary means of communications when the main terrestrial links fail, or not available at all. This capability is of critical importance in UN peace operations, as they are often deployed in austere environments with poor national infrastructure. This solution would also incorporate a cheaper, better-performing alternative to traditional (high-orbit) satellites in areas of operation, where it is imperative that communications are reliable.

Planning for Technology: Involving field missions and substantive offices at Headquarters more directly will result in the identification of requirements for new technological solutions more systematically and earlier in the planning process. A corporate approach to identifying technology gaps will also identify greater opportunities for synergies and cost savings. Internal management processes for considering and approving new initiatives will be be rationalised, streamlined, and integrated within budget cycles.

IV. ENHANCING OPERATIONAL EFFECTIVENESS

Goal: *To meet the challenges arising from the high-tempo, complex and increasingly dangerous environments faced by some peacekeeping operations, missions possess operational tools that are fit for purpose in the theatres in which they are deployed and for the mandates they are given. New, widely accessible technologies are leveraged to improve mandate implementation, including the protection of civilians, while improving the safety and security of civilian and uniformed peacekeepers.*

Information-led Operations: Better-informed decision-making is critical to ensuring safe and effective mandate implementation in challenging threat environments. By incorporating new technologies and practices into information gathering, analysis and reporting systems, peacekeepers of all ranks and deployment locations can significantly enhance their early warning and response mechanisms, real-time situational awareness and understanding, and decision support tools. Missions can also take a more systematic approach to strategic communications in the field by using tools for rapid strategic messaging. To achieve these goals while safeguarding sensitive information, ensuring secure communications and protecting the rights of local populations, DPKO/DFS must modernise administrative processes, information management practices, communications infrastructure and staff competencies in handling, managing and analysing information.

Situational Awareness Software: DPKO/DFS will continue to roll out Sage, a web-based incident tracking system, as an enterprise situational awareness platform that makes use of handheld devices equipped with specialised, real-time mobile applications, as well as GIS data visualisation and analysis tools. DPKO/DFS and UNOCC are engaging with Member States to leverage in-kind software development services to upgrade the Sage system, including numerous functionality improvements to meet missions requirements more effectively.
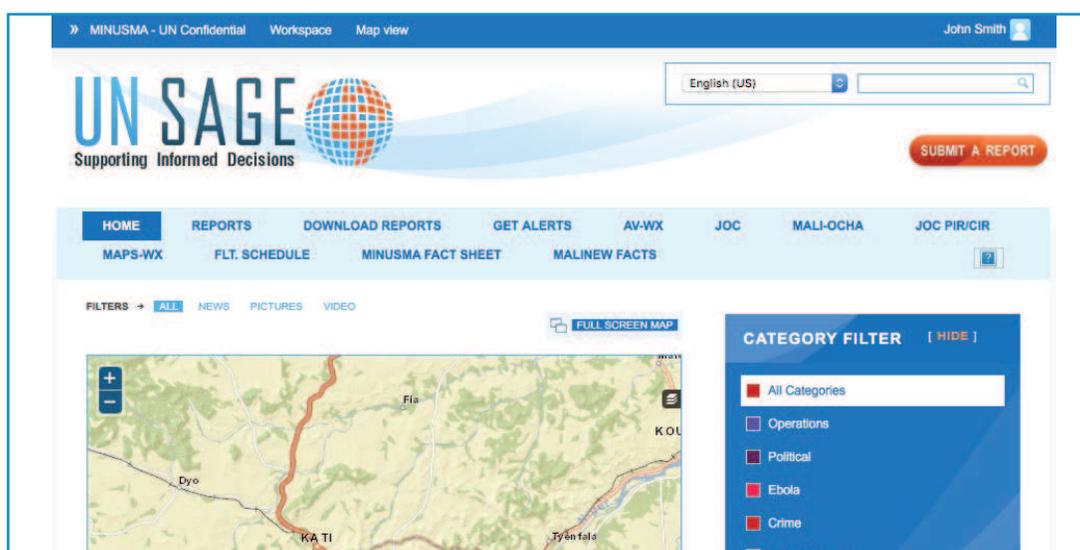
Business Intelligence:

DPKO/DFS are rolling out a Field Analytics Workspace, a self-service application that supports flexible data discovery, visualization and sharing across enterprise and local data sources. The Workspace enables decision-makers to easily create powerful visual reports and to securely share them with teams, including on mobile devices.

Information Sensitivity Training:

DPKO/DFS have rolled out a new, mandatory training on sensitive information management and sharing. The course is intended to build the understanding of civilian and uniformed personnel on the meaning of confidentiality in the Organisation and teach them to use information security classification markings effectively; declassify and release information; confidently share information and manage access in digital systems and store and handle highly-sensitive information appropriately.

IED Survivability: Operating in asymmetric threat environments presents immediate and pressing imperatives for peacekeeping operations deployed in these theatres. To ensure missions are capable of implementing their mandates effectively and safely in areas that feature improvised explosive devices, complex attacks and other asymmetric assaults, relevant peacekeeping operations require the systems, guidance, technologies and training for the purposes of force protection and the protection of civilians.

Policing: New technologies offer significant opportunities to strengthen the uniformed capabilities of peacekeeping operations to address emerging rule of law threats, including transnational organized crime. Technologies will enable missions to improve the operational and protective equipment of Formed Police Units and Individual Police Officers, while police surveillance technologies will improve situational awareness in the field. New innovations in training technologies can broaden the scope of training both for UN Police and host state law enforcement agencies. Enhanced use of tools to process criminal intelligence will permit missions to plan, prioritise and allocate resources in undertaking and/or contributing to crime reduction strategies.

V. MISSION SUPPORT

Goal: *Missions use new situational awareness, duty of care, threat detection and mitigation tools to enhance the capacity of peacekeeping operations to fulfil their mandates in dangerous environments, while protecting UN personnel and installations to a high standard. The Departments leverage the opportunities presented by existing and emerging technologies to reduce the environmental footprint of peacekeeping operations, thereby reducing costs and enhancing safety and security by limiting the exposure of supply lines to directed attack.*

Safety and Security: Comprehensive technology suites tailored to different mission environments can significantly enhance camp safety and security, including threat detection, perimeter control and dissuasion tools. Mobile surveillance systems such as unarmed, unmanned aerial systems and convoy line-of-sight enhancement tools can help to identify threats more quickly and enable greater freedom of movement. Existing emergency communication systems provide alternatives to radio communications during crisis situations.

Enhancing Camp Security Suites:
Guard duty can be augmented by equipping installations with a basic suite of sensors placed on portable elevated mounts for flexibility and range including a combination of CCTV, motion sensors, infrared radar and ground radar. The addition of handheld UAVs will enable further investigation of potential threats or blind spots and allow installations to employ dynamic coverage. Basic-access control measures, such as remote-controlled barriers, could add to basic perimeter security measures and augment trenches and modern, easy-to-erect fencing or bastion perimeters.

Duty of Care: A variety of technological solutions at the tactical and operational levels present opportunities for the enhancement of medical support to peacekeeping operations. This includes the implementation of the "10-1-2" international standard of medical and casualty evacuation.

Reduced Environmental Footprint: The systematic integration of alternative energy sources across all aspects of field operations and the incorporation of a life-cycle approach will significantly decrease missions' environmental footprints and reduce long-term costs. More timely delivery, as well as remote supply and services reduce a mission's physical presence in its area of operations, which, in turn, can help manage a mission's environmental impact on local areas and limit the exposure of supply lines to threats of attack. Shifting from 'hard wall' to more expeditionary accommodation helps to reduce a mission's footprint and control waste, while significantly enhancing in-theatre mobility and response capacity.