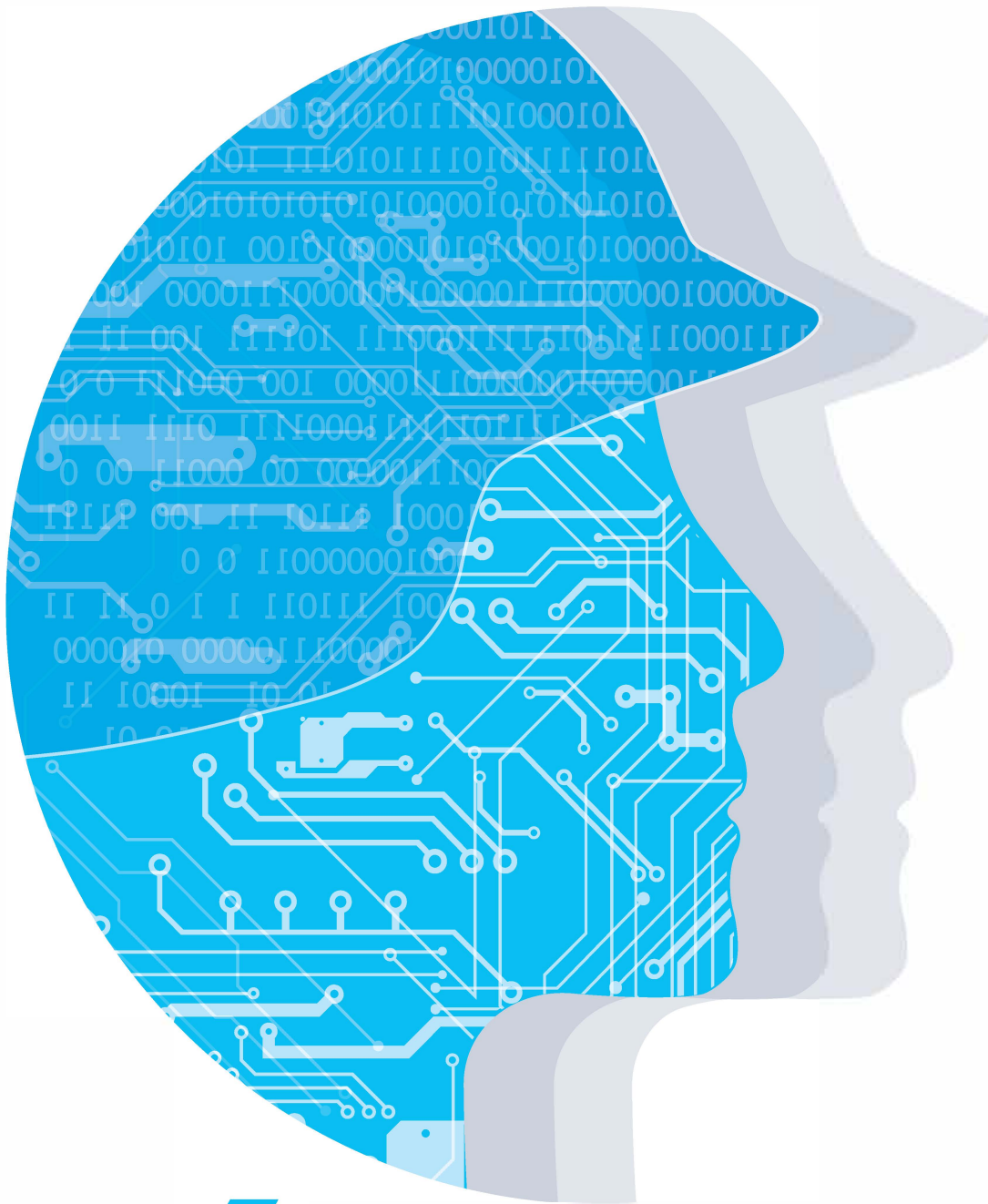


21 - 24 June 2022



Informed · Aware · Effective

# 6<sup>th</sup> International Partnership for Technology in Peacekeeping SYMPOSIUM 2022



defence  
Department:  
Defence  
REPUBLIC OF SOUTH AFRICA



Council for Scientific and Industrial Research  
International Convention Center (CSIR ICC)  
City of Tshwane (Pretoria), South Africa

Office of Information and Communications Technology  
United Nations Department of Operational Support





Union Building & Mandela Statue



The City of Tshwane (Pretoria)



The Big Hole



Isandiwana Hill



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**Mr. Atul Khare**

**Under-Secretary-General**

Department of Operational Support, United Nations

Welcome to the 6th International Partnership for Technology in Peacekeeping Symposium.

I am sincerely grateful for the Republic of South Africa's hosting of this important event. This year's symposium is especially significant as it is the first time it is held in Africa.

This event was originally planned for 2020 and like so many things, had to be adjusted due to COVID-19.

Technology is the critical enabler that facilitated business continuity and global communications during the pandemic, thereby fast-tracking the move towards a digitally driven world. This first post-COVID symposium is being held in this changed context. The mandates that drive our operations continue to be complex requiring an integrated and multi-dimensional approach to both peacekeeping and peacebuilding. The support provided to mandate implementation continues to be impacted by the challenging environments in which we operate. Our field missions deliver in unpredictable and hostile environments, with daily threats to local populations and United Nations civilian and uniformed personnel. New challenges are emerging including those resulting from climate change. We believe that technology can enable the transformation needed to successfully tackle these challenges.

This Partnership for Technology in Peacekeeping, launched in 2014, was the earliest attempt to leverage the potential of Member States in support of achieving organizational objectives through partnership arrangements. The effectiveness of the resulting partnerships has been instrumental in delivering impactful technology outcomes which make a real difference on the ground. The five topics in this year's symposium represent areas where the impact of the application of technology can potentially be the most significant. Protecting Peacekeepers, Information-Driven Peace Operations, Integrated Training and Capacity Building, Eco-Responsibility and Telemedicine are at different levels of technological maturity in the Organization. Training and capacity building was introduced at the first symposium in Italy and telemedicine at the most recent event in Kazakhstan. Many technology solutions, previously seen as innovative, are now integrated into the day-to-day activities of many field missions. This evolving lifecycle of technological innovations to meet current needs and the emergence of new challenges is a key feature of the Partnership.

Secretary-General António Guterres has called for a digital transformation of the United Nations. His 2018 Strategy on New Technologies was followed by the United Nations Secretary-General's Data Strategy. The Organization's leaders and personnel at all levels are embracing the resulting initiatives. I very much welcome the Strategy for the Digital Transformation of Peacekeeping issued by the Department of Peace Operations in August of 2021 with the support of the Department of Management Strategy, Policy and Compliance, and my Department. The goals of this strategy will provide a chapeau for future work.

I remain grateful for the support of Member States as we deal with emerging challenges and identify and implement effective technology solutions. I confirm the seriousness of the Organization with respect to these engagements. I wish you a positive and constructive symposium and look forward to outcomes that will inform the direction of the Partnership for Technology in Peacekeeping.





## Mr. Jean-Pierre Lacroix

### Under-Secretary-General

Department of Peace Operations, United Nations

I would like to warmly welcome the participants and guests of the Sixth International Partnership for Technology in Peacekeeping Symposium and express my gratitude to the authorities of the Republic of South Africa for hosting this important event.

As the means of conflict change, so must the means of peace. Our complex peacekeeping mandates, make the use of digital technologies a necessity in today's world. These technologies provide an essential role in surveillance, control and intelligence gathering, and in ensuring the safety and security of our peacekeepers. Technology is also used, however, by other actors in the conflict environment for spreading disinformation and misinformation, and hate speech, mobilization, outreach and recruitment into armed groups, and for cyber and other types of attacks.

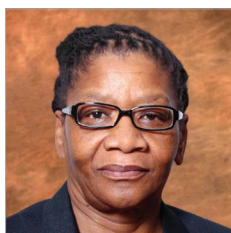
To meet these challenges, United Nations peacekeeping is implementing a Strategy for Digital Transformation and seeks to harness the potential of digital technologies to enhance the effectiveness of our operations, and to better deliver on our mandates, both now and in the future. The aim is to deliver timely, responsible, integrated analysis for decision-making; to empower technology-aware, data literate and innovation-minded personnel; and to leverage technology to innovate and respond to these threats and opportunities in a timely manner.

Recognizing our part in a broader system-wide transformation process, the peacekeeping strategy seeks to leverage and expand existing initiatives and structures, and strengthen coherence, while ensuring that our field missions are at the heart of the move towards an innovative, data-driven and technology-enabled peacekeeping. Digital transformation also cuts across all the areas of Action for Peacekeeping and will be central to the next phase of implementation through A4P+.

Bringing about culture change and transformation that has a real impact on the ground will require the expertise, resources, support, and active engagement of all of our personnel, as well as our Member States and partners. This will be one of the most complex undertakings of United Nations peacekeeping in the coming years. But the need is critical, and the benefits will be profound.

I would like to take this opportunity to thank all of you for participating in the City of Tshwane (Pretoria), South Africa this week, and for your commitment to this partnership and to the digital transformation of United Nations Peacekeeping.

# Welcome Note



## **Ms. Thandi Modise**

**Minister of Defence and Military Veterans**

Republic of South Africa

We are honoured as South Africa to be hosting the 6th installment of the United Nations Partnership for Technology in Peacekeeping symposium. We thank all peace-loving nations of the world who have converged on our shores determined to lend a hand to countries that have been ravaged by conflicts and wars.

We commend the United Nations for initiating this annual symposium which has become a unique platform for nations to share innovative solutions as well as latest technologies in peacekeeping missions. I am confident that we will emerge from this four-day symposium with creative ideas and concrete interventions that will strengthen the capacity and effectiveness of peace-keeping missions across the globe.

As a country, we have a vested interest in a symposium of this nature. South Africa remains a significant continental actor and major contributor to peace keeping operations on the continent. Members of the South African National Defence Force (SANDF) have been deployed to numerous peace missions since 1999. South Africa is the leading African country in the deployment of officers in peacekeeping missions.

Since the dawn of freedom and democracy in 1994, expectations have grown about South Africa's role in international affairs. These expectations have included a hope that South Africa will play a leading role in global efforts towards peaceful resolutions of conflicts across the globe as well as post-conflict interventions.

Our approach to conflict management is strongly informed by our own recent history. Our strong sense of national interest and our experience in the peaceful resolution of seemingly intractable conflicts compels us to participate in initiatives to alleviate the plight of other peoples who are struggling to resolve similar conflicts. Indeed, one of the most striking features of South Africa that continues to astound critic and admirer alike, is our people's unique capacity to rise above partisan divisions in order to collectively shape a common destiny.

Commitment to multilateralism characterises South Africa's approach to peacekeeping missions. In this regard, we recognise the United Nations [at global level] and the African Union [at the Continental level] as the primary multilateral bodies for the collective pursuit of peace and security, and ultimately, inclusive economic and social development.

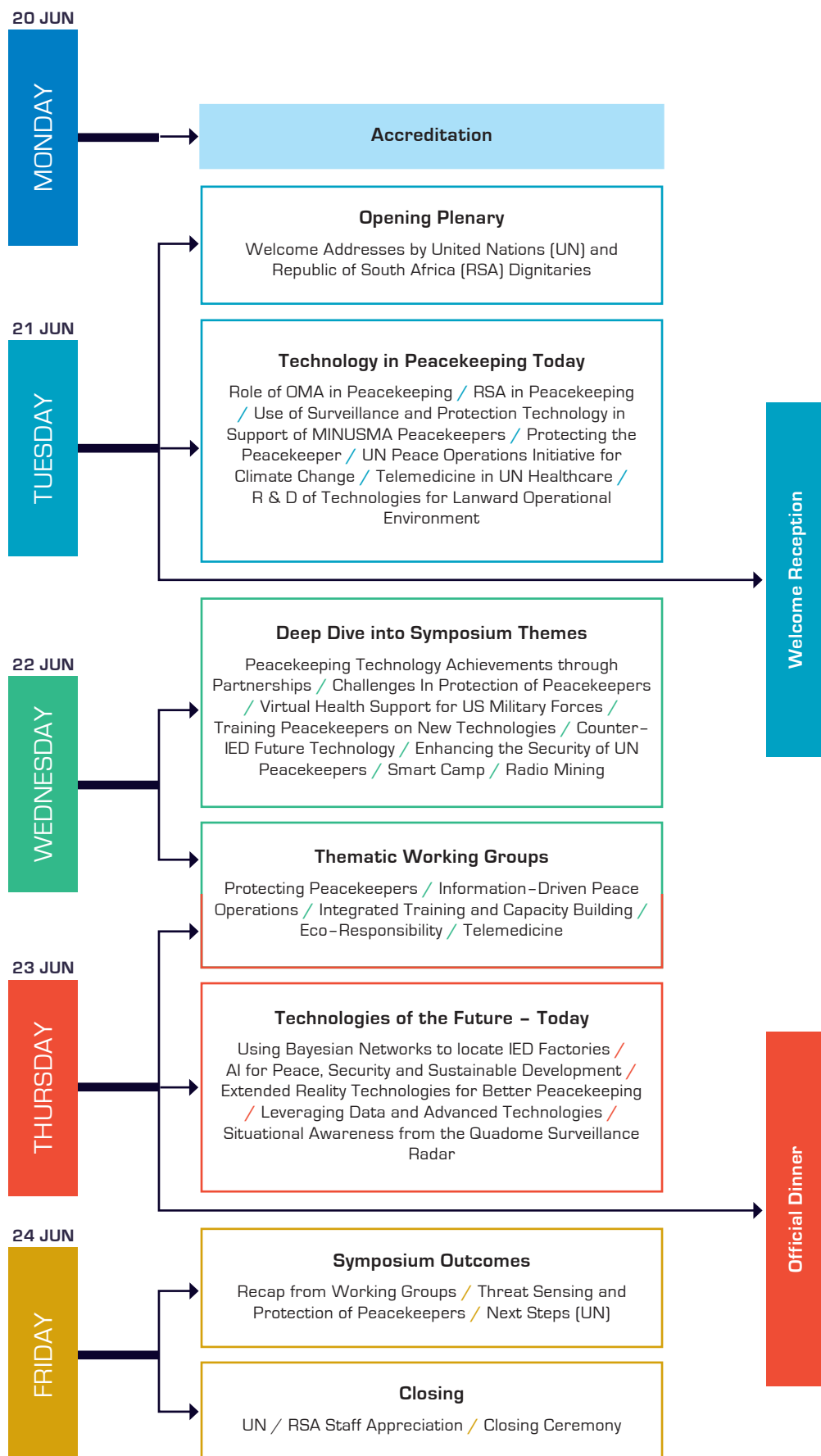
From a regional perspective, the South Africa's national interest hinges on the recognition that its own future is inextricably linked to the stability, unity and prosperity of the African continent. South Africa will, therefore, in partnership with like-minded nations, continue to play a leading role in conflict prevention, conflict resolution, post-conflict reconstruction and peacekeeping. We are pursuing this path because we know too well that lack of peace anywhere is a threat to peace everywhere.

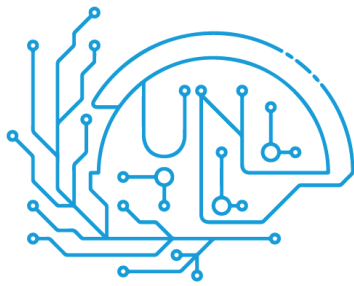
Beyond issues of peace and security, I am confident that this symposium will make a positive impact on the economy. It is my expectation that it will help promote locally developed technologies and indigenous defence industrial capabilities.

Welcome to this momentous global event. We look forward to your contribution towards lasting peace and stability in the world.



# Agenda at a Glance





# Strategy for the Digital Transformation of UN Peacekeeping



Visit [peacekeeping.un.org](https://peacekeeping.un.org) to download the full strategy

## GUIDING PRINCIPLES

- Do-no-harm
- Accessibility
- Data protection & privacy
- Demand-driven
- Gender-sensitive
- Human-centered
- Human rights compliant
- Inclusion & transparency
- Multidisciplinary
- Partnerships
- Realistic expectations
- Sustainability & Scalability

## UN PEACEKEEPERS



Department of Peace Operations (DPO)  
Department of Operational Support (DOS)  
Department of Management Strategy, Policy and Compliance (DMSPC)

VERSION 2

## GOAL

Make UN Peacekeeping innovative, data-driven, & technology-enabled.

## FOCUS ON CULTURE CHANGE

It's just not just about technology - it's about a **CULTURE CHANGE**...

- Driven by leadership
- Embraces new ideas, new ways of working, and new technologies
- Builds digital skills and data literacy

## KEY OUTCOMES

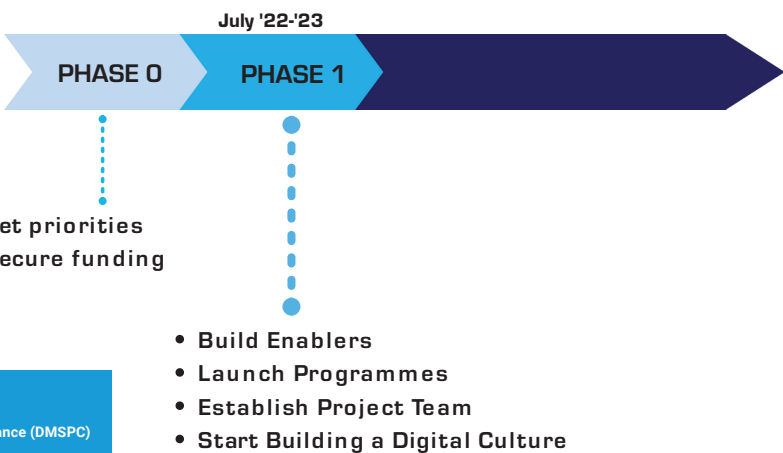
- Peacekeeping can leverage data and digital technologies for
- Data and analysis driven understanding of the conflict environment
  - Strengthened safety and security of personnel
  - Agile and responsive mandate implementation

## SCOPE

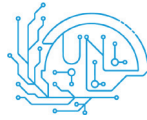
Excludes:

- Enterprise technologies (e.g. UMOJA and Inspira), and
- Support-related Peacekeeping Technologies

## TIMELINE (3 years)



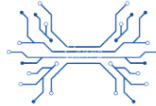




## KEY PRIORITIES

### PHASE 1

## ENABLERS



## PROGRAMMES

### DIGITAL ENABLEMENT TEAM (DET)

**GOAL:** Lead digital transformation of UN Peacekeeping and oversee its key workstreams

**KEY ACTIONS:**

- Ensure systems and technologies are integrated, interoperable and field-focused
- Help identify (with field network) technology solutions to mandate delivery problems
- Drive culture change and innovation
- Advise on design, management and compliance of technology projects and share best practices
- Support resource mobilization
- Leverage internal and external expertise and partnerships

### MODERN DATA ECOSYSTEM

**GOAL:** Build a Peacekeeping data system that improves how we collect, use and share data, and enables data-driven decision making

**KEY ACTIONS:**

- Make accessible, integrated, and secure systems and platforms
- Put in place data governance and data management systems
- Build staff's digital and data skills and expertise

### DRIVING INNOVATION

**GOAL:** To drive innovation across UN peacekeeping

**KEY ACTIONS:**

- Explore and establish best innovation mechanisms/modalities for UN peacekeeping
- Co-design technology solutions with field and HQ

### ENHANCING SITUATIONAL AWARENESS

**GOAL:** An enhanced situational awareness capability that provides real time information about the operational environment, to support planning, analysis and data-driven decision making.

**KEY ACTIONS:**

- Enhance and deploy the Unite Aware technical platform
- Systematize data management
- Optimize information sharing
- Streamline reporting
- Improve presentation and visualization of information



### COUNTERING MIS- & DISINFORMATION

**GOAL:** Establish an integrated and multidisciplinary approach to support field missions in understanding and responding to mis/disinformation challenges

**KEY ACTIONS:**

Provide guidance materials, training, technology tools and engagement with technology platforms

### LEVERAGING TECHNOLOGIES FOR UNIFORMED PEACEKEEPERS

**GOAL:** Leverage innovative digital technologies and new ways of working to ensure the safety and security of uniformed personnel, and strengthen performance and mandate delivery

**KEY ACTIONS:**

- Assess and address critical operational needs, gaps and challenges
- Help identify current and future digital technology solutions



**Mr. Atul Khare**

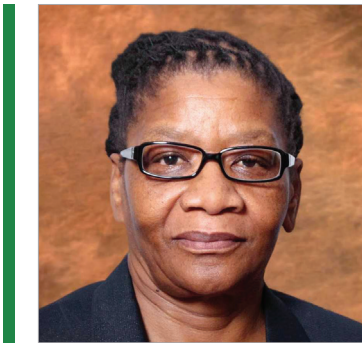
**Under-Secretary-General**

Department of Field Support, United Nations

Mr. Atul Khare became the Under-Secretary-General for Operational Support on 1 January 2019. He was previously appointed Under-Secretary-General for Field Support on 2 March 2015. Mr. Khare has had a long senior career with the United Nations, including as Special Representative of the Secretary-General for Timor-Leste and Head of the United Nations Integrated Mission in Timor-Leste (UNMIT) at the level of Under-Secretary-General (2006–2009), Assistant Secretary-General for Peacekeeping Operations and Deputy Head of the Department of Peacekeeping Operations (2010–2011), as well as Assistant Secretary-General and Leader of the Change Management Team (2011–2012).

Mr. Khare also served with the Indian Foreign Service in several diplomatic missions around the world.

Mr. Khare holds Bachelor's degrees in Medicine and Surgery, and Master's degrees in Business Administration and Leadership.



**Ms. Thandi Modise**

**Minister of Defence and Military Veterans**

Republic of South Africa

Ms. Thandi Modise is the Minister of Defence and Military Veterans since 5 August 2021, having served as the Speaker of National Assembly of the Republic of South Africa since 2019. She previously held the position of Chairperson of the National Council of Provinces as well as Premier of North West province. Ms. Modise holds a B. Comm degree in Industrial Psychology and Economics from Unisa (1989). She attended a special leadership course from the University of United Nations in Jordan and holds Certificates in Security Studies from the Naval University in Montreal. A former political prisoner who spent 10 years in prison and later became a Member of Parliament of the post-Apartheid South Africa, during which time she chaired, inter alia, the Portfolio Committee on Defence and the Joint Standing Committee on Defence. She participated in the peace-building activities such as the Peace Mission to stabilise the East Timor; civil-military roundtables in Nigeria and Ghana; and contributed to International Conferences, highlighting women's roles in negotiations and conflict resolution in Rwanda and Burundi.

# Welcome Address







### **Ms. Sonto G. Kudjoe**

**Secretary for Defence**

Republic of South Africa

Ms. G.S. Kudjoe is the Secretary for Defence since August 2020. She previously served as ambassador to the Kingdom of Sweden and Latvia (2002) and the Arab Republic of Egypt (2006). She held several senior positions in the Department of International Relations and Cooperation (DIRCO) and the State Security Agency (SSA) including Manager in charge of Research and Analysis on Africa (SSA); Chief Director Africa Multilateral (DIRCO) as well as being the first female Director General when she became Director General of the SSA. She holds Bachelor's and Master's degrees in Law specialising in Criminal Law from Kishinev State University (KSU), former Soviet Union (1987); she did postgraduate studies in Placement Training Programme on the Administration of Criminal Justice and Criminology in the Department of Criminology at University of Hull, England and served as a Researcher for the National Institute for Public Interest Law and Research (NIPILAR) where she later became Deputy Executive Director (1997–1998).



### **General Rudzani Maphwanya**

**Chief South African National Defence Force**

Republic of South Africa

General Rudzani Maphwanya is the Chief of the SA National Defence Force. He is a former member of uMkhonto we Sizwe, the military wing of the African National Congress. He completed his Junior Command and staff Course at the Zimbabwe Staff College (1993); Senior Command and Staff Course at the Kenyan Staff College (2000) and the Executive National Security Programme (2004). Gen Maphwanya previously served as Chief of Staff SA Special Forces (2003 to 2005); General Officer Commanding (GOC) Special Forces (2006–2016). He was promoted to Major General and appointed as GOC SA Army Infantry Formation and later promoted to Lieutenant General and appointed Chief of Joint Operations. General Maphwanya holds a Bachelor of Commence from University of the North (1994); a Postgraduate Diploma in Security Management from the University of the Witwatersrand (Wits) in 2012 and a Master of Management from Wits (2015).

# Welcome Address



**Mr. Bernardo Mariano Junior**

**Assistant Secretary-General, Chief Information Technology Officer**  
Office of Information and Communications Technology, United Nations

Mr. Bernardo Mariano Junior, Chief Information Technology Officer (CITO), Assistant Secretary-General of the United Nations Office of Information and Communications Technology, was appointed by the Secretary-General on 1 August 2021.

Mr. Mariano has 28 years of experience within the United Nations system and international organizations, most recently serving as the Chief Information Officer and Director for Digital Health and Innovation at the World Health Organization (WHO).

He started his career in 1993 with the International Organization for Migration (IOM) in Mozambique and held numerous assignments before joining WHO in 2018. During this tenure, he championed several business transformation initiatives, driving innovations in operation and management systems, Enterprise Resource Planning systems, information technology, project management and network infrastructure.



**General Birame Diop**

**Assistant Secretary-General, Military Adviser**  
Department of Peace Operations, United Nations

General Birame Diop is a Senegal citizen. He graduated as a pilot officer from the Royal Air School of Marrakech, Morocco. A highly experienced pilot and instructor, he is also an air accident and incident investigator. General Diop was appointed as Chief of the Senegal Air Force in 2015. He remained as Chief of Staff to the President of the Republic of Senegal in 2017. In January 2020, General Diop was appointed as Chief of the General Staff of the Armed Forces. In 2021 he was promoted to Air Force General.

General Diop has served as Deputy Chief Air Operations in the UN Mission in DRC. He has remained as the Director of the African Institute Security Sector. The General has worked extensively in domains of Security Sector Reforms; Civil Society's Role in Security Challenges; Human Insecurity in Africa; Peace Mechanisms between Communities and Countries; National Security Strategies; and Gender Strategy. He is recipient of several national and international decorations throughout his distinguished career for illustrious service.

United Nations





## Mr. Christian Saunders

### Assistant Secretary-General for Supply Chain Management

Department of Operational Support, United Nations

Christian Saunders was appointed Assistant Secretary-General for Central Support Services by United Nations Secretary-General António Guterres in 2017, and on 1 January 2019, Assistant Secretary-General for the newly established Office of Supply Chain Management.

Mr. Saunders has over 30 years of experience in international affairs, much of it focusing on delivering results and overseeing major reforms leading to improved organizational effectiveness and efficiency. He has significant humanitarian and field experience having begun his career with "Save The Children" (UK) in the Sudan and then in Mozambique; and his United Nations career with United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in Gaza. He also served in various other postings with the Office of the United Nations High Commissioner for Refugees (UNHCR), Peacekeeping, the United Nations Population Fund (UNFPA) and with UNRWA in 2019 as Acting Commissioner General.

## Mr. Chandramouli Ramanathan

### Assistant Secretary-General for Programme Planning, Finance and Budget & Controller

Department of Management Strategy, Policy and Compliance, United Nations

Mr. Chandramouli (Chandru) Ramanathan is the Assistant Secretary-General and Controller of the United Nations. Mr. Ramanathan has 42 years of senior executive experience in diverse organizational settings, with specializations in finance, audit and information technology. Mr. Ramanathan has a track record of championing major change initiatives, including the global deployment of Umoja (the United Nations Enterprise Resource Planning solution), implementation of IPSAS (International Public Sector Accounting Standards), and introduction of the UN's enterprise systems for Customer Relationship Management, Identity Management, Basic Content Management and Collaboration. Previously, Mr. Ramanathan served as Assistant Secretary-General for Enterprise Resource Planning (2016–2020), and was the Deputy Controller, Director of Accounts Division and Chief of Service, IT Services Division. Before joining the UN, he served as Assistant Auditor General, India (1993–1995) and Director of Accounts for the Auditor General of India (1989–1993). Mr. Ramanathan is a cost accountant with a Master's degree in Economics.

# United Nations



**Ambassador Mathu Joyini**

**Permanent Representative, Permanent Mission of Republic of South Africa to the United Nations**  
Republic of South Africa

Ambassador Mathu Joyini is South Africa's Permanent Representative to the United Nations. Prior to this position, she served as the Head of the Diplomatic Academy in the Department of International Relations and Cooperation of South Africa. She has also served as South Africa's High Commissioner to six CARICOM countries and a Permanent Representative to the International Seabed Authority. Ambassador Joyini holds a Master's degree in Social Work as well as a Master's degree in Business Administration.



**Major General Bonginkosi Ngcobo**

**Deputy Chief of Staff, South African National Defence Force**  
Republic of South Africa

Major General Bonginkosi Ngcobo is the Deputy Chief of Staff (SA National Defence Force) and Coordinator of the National Steering Committee for the planning and preparation for the UN 6th PTPS. He served in several positions including Personal Staff Officer to Chief Defence Intelligence (1998); SO1 Strategic Intelligence Quality Control; SSO Intelligence Special Forces Bde HQ (2006); Director Counter Intelligence Processing (2008); Director Strategic Intelligence (2011); Military Secretary to MOD&MV (2013) and finally Chief Director Collection (2017). He holds a Postgraduate Diploma in Management in the Field of Security from the University of Witwatersrand (2012) and has successfully completed Special Forces Course in Cuba (1987). Maj. Gen. Ngcobo was the best student of Military Intelligence Course in Zimbabwe (1994) and the Executive National Security Programme in 2005 in which he was the student leader. He won awards for Best Research Paper; Best Student of National Security as well as the Golden Rivet Trophy for Student with the most contribution to the success of the ENSP.

# Republic of South Africa







## Brigadier General Mnimzi Sizani

**Defence Advisor, Permanent Mission of  
Republic of South Africa to the United  
Nations**

Republic of South Africa

Brigadier General Mnimzi Sizani has served as the Defence Advisor with the RSA Permanent Mission to United Nations 2017– 2022, and participated in meetings, conferences, and seminars such as Peacekeeping Ministerial, Chiefs of Defence Conference, C34, COE Workgroup and Quadrennial survey, and initiatives and roundtables like the Group of Friends on COVID-19 Vaccines, PKO Challengers Forum, International Peace Institute and International Crisis Group.

From 2019 to 2020 General Sizani served with the UN Security Council as a Member of the Military Staff Committee, and a Leader of the SADC Military Advisors Assessment Team on Force Intervention Brigade (FIB) and MONUSCO Adaptation, addressing threats to civilians in the east of DR Congo, and negotiated and deployed the first UN Tactical Intelligence Unit.

General Sizani is the student of statecraft and strategy, geo-economics, and geopolitics, and immersed in geo strategies. He holds an MSc in National Security and War Studies from the National Defence University (NDU), Islamabad, Pakistan. Completed, Social Theory, a Preparatory Research at Wits University for Ph.D..

## Mr. Kopano Peter Lebelo

**Chief Director, Matériel Governance,  
Department of Defence**

Republic of South Africa

Mr. Kopano Peter Lebelo is the co-coordinator of the organising team for the 6th UN Partnership for Technology Symposium and the UN Procurement Seminar and the Co-Chairperson of the National Steering Committee for the Symposium. He is employed as the Chief Director Materiel Governance of the Department of Defence previously Chief Director Procurement. He is responsible for Procurement policies in the DOD, the consideration and approval of all outsourced activities and Public Private Partnerships and procurement of spares for existing military equipment. He is the Chairperson of the Alternative Service Delivery Implementation Board, which aims to determine the cost benefit analysis in outsourcing of core and non-core activities. He possesses an M.Sc. degree in Electronic and Automation Engineering from the Higher Institution of Mechanical and Electrical Engineering in Sofia, Bulgaria. Kopano attained a second MSc in Contract and Acquisition Management at the Naval Post Graduate School in Monterey, California, USA.

# Republic of South Africa

# Keynote Speakers



## Mr. Anthony O'Mullane

**Director, Operations Support Division**

Office of Information and Communications Technology, United Nations

Mr. Anthony O'Mullane is the Director of the Operations Support Division in the Office of Information and Communications Technology of the United Nations. He has worked for the United Nations for 25 years in ICT, 21 years of which were with United Nations Peacekeeping Operations, beginning in 1994 in the Balkans, where he was deployed in Croatia, Bosnia and Kosovo. In subsequent years he has served in UN missions in Sierra Leone, Pakistan/India, Afghanistan and Lebanon before moving to the New York Headquarters in 2014 to work for the Organization's Chief Information Technology Officer (CITO) and was involved in the latter part of the development of the Organization's ICT strategy. He led the development of the Field Technology Framework released in 2018. The Partnership for Technology in Peacekeeping is managed by his Division on behalf of the Under Secretary General for Operational Support.



## Mr. Anton Antchev

**Director, Mission Support Division**

Department of Peace Operations, United Nations

Mr. Anton Antchev has been serving as the Director of Mission Support in the Multidimensional Stabilization Mission in Mali (MINUSMA) since March 2020.

Prior to this assignment, Mr. Antchev served in different roles in the United Nations system, most recently as Chief Supply Chain Service with the United Nations Global Service Center (UNGSC) in Brindisi, Italy.

His long career in Peacekeeping includes positions in MINUSMA as Chief Service Delivery Management and Deputy Director of Mission Support, and in the United Nations Interim Force in Lebano (UNIFIL) as Chief Property Management Section and Chief Joint Logistics Operations Center. Mr. Antchev began his service with the UN as peacekeeper in Cambodia and in Angola and then as Planning Officer in the former MPS/OMA/DPKO in 2001. His career outside the UN includes twenty years in the Bulgarian Army. Anton holds two Master's and a postgraduate degree. He speaks Bulgarian, English, French and Russian and started acquiring Italian.





## Mr. Andries van Wyk

**Defence Decision Support Institute**

Republic of South Africa

Mr. Andries van Wyk retired as a colonel in 2001 from the South African National Defence Force. He considers the highlight of his military career as being the commander of an exceptionally large and diverse infantry unit just after the SANDF amalgamated many types of forces into a standing force. Later he was privileged for being a lecturer on the SA Army Staff Course, supporting the development of the first tranches of the leadership of the integrated SANDF. For the past 20 years, he served in the Defence Decision Support Institute (DDSI) at Armscor in roles ranging from project management of an online lessons learnt system to providing futuristic planning scenarios for defence. As a defence and geopolitical analyst, he was continuously involved in the development of defence policy. Some of his work focused on regional economic development as catalyst for increased human security and less violence in the region.



## Dr. Sang Keon Lee

**Director, Global Development Partnership Centre**

Korea Research Institute for Human Settlements (KRIHS), Republic of Korea

Dr. Sang Keon Lee is the Director of Global Development Partnership Center at Korea Research Institute for Human Settlements (KRIHS). He received his Bachelor of Science in Architectural Engineering and Master of Science in Urban Planning from Yonsei University, Seoul, Korea. His Ph.D. was in Civil Engineering from Virginia Tech, Blacksburg, U.S. where he studied information and communications technology (ICT) application to transportation sector. He is acting as Korean head of delegation at ISO/TC204 and Smart City Master Planner of Sejong City. During the last 33 years, Dr. Lee has explored widely in the fields of Intelligent Transport Systems and ICT; and his current research interests are ubiquitous traffic information standardization and globalization of smart city technology for developing countries, including Integrated Operation and Control Center (IOCC). Recently, he has been involved in UN Smart Camp Development projects of Ministry of Defence, Korea and provided its basic concept and roadmaps at the Fifth Partnership for Technology in Peacekeeping International Symposium in Nur-Sultan, Kazakhstan.



## Dr. Tleyane J Sono

**Impact Area Manager, Landward Sciences**

Defence and Security Cluster, CSIR, Republic of South Africa

Dr. Tleyane Sono is currently an Impact Area Manager within Landward Sciences, an Impact Area in the Defence and Security Cluster at the CSIR. He currently serves as the Chairperson of the South African Ballistic Organisation (SABO). Dr. Sono has held several positions at the CSIR since he joined in 2012, ranging from Senior Researcher, Research Group Leader, Operations Manager and Business Development. Before joining the CSIR, Dr. Sono worked at Elements Six as a Project Scientist and before then he was a Lecturer in Physics at the University of KwaZulu Natal. He holds a Ph.D. from University of Southampton in the UK, a Masters in Project Management from University of Pretoria and has completed the Executive National Security Programme from the South African National Defence Force.



## Dr. Bernhard Lennartz

**Director, Division of Healthcare Management and Occupational Safety and Health**  
Department of Operational Support, United Nations

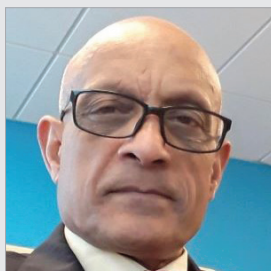
Dr. Bernhard Lennartz is the Director of the Division of Healthcare Management and Occupational Safety and Health (DHMOSH) of the United Nations, based in New York Headquarters. In this role, he oversees the health, safety and wellbeing of all UN personnel deployed around the globe. His responsibilities include standards and quality of healthcare delivery and Occupational and Public Health services in all facilities operating under the UN flag. This includes over 400 healthcare services, ranging from UN primary care clinics to military medical services. Dr. Lennartz commenced his role as Medical Director in June 2021. Prior to stepping into the his current role, he was the Deputy Director of DHMOSH for 10 years. Dr. Lennartz also worked as a Senior Medical Officer in the then Medical Services Division (MSD), after a five-year tenure as Chief Medical Officer in Baghdad with the United Nations Assistance Mission in Iraq. Dr. Lennartz is board-certified in Neurology and Emergency Medicine.



## Mr. Eduardo Artigas

**Chief of Business Relationship Management Section**  
Office of Information and Communications Technology, United Nations

Mr. Eduardo Artigas is the Chief of Business Relationship Management Section, Regional Service Management Service of the Office of Information and Communications Technology. With more than 31 years of Peacekeeping experience, 15 of them in the field, Mr. Artigas worked in Missions in the Middle East, Southeast Asia, Africa and Central America. Some of his earlier roles included the roles of Chief ICT in the United Nations Truce Supervision Organization (Jerusalem), the United Nations Logistics Base (Italy) and the United Nations Stabilisation Mission in Haiti (Haiti). Before joining UN, he was the technical Director of the Uruguayan Radio State Network. His current focus is on new technologies in support of Peacekeeping Operations.



## Major General Jai Shanker Menon (retd.)

**Director, Office for Peacekeeping Strategic Partnership**  
Department of Peace Operations, United Nations

General Jai Shanker Menon was born in 1959 in India. He retired from Indian Army following a distinguished 42-year career. His previous assignments include Additional Director General Equipment Management, General Officer Commanding an Infantry Division, Commandant of the Regimental Training Centre, Brigade Commander and Battalion Commander. His international experience includes service as Head of Mission and Force Commander of the United Nations Disengagement Observer Force (UNDOF) from 2016 to 2017, as a Military Observer with the United Nations Operation in Mozambique in 1993, and as Deputy Chief Integrated Support Services with the United Nations Interim Force in Lebanon (UNIFIL) from 2007 to 2009. He holds Master of Management Studies degree from Osmania University, a Master of Defense Studies degree from Madras University, and a Bachelor of Arts degree from Jawaharlal Nehru University from India. He is also a graduate of India's National Defense Academy, Army War College, Defense Services Staff College, and the College of Defense Management in India.







## Dr. Konrad Davis, MD

**Clinical Professor of Medicine, Scripps Clinic Medical Group**  
United States of America

Dr. Konrad Davis is a Clinical Professor of Medicine within the division of Pulmonary & Critical Care Medicine at the Scripps Clinic Medical Group in San Diego, California. He served 21 years on active duty in the U.S. Navy before retiring with the rank of Captain in 2021. While on active duty, he served as the Director of the Defense Health Agency (DHA) Joint Tele-Critical Care Network, Director of the DHA Virtual Medical Center hub site for the IndoPacific region and performed grant-funded research in telemedicine. He received his medical degree from the Keck School of Medicine at the University of Southern California and performed his medical training at Naval Medical Center San Diego.



## Mr. Robert Kirkwood

**Chief, Mission Support**  
United Nations Interim Security Force for Abyei (UNISFA), United Nations

Mr. Robert Kirkwood has been supporting United Nations field operations for 28 years. Mostly in the field but also from UN Headquarters, Brindisi, Italy, and The Hague. He is currently the Chief of Mission Support for the United Nations Interim Security Force for Abyei-Peacekeeping's most remote operation. He has held roles in all areas of support to field operations and has focused efforts in the last decade or so to leveraging technology and data-led management systems. An engineer by profession he also holds a Master's degree in Human Resource Management and Training as well as a postgraduate professional qualification in Community Development.



## Colonel Leo E. Bradley (retd.)

**Senior Staff Engineer, Energetics Research Group, Whiting School of Engineering, Johns Hopkins University**  
United States of America

Colonel Leo E. Bradley (U.S. Army, Retired) is a consultant and subject matter expert providing world class expertise and thought leadership in explosive ordnance disposal (EOD), counter improvised device (C-IED), counter weapon of mass destruction (C-WMD) and explosives safety. He served 29 years in the United States Army, most of those in ordnance and explosive ordnance disposal assignments, including commander of the 71st Ordnance Group (EOD) and Combined Joint Task Force Paladin (Counter-IED) in Afghanistan (July 2011 – June 2012). He is a senior staff engineer and subject matter expert for the Whiting School of Engineering at Johns Hopkins University, an adjunct instructor at the Oklahoma State University Graduate School of Forensic Sciences, and a member of the Board of Advisors of the International Association of Bomb Technicians and Investigators.



## Brigadier Joyce Sitienei

**Director, International Peace Support Training Centre (IPSTC)**  
Republic of Kenya

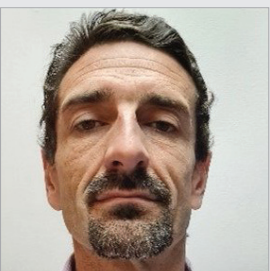
Brigadier Joyce Sitienei is the Director of the International Peace Support Training Centre (IPSTC). She holds a Bachelor of Education from Kenyatta University, Kenya, a Postgraduate Diploma in Peace and Conflict Studies from Africa Nazarene University, Kenya, and a Master of Arts in Diplomacy and International Studies. She is an experienced Military Senior officer having served in Rwanda as part of the Kenya Military Assistance Training Team and as a Military Observer in the Democratic Republic of the Congo from 2002–2003. She has held senior military positions including Education Officer at Women Service Corps and the 15 Kenya Rifles, Head of Distance Learning at the Defence Forces School of Higher education, the head of Curriculum design and evaluation, head of Applied Research, Colonel Plans and Programmes at IPSTC and currently Director IPSTC. Her decorations include Member of the Order of the Burning Spear (MBS), United Nations and other Constitutional medals earned in service.



## Lieutenant Colonel Stefan Lemm

**Deputy Branch Head, Directorate General of Planning, Federal Ministry of Defense**  
Federal Republic of Germany

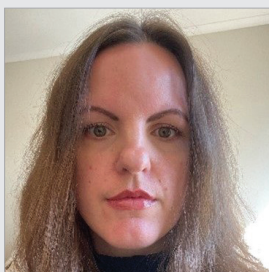
Born in 1966 in Muenster, Lieutenant Colonel Lemm has served in the German Army Field Artillery and Signals branches. After studying economics and computer science, he held multiple officer and command positions including Commanding Officer of Signals Battalion Airmobile Division. He attended the German General Staff Course and served in staff officer positions on Brigade and Division levels, as well as two tours of duty in Afghanistan. From 2016 to 2021, he served as Head Military Operations Unit in the Office of Information and Communications Technology of the United Nations, developing, implementing and advancing technology projects for and with UN Field Missions. Currently, he is deputy branch head in the directorate-general of planning in the Federal Ministry of Defense.



## Mr. Jaco Botha

**Programme Manager, Radar Specialist, Hensoldt**  
Republic of South Africa

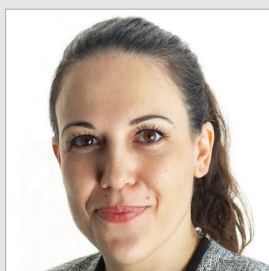
Mr. Jaco Botha obtained a Bachelor's degree in Electrical and Electronics Engineering at the University of Pretoria in 1996. He then completed a master's degree in Electronic Engineering at the University of Johannesburg in 2007. He specialized in Image Processing and Pattern Recognition. He started at Denel as an algorithm and software engineer working on image and signal processing software. He later moved into the development of radar algorithms. That included modelling and simulation of radar systems and tracking algorithms like Kalman filters. He later worked as a development system engineer on the development and integration of a radar seeker system at Denel Dynamics. He was responsible for system engineering, planning, organization, managing of tasks and integration activities. He was later appointed as a program manager for a large radar missile development program. He also acted as a facility manager for a radar and image processing department. In 2019 he was appointed as a radar specialist at Hensoldt South Africa. He was later appointed as a program manager for a new surveillance radar product. He is also responsible to grow and build the radar capability in Hensoldt South Africa.



## Dr. Hildegard Koen

**Senior Researcher, Command and Control and Integrative Systems, CSIR**  
Republic of South Africa

Dr. Hildegard Koen completed her M.Sc (Applied Mathematics) degree at the University of Stellenbosch in 2010. She then joined the CSIR Pretoria and completed her Ph.D. degree in electronic engineering at the University of Pretoria early 2016. She has authored and co-authored numerous papers for both local and international publications, as well as being invited to present her work at several events including the 2019 Armscor Engineering Day. She is currently a senior researcher in the Command and Control and Integrative Systems research group with a focus on machine learning and artificial intelligence. Her current projects focus on using machine learning and Natural Language Processing to develop tools for clients.



## Ms. Branka Panic

**Founder and Executive Director, AI for Peace**  
United States of America

Ms. Branka Panic is the Founder and Executive Director of AI for Peace, a nonprofit ensuring artificial intelligence benefits peace, security, and sustainable development and where diverse voices influence the creation of AI and related technologies. Ms. Branka is a passionate advocate for positive peace, with 13 years of experience in the humanitarian-peace-development nexus, working with governments and think tanks across the globe. She is a co-founder and Board Member of the Center for Exponential Technologies, connecting policy and the tech world. She is a founding member of Sustainable Healthy Habitats and Healthy Humans for Peace, enabling the sustainability of humanitarian action within the framework of the Sustainable Development Goals (SDGs).



## Ms. Didintle Rasetsoke

**Scientific Ergonomics Researcher, Ergonomics Technologies (ERGOTECH), Armscor**  
Republic of South Africa

Ms. Didintle Rasetsoke joined Ergonomics Technologies (ERGOTECH) in 2018 as a scientific ergonomics researcher. She is a Certified Ergonomics Associate, accredited through the Ergonomics Society of South Africa. Ms. Rasetsoke has explored a range of research domains such as cognitive ergonomics, functional performance, user experience design, and occupational health and safety. Her research focus is interdisciplinary ergonomics and human factors, with special interest in intervention research to reduce exposures to various risk factors, for application in sectors such as military, health care and education. Having obtained a BSc (Honours) qualification in Human Kinetics from Rhodes University, she is currently pursuing her Master's degree in Human Factors and Ergonomics with the University of Derby in the UK. Ms. Rasetsoke is a strong advocate for evidence-based prevention strategies in ergonomics and has a passion for technological growth and innovation. Most recently, she started investigating the ranging impact that modern technologies have in relation to human performance, safety and well-being.



## Lieutenant Colonel Lazare Abe Aké

**Director, Inter-regional Maritime Security Institute (ISMI)**  
Republic of Côte d'Ivoire

Lieutenant Colonel Abe Aké Lazare is Principal Administrator of Maritime and Port Affairs of Ivory Coast. Since 2018, he has been Director of the Inter-regional Maritime Security Institute (ISMI) / Regional Academy of Maritime Sciences and Technology (ARSTM) in Abidjan. The Institute oversees training and capacity building of the personnel of the Gulf of Guinea States in maritime security and safety. Lt. Col. Abe Aké Lazare holds a Master of Arts degree from the University of Cocody Abidjan, and is a graduate of the Ecole Nationale d'Administration (ENA) of Abidjan (specializing in Maritime Affairs) and the World Maritime University of Malmö in Sweden, specializing in Maritime Law and Policy.



## Mr. Molahlegi Molope

**Divisional Head, Telecommunications and Sensing Systems Division, Armscor**  
Republic of South Africa

Mr. Molahlegi Molope is an Electronic Engineer with BSc Elec. Eng. (USA), MSc Elec. Eng. (RSA), MBL (RSA) and currently pursuing his Ph.D. in Elect. Eng. He has more than 28 years of experience working as an Engineer with 23 years in the defence environment. His current appointment at Armscor is Divisional Head of Telecommunications and Sensing Systems division and he is responsible for Engineers who acquire telecommunications systems and sensing systems such as Electronic Warfare systems, Radar systems, Optronics systems and Information Warfare systems including but not limited to cyber warfare tools. His recent engagement with peacekeepers activities was during the ASIC 2022 conference which was hosted in Kenya whereby he was the session chair for the panel that was discussing peace support operations and peacekeeping of the UN.

Mr. Molahlegi has participated in the evaluation of various equipment that are essential in the protection of peacekeepers. Some of them include but are not limited to systems that detect and classify drones using Radars and thereafter jam these drones to force them to return to their operator. Other solutions that he looked at is the use of High Energy Laser to bring down drones.



# Topics for Moderated Discussions



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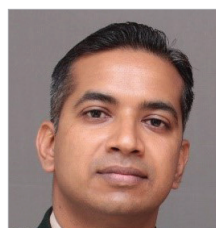
6th International  
Symposium  
Partnership for  
Technology in  
Peacekeeping:  
“Informed – Aware –  
Effective”

## 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), 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



### Working Group Lead

#### Lt. Col. Animesh Srivastava

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### Working Group Enabler

#### Wng Cdr Jamie Meighan

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### Working Group Enabler

#### Mr. Stephen O'Sullivan

**Technology Solutions Engineer– Intelligence, Surveillance, Reconnaissance**

Global Service Center, United Nations



### Working Group Enabler

#### Mr. Seamus McMenamin

**Programme Officer**

United Nations Mine Action Service, United Nations

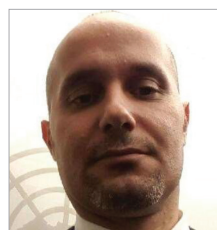


## TOPIC 2

# 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



### Working Group Lead

#### Mr. Erzen Ilijazi

Chief Technology Operations Service

Office of Information and Communications Technology, United Nations



### Working Group Enabler

#### Mr. Emmanuel Ngor

Chief Regional Field Technology Service

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Programme Manager, Situational Awareness-Unite Aware

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### Working Group Enabler

#### Ms. Melanie Doulton

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Office of Information and Communications Technology, United Nations

## TOPIC 3

# Integrated Training and Capacity Building

The United Nations provides a wide range of technologies and platforms across many functional areas within 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 C4ISR<sup>1</sup> Academy for Peace Operations (UNCAP) in 2015. 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 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 an C4ISR integrated training concept

<sup>1</sup> UNC4ISR – Command, Control, Communications, Computers (C4), Intelligence – Surveillance – Reconnaissance (ISR)

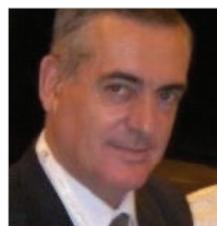


### Working Group Lead

#### Mr. Jean Michel Kergoat

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### Working Group Enabler

#### Ms. Ellen Regeling

Peacekeeping-Intelligence Coordination Team

Department of Peace Operations, United Nations





## 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 Dukra 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



### Working Group Lead

#### Mr. Michel Bergeron

Chief, Service for Geospatial, Information and Telecommunications Technology (SGITT)

Global Service Center, United Nations



### Working Group Enabler

#### Mr. Samuel Leal

Chief, Technology Development, Design and Planning Section, Service for Geospatial, Information and Telecommunications Technology (SGITT)

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### Working Group Enabler

#### Mr. Avinoam Borovoy Melzer

Smart Camp Project Manager, Technology Development Design and Planning Section, Service for Geospatial, Information and Telecommunications Technology (SGITT)

Global Service Center, United Nations

## TOPIC 5

# Telemedicine

Improving peacekeepers' access to quality healthcare is a top priority for DOS and the Department of Peacekeeping 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 audio-video 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 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.

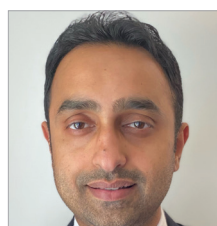


### Working Group Lead

**Mr. Vyacheslav Gnezdilov, Ph.D.**

**Business Relationship Manager,  
Telemedicine Programme Oversight**

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### Working Group Enabler

**Mr. Yogesh Jha**

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### Working Group Enabler

**Ms. Brittany Osachuk**

**Telemedicine Programme Associate**

Office of Information and  
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## DISCUSSION PANEL

---

# Achieving a Mission Common Operational Picture by Leveraging Data and Advanced Technologies



**Mr. Erzen Ilijazi**

Chief Technology Operations Service  
Office of Information and  
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**Ms. Didintle Rasetsoke**

Scientific Ergonomics Researcher,  
Ergonomics Technologies  
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Republic of South Africa



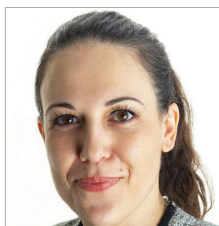
**Ms. Ellen Regeling**

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**Mr. Guy Bennett**

Situational Awareness Programme  
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Department of Peace Operations,  
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**Ms. Branka Panic**

Founder and Executive Director, AI  
for Peace  
United States of America



### Moderator

---

**Mr. Aaron David**

Logistics and Transportation  
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# SYMPOSIUM ORGANIZERS

## United Nations



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**Lead Coordinator, Programme Management Officer**

Office of Information and Communications Technology, United Nations



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**Working Group Coordinator, Head of Military Operations Unit**

Office of Information and Communications Technology, United Nations



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**Mr. Vyacheslav Gnezdilov, Ph.D.**

**Working Group Coordinator, Business Relationship Manager, Telemedicine Programme Oversight**

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**Mr. James Smith**

**Registration and Accreditation Coordinator, Project Associate for the Military Operations Unit**

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**Major Florence Keter**

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Brooklyn Station Commander,  
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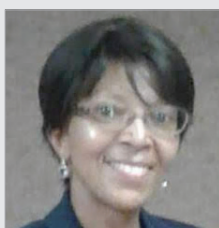
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**Mr. Andre Van Straten**

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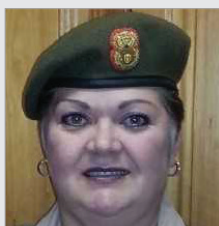
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**Lt. Col. Lebeko Mokwa**

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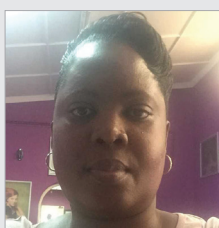
Republic of South Africa



**Mr. WP Pretorius**

Safety and Setup Coordinator, CSIR  
International Convention Centre

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**Ms. Thabisile Dlomo**

Deputy Director, Justice, Crime  
Prevention and Security Cluster  
Coordination, Government  
Communication and Information  
System, Pretoria: National Office

Republic of South Africa

## SYMPOSIUM PROGRAMME

## Daily Agenda

## ▲ MONDAY, 20 JUNE 2022

0900–1700	Accreditation
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## ▲ TUESDAY, 21 JUNE 2022

Opening Plenary		
0900–0910	Briefing on Venue Facilities, Security and Health Protocols	<b>Mr. WP Pretorius</b> Safety and Setup Coordinator, CSIR International Convention Centre, South Africa
0910–0915	Introduction of Speakers	<b>Mr. Anthony O'Mullane</b> Director, Operations Support Division, Office of Information and Communications Technology, United Nations
0915–1000	Opening Addresses by the United Nations and the Republic of South Africa Dignitaries	<b>Mr. Atul Khare</b> Under-Secretary-General, Department of Operational Support, United Nations  <b>Ms. Thandi Modise</b> Minister of Defence and Military Veterans, Republic of South Africa  <b>Mr. Bernardo Mariano Junior</b> Assistant Secretary-General, Chief Information Technology Officer, Office of Information and Communications Technology, United Nations  <b>Ms. Sonto G. Kudjoe</b> Secretary for Defence, Republic of South Africa  <b>Gen. Rudzani Maphwanya</b> Chief South African National Defence Force, Republic of South Africa
Group Photo/Coffee Break/Press Conference		
1000–1030	Group Photo	USG/MODMV/MILAD/ASGs/OSD Dir./ All Participants
1030–1100	Press Conference	
1030–1130	Participant Long Break	



Technology in Peacekeeping Today		
1130–1230	Introduction of Speakers	<b>Mr. Anthony O'Mullane</b> Director, Operations Support Division, Office of Information and Communications Technology, United Nations
	Role of OMA in Peacekeeping	<b>General Birame Diop</b> Assistant Secretary-General, Military Adviser, Department of Peace Operations, United Nations
	Republic of South Africa in Peacekeeping	<b>Gen. Rudzani Maphwanya</b> Chief South African National Defence Force, Republic of South Africa  <b>Ambassador Mathu Joyini</b> Permanent Representative, Permanent Mission of Republic of South Africa to the United Nations, Republic of South Africa
1230–1400	<b>Lunch Break</b>	
1400–1430	Introduction of Speakers	<b>Mr. Anthony O'Mullane</b> Director, Operations Support Division, Office of Information and Communications Technology, United Nations
	Use of Surveillance and Protection Technology in Support of MINUSMA Peacekeepers	<b>Mr. Anton Antchev</b> Director, Mission Support Division, Multidimensional Stabilization Mission in Mali (MINUSMA), United Nations
1430–1500	Protecting the Peacekeeper	<b>Mr. Andries van Wyk</b> Defence Decision Support Institute, Republic of South Africa
1500–1530	UN Peace Operations Initiative for Preparing for Climate Crisis	<b>Dr. Sang Keon Lee</b> Director, Global Development Partnership Center, Korea Research Institute for Human Settlements (KRIHS), Republic of Korea
1530–1600	<b>Coffee Break</b>	
1600–1630	Telemedicine in United Nations Healthcare Settings	<b>Dr. Bernhard Lennartz, MD</b> Director, Division of Healthcare Management and Occupational Safety and Health, Department of Operational Support, United Nations
1630–1700	Research and Development of Technologies for Landward Operational Environment	<b>Dr. Tleyane J Sono</b> Impact Area Manager, Landward Sciences, Defence and Security Cluster, CSIR, Republic of South Africa
1800–2030	<b>Welcome Reception</b>	

### ▲ WEDNESDAY, 22 JUNE 2022

#### Deep Dive into Symposium Themes

0900-0930	Peacekeeping Technology Achievements through Partnerships	<b>Mr. Eduardo Artigas</b> Chief, Business Relationship Management Section, Office of Information and Communications Technology, United Nations
0930-0950	Challenges in Protection of Peacekeepers	<b>Major General Jai Shanker Menon (retd.)</b> Director, Office for Peacekeeping Strategic Partnership, Department of Peace Operations, United Nations
0950-1010	Virtual Health Support for US Military Forces	<b>Dr. Konrad L. Davis, MD</b> Clinical Professor of Medicine, Scripps Clinic Medical Group, United States of America
1010-1030	Training Peacekeepers on New Technologies—Lessons Learned and Best Practices	<b>Brigadier Joyce Sitienei</b> Director, International Peace Support Training Centre (IPSTC), Kenya
1030-1100	<b>Coffee Break</b>	
1100-1120	Counter-IED Future Technology	<b>Colonel Leo E. Bradley (retd.)</b> Senior Staff Engineer, Energetics Research Group, Whiting School of Engineering, Johns Hopkins University, United States of America
1120-1140	Enhancing the Security of UN Peacekeepers through Collaboration between ISMI (Interregional Maritime Security Institute) and UNCAP (United Nations C4ISR Academy for Peace Operations)	<b>Lieutenant Colonel Lazare Abe Aké</b> Director, Inter-regional Maritime Security Institute (ISMI), Republic of Côte d'Ivoire
1140-1200	Smart Camp—An Exercise in Change Management and Organizational Transformation	<b>Mr. Robert Kirkwood</b> Chief, Mission Support, United Nations Interim Security Force for Abyei (UNISFA), United Nations
1200-1220	Radio Mining—Developing an OSINT Tool for Peacekeeping	<b>Lieutenant Colonel Stefan Lemm</b> Deputy Branch Head, Directorate General of Planning, Federal Ministry of Defense, Germany
1220-1230	Introduction to the Working Groups: Structure, Goals, Outcomes	<b>Lieutenant Colonel Yun Kyong Sung</b> Head of Military Operations Unit, Office of Information and Communications Technology, United Nations
1230-1400	<b>Lunch Break</b>	





Thematic Working Groups		
1400–1700	<b>Working Groups by Topics:</b> <ul style="list-style-type: none"> <li>▲ Protecting Peacekeepers</li> <li>▲ Information-Driven Peace Operations</li> <li>▲ Integrated Training and Capacity Building</li> <li>▲ Eco-Responsibility</li> <li>▲ Telemedicine</li> </ul>	Moderated Group Discussions / Breakout Rooms
1700	<b>Return to Accommodations</b>	

### ▲ THURSDAY, 23 JUNE 2022

Thematic Working Groups		
0900–1230	<b>Working Groups by Topics:</b> <ul style="list-style-type: none"> <li>▲ Protecting Peacekeepers</li> <li>▲ Information-Driven Peace Operations</li> <li>▲ Integrated Training and Capacity Building</li> <li>▲ Eco-Responsibility</li> <li>▲ Telemedicine</li> </ul>	Moderated Group Discussions / Breakout Rooms
1230–1400	<b>Lunch Break</b>	
1400–1430	An Expert-Driven Approach to Locating IED Factories Using Bayesian Networks	<b>Dr. Hildegard Koen</b> Senior Researcher, Command and Control and Integrative Systems, CSIR, Republic of South Africa
1430–1500	A Future in which AI Benefits Peace, Security and Sustainable Development	<b>Ms. Branka Panic</b> Founder and Executive Director, AI for Peace, United States of America
1500–1530	Extended Reality Technologies for Better Peacekeeping	<b>Ms. Didintle Rasetsoke</b> Scientific Ergonomics Researcher, Ergonomics Technologies (ERGOTECH), Armscor, Republic of South Africa
1530–1600	<b>Coffee Break</b>	
1600–1700	Discussion Panel: Achieving a Mission Common Operational Picture by Leveraging Data and Advanced Technologies	<b>Mr. Erzen Ilijazi, Ms. Branka Panic, Ms. Didintle Rasetsoke, Mr. Guy Bennet, Ms. Elen Regelling</b> Moderator: <b>Mr. Aaron David</b>
1700–1730	Situational Awareness from the Quadome Surveillance Radar	<b>Mr. Jaco Botha</b> Programme Manager, Radar Specialist, Hensoldt, Republic of South Africa
1800–2030	<b>Official Dinner / CSIR (Host: RSA)</b>	

▲ **FRIDAY, 24 JUNE 2022**

**Thematic Working Groups**

0900–1000	Recap from Working Groups	<p><b>Lt. Col. Animesh Srivastava</b> ▲ Working Group Lead, Protecting Peacekeepers Military Affairs Officer, Policy and Doctrine Team, Office of Military Affairs, Department of Peace Operations, United Nations</p> <p><b>Mr. Erzen Ilijazi</b> ▲ Working Group Lead, Information–Driven Peace Operations Chief Technology Operations Service, Office of Information and Communications Technology, United Nations</p> <p><b>Mr. Jean Michel Kergoat</b> ▲ Working Group Lead, Integrated Training and Capacity Building UN C4ISR Academy for Peace Operations (UNCAP), Regional Service Centre Entebbe, United Nations</p> <p><b>Mr. Michel Bergeron</b> ▲ Working Group Lead, Eco–Responsibility Chief, Service for Geospatial, Information and Telecommunications Technology (SGITT), Global Service Center, United Nations</p> <p><b>Mr. Vyacheslav Gnezdilov, Ph.D.</b> ▲ Working Group Lead, Telemedicine Business Relationship Manager, Telemedicine Programme Oversight, Office of Information and Communications Technology, United Nations</p>
1000–1030	Threat Sensing and Protection of Peacekeepers	<p><b>Mr. Molahlegi Molohe</b> Divisional Head, Telecommunications and Sensing Systems Division, Armscor, Republic of South Africa</p>
1030–1100	<b>Coffee Break</b>	
1100–1130	Symposium Outcome	Next Steps (UN)
1130–1230	<p>UN/Host Country Staff Appreciation</p> <p>▲ Gift Exchange</p> <p>▲ Announcement of 7th PTP Symposium in Nepal</p> <p>Closing Ceremony / Remarks</p>	<p><b>Mr. Atul Khare, Under–Secretary–General</b> Department of Operational Support, United Nations</p> <p><b>Ms. Thandi Modise</b> Minister of Defence and Military Veterans, Republic of South Africa</p> <p><b>Mr. Bernardo Mariano Junior</b> Assistant Secretary–General, Chief Information Technology Officer, Office of Information and Communications Technology, United Nations</p> <p><b>Mr. Anthony O'Mullane, Director of Operations</b> Support Division of the Office of Information and Communications Technology, United Nations</p>
1230	<b>Lunch / End of Symposium</b>	



Front Entrance, CSIR International Convention Centre







The Deck, CSIR International Convention Centre







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## 6th International Partnership for Technology in Peacekeeping Symposium

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