18 August 2017

To whom it may concern,

Dr. Walter Dorn has been working in the Information and Communications Technology Division (ICTD) of the Department of Field Support (DFS), United Nations, New York from February to August 2017 as our resident Innovation and Protection Technology Expert. His expertise has been used to support the Partnership for Technology in Peacekeeping initiative – a key innovator in the field of peacekeeping technology.

Dr. Dorn is well known among the United Nations peacekeeping community, and many United Nations officials in the Department of Peacekeeping Operations (DPKO) and DFS have drawn inspiration and ideas from his work over the years and even decades. He is most known for inspiration and action, especially in relation to aerial reconnaissance technologies, and deservingly so. He encouraged the United Nations to pursue Unmanned Aerial Vehicles (UAVs) a decade before their initial deployments by United Nations missions. He also proposed aerostats (tethered balloons) to the United Nations several years before they were first deployed in 2015.

Dr. Dorn's book, *Keeping Watch: Monitoring, Technology and Innovation in UN Peacekeeping*, was a seminal contribution to the wider field of peacekeeping technology, which has since gained an increasing role in United Nations missions. His book demonstrated the wide range of applicable technologies that the United Nations had not yet used to increase the effectiveness, efficiency and safety of its peace operations. The book inspired the creation of the Panel of Experts on Technology and Innovation in United Nations Peacekeeping, known as "TIP", of which Dr. Dorn served as a key member. The Panel's final report (2015) gave a major impetus to the advancement of technological tools in peacekeeping. Thereafter, DPKO and DFS created an implementation strategy to move many of the recommendations from concept to reality.

We recognized Dr. Dorn's creativity by inviting him to be a keynote speaker at our 2016 Partnership for Technology in Peacekeeping symposium, held in Seoul, Republic of Korea. Following that, we made use of his services by appointing him as the Innovation and Protection Technology Expert at United Nations Headquarters. His service within DFS/ICTD, soon to be renamed the Field Technology Division, have assisted us in many innovative areas, including:

- Airships for transport (LTA): His useful study on the status of lighter-than-air vehicles in industry helped us make decisions on the pursuit of such means, holding back until the technology becomes more mature while still keeping options open for the future.
- UAVs for observation: His assessment of micro- and mini-UAVs in selected United Nations African missions, based on his field visits to the missions in Mali, Central African Republic and Democratic Republic of the Congo, have spurred us to mainstream this service, including enabling United Nations military observers. His assessment of

larger UAV systems will similarly help to make better decisions on their deployment in the future.

- Radars: he wrote a definitive report on the success of such a system: the "sense and warn" radar in the Kidal camp that saved lives during the attack of 8 June 2017. This helped raise awareness of technology within the United Nations more generally.
- Institutionalizing innovation: he helped with the creation of new structures for innovation, including the Field Technology Innovation Units in several field missions, the Technology Development, Design and Planning Section (TDDPS) at the Global Service Centre, and innovation initiatives at United Nations headquarters. He helped facilitate links for the United Nations Signal Academy to other peacekeeping training centres.

Dr. Dorn has done similar innovative work on many other initiatives including landmine & ERW clearance technologies; crowd-sourcing and crowd-seeding techniques for peace operations; cyberpeacekeeping as a concept; peacekeeping games (in contrast to warfighting games); information/intelligence collection and management, especially to assist the Situational Awareness Programme; and non-lethal weapons. He has also catalogued a wide range of peacekeeping technologies. Additionally, we note that he foresaw and pioneered the concept of "peacekeeping intelligence", which is now the subject of official United Nations policy.

Owing to his ability to share insights and innovative ideas, we invited Dr. Dorn to be a featured speaker at the annual meeting of Chiefs of Communications and Information Technology Services (CITS) from field missions around the world. His inspiring talk helped generate new ideas for innovation in the field.

Furthermore, his collegial attitude and team spirit contributed to the positive atmosphere here in DFS/ICTD and his presence will be greatly missed by the whole team. He enriched us all with his knowledge and expertise and honored us with his friendship.

The United Nations is sincerely grateful to the Government of Canada for the gracious loan of Dr. Dorn.

I am sure he will continue to be a prolific innovator and publisher. And we hope that he will continue to provide us with important ideas and feedback for our future innovation initiatives. He will always be welcome to work with our team in the future.

Sincerely,

Mission Support