BRAZIL

Brazil Issue Paper # 04

UPGRADE FROM CONVENTIONAL PORTABLE ULTRASOUND TO WIRELESS PORTABLE ULTRASOUND

1. ISSUE PAPER THEME

Medical

2. SUMMARY / BACKGROUND / PREVIOUS HISTORY

The current COE Manual includes the use of portable ultrasound as part of field medical diagnostic tools. However, conventional models have technological limitations in environments requiring high mobility, sterility, and rapid data transmission. Recent advancements in wireless portable ultrasound devices offer significant advantages in operational contexts.

Wireless ultrasound technology enables real-time image transmission, minimal setup, enhanced sterility, and improved maneuverability, especially in austere and confined operational environments. It has been successfully adopted by multiple military medical services globally, reflecting a shift toward modern, agile diagnostic capability in combat and humanitarian missions.

3. DETAILED PROPOSAL

It is recommended that the COE Manual formally recognize wireless portable ultrasound devices as a preferred alternative or complementary option to conventional portable ultrasound systems. This proposal is supported by international standards, including the WHO Catalogue of Innovative Health Technologies (2025), NATO Medical Standards, and the U.S. Army Telemedicine Guidelines, which highlight the growing operational relevance and clinical value of such technology in field conditions.

Wireless ultrasound systems offer a series of operational advantages. Their wireless connectivity allows real-time consultations with remote medical specialists, enhancing decision-making in critical situations. The devices are significantly smaller and lighter than traditional models, which facilitates easier sterilization, handling, and transport in austere environments. Furthermore, the absence of cables reduces setup time and increases mobility during medical interventions. These systems also enable secure storage and transmission of diagnostic data to command centers or medical oversight structures, ensuring both continuity of care and accountability.

It is therefore proposed that the current equipment specifications listed in the COE Manual, Chapter 3, Annex C, Appendix 4.1, be amended to include the Wireless Portable Ultrasound System. This system should be described as a compact, wireless-enabled diagnostic device suitable for abdominal, cardiac, and vascular assessments at the point of care.

4. FINANCIAL IMPLICATIONS

Wireless portable ultrasound systems are superior to traditional models due to their enhanced mobility, real-time remote image transmission, faster setup, and greater usability in field conditions—making them more effective for modern military medical operations.

Chapter 3, Annex C, Appendix 4.1 of the COE Manual currently includes the “Handheld Portable Ultrasound Machine” as part of the Level 1 medical facility equipment list, with an established reference value of USD 6,130. At this same price point, modern wireless portable ultrasound systems are now commercially available, offering significant operational and clinical advantages without additional cost. This parity in pricing presents a timely opportunity to upgrade to a more advanced and field-adapted diagnostic solution, while remaining

fully aligned with the current budgetary framework outlined in the manual.

5. PROPOSED 2026 COE MANUAL TEXT

Revise Chapter 3, Annex C, Appendix 4.1, Level 1 medical facility, p. 96: add text in bold:

Updated Diagnostic Equipment List – Level 1 Medical Facility (Appendix 4.1)

Item	Quantity	Generic Fair Market Value
Electrocardiogram machine	1	11,118
Ophthalmoscope	1	1,112
Otoscope	1	1,112
X-ray view box	1	1,112
Wireless Portable Ultrasound System	**1**	**6,130**