

ISO/IEC 30140-4:2018-07 (E)

Information technology - Underwater acoustic sensor network (UWASN) - Part 4: Interoperability

Contents	Page
FOREWORD.....	3
INTRODUCTION.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions.....	5
4 Abbreviated terms.....	5
5 Interoperability in UWASN.....	6
5.1 Overview.....	6
5.1.1 Interoperability definition.....	6
5.1.2 Achieving interoperability.....	6
5.1.3 The need for interoperability.....	6
5.1.4 UWASN interoperability.....	6
5.2 Interoperability between the user and the UWA-GW.....	9
5.3 Interoperability between the UWA-GW and the UWA-FN.....	9
5.4 Interoperability between UWA-FNs.....	10
5.5 Interoperability between UWA-GWs.....	11
6 UWASN communication technology interoperability architecture point of view.....	11
7 UWASN communication technology interoperability architecture from service point of view.....	12
7.1 General.....	12
7.2 Example: Interoperability between heterogeneous networks.....	14
Bibliography.....	16
Figure 1 – Interoperability in UWASN.....	8
Figure 2 – Graphical representation of interoperable UWASN.....	8
Figure 3 – Interoperability of UWASN.....	9
Figure 4 – Generic standardized interface for interoperability in UWASNs.....	9
Figure 5 – Multiple interfaces on a UWA-GW to provide interoperability in UWASN.....	10
Figure 6 – Interoperability between fundamental networks.....	11
Figure 7 – Interoperability between UWA-GWs.....	11
Figure 8 – UWASN communication technology interoperability architecture point of view.....	12
Figure 9 – UWASN communication technology interoperability architecture a from service point of view.....	13
Figure 10 – Interoperability between heterogeneous networks.....	15
Table 1 – UWASN CTI-AP Entities.....	14
Table 2 – UWASN CTI-AP interoperability.....	14