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**Smart Body Area Network (SmartBAN);
Enhanced Ultra-Low Power Physical Layer**

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Smart Body Area Network (SmartBAN).

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document specifies the ultra-low power physical layer (PHY) Smart BAN.

The present document applies to short range, wireless communication between wearable sensors devices and the hub coordinator. The present document specifies the PHY for transmitting on the medium.

The present document describes:

- packet formats;
 - modulation;
 - forward error correction.
-

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] ETSI TS 103 325 (V1.1.1) (2015-04): "Smart Body Area Network (SmartBAN); Low Complexity Medium Access Control (MAC) for SmartBAN".

2.2 Informative references

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

Not applicable.

3 Symbols and abbreviations

3.1 Symbols

For the purposes of the present document, the following symbols apply:

D	Delay
⊕	eXclusive OR (XOR)