



**NSAI**  
Standards

Irish Standard  
I.S. EN 13757-5:2015

# Communication systems for meters - Part 5: Wireless M-Bus relaying

**I.S. EN 13757-5:2015**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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## National Foreword

I.S. EN 13757-5:2015 is the adopted Irish version of the European Document EN 13757-5:2015, Communication systems for meters - Part 5: Wireless M-Bus relaying

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EUROPEAN STANDARD

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## Communication systems for meters - Part 5: Wireless M-Bus relaying

Systèmes de communication - Partie 5: Relais de  
transmission sans fil M-Bus

Kommunikationssysteme für Zähler - Teil 5:  
Weitervermittlung

This European Standard was approved by CEN on 22 August 2015.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 13757-5:2015) has been prepared by Technical Committee CEN/TC 294 “Communication systems for meters”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13757-5:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

EN 13757 comprises the following parts:

- *Part 1: Data exchange*
- *Part 2: Physical and link layer*
- *Part 3: Dedicated application layer*
- *Part 4: Wireless meter readout (Radio meter reading for operation in SRD bands)*
- *Part 5: Wireless M-Bus relaying*
- *Part 6: Local Bus*

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## EN 13757-5:2015 (E)

### 1 Scope

This European Standard specifies the protocols to use when performing relaying in wireless meter readout networks. This European Standard is an extension to wireless meter readout specified in EN 13757-4. It supports the routing of modes P and Q, and simple single-hop repeating of modes S, T, C, F and N.

The main use of this European Standard is to support simple retransmission as well as routed wireless networks for the readout of meters.

NOTE Electricity meters are not covered by this standard, as the standardization of remote readout of electricity meters is a task for IEC/CENELEC.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13757-1:2014, *Communication systems for meters — Part 1: Data exchange*

EN 13757-3:2013, *Communication systems for meters and remote reading of meters — Part 3: Dedicated application layer*

EN 13757-4:2013, *Communication systems for meters and remote reading of meters — Part 4: Wireless meter readout (Radio meter reading for operation in SRD bands)*

EN 60870-5-1:1993, *Telecontrol equipment and systems — Part 5: Transmission protocols — Section 1: Transmission frame formats (IEC 60870-5-1:1990)*

EN 60870-5-2:1993, *Telecontrol equipment and systems — Part 5: Transmission protocols — Section 2: Link transmission procedures (IEC 60870-5-2:1992)*

EN 62054-21:2004, *Electricity metering (a.c.) — Tariff and load control — Part 21: Particular requirements for time switches (EN 62054-21:2002)*

RFC 1662 July 1994, *HDLC-like Framing, Appendix C. Fast Frame Check Sequence (FCS) Implementation*

ETSI EN 300 220-1:2012, *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Technical characteristics and test methods*

CEPT/ERC/REC 70-03, *Relating to the use of short range devices (SRD)*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

#### **Bidirectional Single Hop Repeater**

#### **BSHR**

repeater retransmitting original frames in upstream as well as downstream direction

Note 1 to entry: The 'H' bit in the Extended Link Layer shows whether or not frames are original or repeated.

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