



**INTERNATIONAL STANDARD ISO/IEC 29180:2012**  
**TECHNICAL CORRIGENDUM 1**

Published 2015-07-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION  
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

**Information technology — Telecommunications and information  
exchange between systems — Security framework for  
ubiquitous sensor networks**

**TECHNICAL CORRIGENDUM 1**

*Technologies de l'information — Télécommunications et échange d'informations entre systèmes — Cadre de  
sécurité pour réseaux de capteurs ubiquitaires*

*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO/IEC 29180:2012 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

INTERNATIONAL STANDARD  
ITU-T RECOMMENDATION

## Information technology – Security framework for ubiquitous sensor networks

## Technical Corrigendum 1

Conventions used in this corrigendum: Original, unchanged, text is in normal font. Deleted text is struck-through, thus: ~~deleted text~~. Inserted text is underlined, thus: inserted text.

**1 Clause 2.2**

Modify clause 2.2 as follows:

**2.2 Paired Recommendations | International Standards equivalent in technical content**

- Recommendation ITU-T X.800 (1991), *Security architecture for Open Systems Interconnection for CCITT applications*.  
ISO/IEC 7498-2:1989, *Information processing systems – Open Systems Interconnection – Basic Reference Model – Part 2: Security Architecture*.
- ~~– Recommendation ITU-T X.805 (2003), *Security architecture for systems providing end-to-end communications*.~~
- ~~– ISO/IEC 18028-2:2006, *Information technology – Security techniques – IT network security – Part 2: Network security architecture*.~~

**2 Clause 2.3**

Add the following reference to clause 2.3:

- Recommendation ITU-T X.805 (2003), *Security architecture for systems providing end-to-end communications*.

**3 Clause 6**

Modify the 10th paragraph as follows:

There are three components in the SN: the application server communicating with the sink node; the sink node called the base station, which interfaces the sensor network and the application server, and the collection of sensor nodes using wireless communication to communicate with each other. The sink may communicate with the application server via the Internet or a satellite. Security architecture in the IP-based network is very similar to that in Rec. ITU-T X.805 ~~ISO/IEC 18028-2~~. Therefore, this Recommendation | International Standard focuses on the security of the wireless sensor network (SN) consisting of a set of sensor nodes using wireless transmission.

**4 Clause 7.1.1**

Modify the first sentence of the first paragraph as follows:

Rec. ITU-T X.800 | ISO/IEC 7498-2 and Rec. ITU-T X.805 ~~ISO/IEC 18028-2~~ cite the following security threats to the networks (note that these are also security threats applicable to the SN):

**5 Clause 7.1.2**

Modify the first sentence of the first paragraph as follows:

Rec. ITU-T X.800 | ISO/IEC 7498-2 and Rec. ITU-T X.805 ~~ISO/IEC 18028-2~~ identify five threats that are applicable to routing-related message exchange in the SN. In addition to these, seven threats are identified in (see Karlrof *et al.* in the Bibliography) with regard to the routing messages exchanged between sensor nodes.