

## **IS/ISO/IEC 27071: 2023**

### **Cybersecurity — Security Recommendations for Establishing Trusted Connections Between Devices and Services**

With the development of the internet of things (IoT), mobile services, cloud computing, big data and artificial intelligence (AI), it is essential to establish trusted connections between devices and services in a growing number of scenarios.

Security channels [e.g. secure sockets layer (SSL) or transport layer security (TLS) protocols] are used between devices and services to protect confidentiality and integrity of data, but it is not enough. It is essential for the service to distinguish data collected by sensors of the authorized device from those of other devices or data forged by adversaries. Thus, the service should be able to ensure that the data comes from the authorized device.

In addition, it is crucial for the device to distinguish the genuine service from unintended services or malicious services. In this way, it should be able to reliably identify the genuine and intended service, in particular for cloud services, which may have thousands of such services running.

Identity without a reliable root of trust can be forged, so controls are critical to ensure the utilization of reliable roots of trust. The requirements for establishing reliable virtualized roots of trust are described in ISO/IEC 27070.

Mutual authentication between a device and a service is essential for preventing impersonation attacks. While insufficient in itself, remote attestation between a device and a service is also critical for protecting the data handling processes and establishing a security channel to prevent interception by an adversary on the communication network.

Data captured from sensors integrated in the device, input by users, or generated (or processed) by algorithms in the device should have a label and be digitally signed (or by other crypto mechanisms) using the device's particular key designed for this purpose, to protect the integrity and authenticity of the data. It is possible that services know the parameters of the sensor device which can help it to process the data. Trusted connections have a strong relationship with hardware security modules (HSM), trusted computing (TC), public key infrastructure (PKI) and certification authority (CA) technology.

This document proposes security recommendations for establishing trusted connections between devices and services, which would help the related organizations to set up HSM in devices (including mobile devices, PCs, or IoT devices) and in the infrastructure of cloud services. This document can help to build a trusted environment. This document can also help trusted third parties (i.e. CA) to issue certificates to devices and services, and help applications to mitigate against attacks and identify forged data from the sensors.

## **IS 2190 : 2024**

### **Selection, Installation and Maintenance of First-Aid Fire Extinguishers — Portable and Mobile — Code of Practice (*Fifth Revision*)**

Portable fire extinguishers are not expected to deal with large fires since they are essentially first-aid firefighting equipment. Nevertheless, they are very valuable in the early stages of a fire when used promptly and effectively. Provision of unsuitable types, incorrect operation, or improper maintenance of the extinguishers have, at times, led to failure in tackling the fire effectively in the early stages, thus involving greater loss of life and property. In addition to the value of their portability and mobility, the most important feature of these extinguishers is their immediate availability so that each extinguisher can be used by one/two persons. The usefulness of these extinguishers is limited, as it is entirely dependent upon the presence of persons having knowledge to operate them. Wheeled extinguishers are installed in high hazard areas for discharging extinguishing media at high flow rate for longer duration for hazard protection.

This standard has, therefore been formulated for giving guidance regarding proper selection, installation, and maintenance of portable first-aid fire extinguishers so that such extinguishers will function at all times as intended throughout their useful life. This standard does not cover the requirements applicable to fixed installation systems for extinguishing fire even though portions of such systems may be portable.

This standard gives provisions for the selection and installation of portable and wheeled fire extinguishers as per IS 15683 and IS 16018 and applicable only for ISI Marked fire extinguishers and equipment. Since a variety of shapes or methods of operation of fire extinguishers have at times led to confusion and failure to quench the fire, it is recommended that extinguishers installed in any one building or single occupancy shall be similar in shape and appearance and should have the similar methods of operation, as far as possible. For this purpose, IS 15683 and IS 16018 have been prepared having same method of operation. In order that fire extinguishers are effective, they should:

- a) be portable/wheeled;
- b) operate instantly;
- c) have adequate throw;
- d) have adequate quantity of extinguishant as per fire rating; and
- e) specified shelf-life from the year of manufacture.

All these characteristics have been incorporated into portable/wheeled extinguishers, which are manufactured to deal with different types of fires. For effectiveness, they should conform to the relevant Indian Standards. The number and size of extinguishers for installation purposes shall be determined by the type, fire rating, and fire hazard classification of the protected risk.

The use of fire buckets, in lieu of fire extinguisher, is not recommended. However, users may provide fire buckets (see IS 2546) over and above the requirements given in this standard.

## **IS 3633: 2024**

### **Black Tea — Specification (*Third Revision*)**

Black tea is a popular beverage consumed all over the world. It is an important commodity in the international trade and India is one of the major black tea producing and exporting countries in the world. The objective of this standard is to specify the plant source from which black tea is to be manufactured and to set requirements for certain chemical characteristics which, if met, are an indication that the black tea has been subjected to recognized good production practices. However, for commercial purpose and to save time and expenses, black tea is also assessed for quality by tasters, who from their previous experience can assess whether a given black tea would meet the requirements of the standards or not.

This standard prescribes the requirements, methods of test and sampling for black tea. It does not cover the requirements for teas grown in *Kangra* valley.