

# American National Standard

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(R2019)

*Information technology - Security techniques -  
Network security - Part 5: Securing  
communications across networks using Virtual  
Private Networks (VPNs)*

**Developed by**



*Where IT all begins*



## INCITS/ISO/IEC 27033-5:2013[2014]

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**Adopted by INCITS (InterNational Committee for Information Technology Standards) as an American National Standard.**

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC 27033 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *IT security techniques*.

This first edition cancels and replaces ISO/IEC 18028-5:2006, which has been technically revised.

ISO/IEC 27033 consists of the following parts, under the general title *Information technology — Security techniques — Network security*:

- *Part 1: Overview and concepts*
- *Part 2: Guidelines for the design and implementation of network security*
- *Part 3: Reference networking scenarios — Threats, design techniques and control issues*
- *Part 4: Securing communications between networks using security gateways*
- *Part 5: Securing communications across networks using Virtual Private Networks (VPNs)*
- *Part 6: Securing wireless IP network access*

(Note that there may be other parts. Examples of possible topics to be covered by parts include local area networks, wide area networks, broadband networks, web hosting, Internet email, and routed access to third-party organizations. The main clauses of all such parts should be Risks, Design Techniques, and Control Issues.)

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# Information technology — Security techniques — Network security —

## Part 5: Securing communications across networks using Virtual Private Networks (VPNs)

### 1 Scope

This part of ISO/IEC 27033 gives guidelines for the selection, implementation, and monitoring of the technical controls necessary to provide network security using Virtual Private Network (VPN) connections to interconnect networks and connect remote users to networks.

### 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.

ISO/IEC 27001:2005, *Information technology — Security techniques — Information security management systems — Requirements*

ISO/IEC 27002:2005, *Information technology — Security techniques — Code of practice for information security management*

ISO/IEC 27005:2011, *Information technology — Security techniques — Information security risk management*

ISO/IEC 27033-1:2009, *Information technology — Security techniques — Network security — Part 1: Overview and concepts*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 7498 (all parts), ISO/IEC 27000, ISO/IEC 27001, ISO/IEC 27002, ISO/IEC 27005, and ISO/IEC 27033-1 apply.