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# Information security — Key management —

## Part 5: Group key management

*Sécurité de l'information — Gestion de clés —  
Partie 5: Gestion de clés de groupe*



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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 27, *Information security, cybersecurity and privacy protection*.

This second edition cancels and replaces the first edition (ISO/IEC 11770-5:2011) which has been technically revised.

The main changes compared to the previous edition are as follows:

- the document has been modified to be consistent with use of the key derivation specifications from ISO/IEC 11770-6;
- the use of a "trapdoor" in key derivation has been removed. Consequently, unlimited forward key chains can no longer be calculated.

A list of all parts in the ISO/IEC 11770 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

In some applications, it is necessary for a secret cryptographic key to be shared by a group of entities. Moreover, in some cases the exact membership of a group of entities that share a key may change over time.

This document is concerned with techniques that enable a secret key to be shared by all members of a defined group with the assistance of a trusted third party known as a key distribution centre. Provisions for adding and removing members of a group are also made.