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Banking — Secure cryptographic devices (retail) —

Part 1:

Concepts, requirements and evaluation methods

Banque — Dispositifs cryptographiques de sécurité (services aux particuliers) —

Partie 1: Concepts, exigences et méthodes d'évaluation



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 13491-1 was prepared by Technical Committee ISO/TC 68, *Financial services*, Subcommittee SC 2, *Security management and general banking operations*.

This second edition cancels and replaces the first edition (ISO 13491-1:1998), which has been technically revised.

ISO 13491 consists of the following parts, under the general title *Banking — Secure cryptographic devices (retail)*:

- *Part 1: Concepts, requirements and evaluation methods*
- *Part 2: Security compliance checklists for devices used in financial transactions*

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Introduction

ISO 13491 describes both the physical and logical characteristics and the management of the secure cryptographic devices (SCDs) used to protect messages, cryptographic keys and other sensitive information used in a retail financial services environment.

The security of retail electronic payment systems is largely dependent upon the security of these cryptographic devices. This security is based upon the premise that computer files can be accessed and manipulated, communications lines can be "tapped" and authorized data or control inputs into system equipment can be replaced with unauthorized inputs. When Personal Identification Numbers (PINs), message authentication codes (MACs), cryptographic keys and other sensitive data are processed, there is a risk of tampering or other compromise to disclose or modify such data. The risk of financial loss is reduced through the appropriate use of cryptographic devices that have proper characteristics and are properly managed.