
**Information technologies — JPEG
systems —**

**Part 4:
Privacy and security**

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 19566 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.

Introduction

This document contributes to the specification of system-level functionalities. In particular, it specifies functionalities to provide a degree of trust while sharing image content and metadata, which simultaneously also allow the signalling of the associated access policies.

A huge number of images are distributed over the internet on a daily basis. For social media alone, this already accounts for over 3 billion pictures. These photos are often shared with many people without protection for personal information or access control. In addition, many portable devices have communication functionality that allows for the immediate distribution of photos after capturing them. In combination with the potential inclusion of GPS information in the file format, for example, the photo might expose private and geo-location information to the world.

In order to avoid such undesirable situations, the framework in this document provides protection mechanisms to the JPEG family of standards. For instance, encryption can be used to protect image data

The particular focus of this document is to provide codestream and file format syntax support to enable security and privacy functionality for JPEG standards, not only in support of ISO/IEC 10918-1, but also for standards such as ISO/IEC 15444 and ISO/IEC 18477.

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