Copyright, standards and the Internet
The Internet has made it easier to find and obtain ISO and IEC International Standards.

The purpose of this brochure is to help users and customers of ISO and IEC International Standards and their national versions to benefit from the new opportunities provided by the availability of standards over the Internet without falling into the traps of copyright infringement and abuse of intellectual property.

Failure to respect copyright and intellectual property may result in breaking the law and in legal penalties. It may also deprive the developers of standards of a fair return on their work and ultimately jeopardize the development of future standards.

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) and their respective members support the protection of copyright in both the paper and electronic worlds. They are committed to promoting the importance of copyright and to doing their part to ensure that the integrity of all types of created works is upheld. At the same time, they are committed to making sure standards are implemented as widely as possible and that users can make the appropriate use of the standards they need.
Standards and copyright

Whether intentionally or unknowingly, a significant number of standards users are breaking copyright laws by reproducing and/or redistributing standards. Contributing to the violation of copyright results in lost revenue for the organizations developing and distributing standards, which not only include ISO and IEC but also their respective members and authorized distributors. It also jeopardizes the standards themselves by putting them at risk of tampering and/or inadvertent modifications.

ISO and IEC introduced online sales several years ago in response to client demand for fast and convenient access to standards. Unfortunately, ease of access has made illegal photocopying easier and Internet distribution has also increased the potential for standards to be obtained or distributed illegally.

ISO and IEC International Standards are sold in order to help fund the very process that leads to their development. ISO and IEC members also adopt the International Standards as National Standards and sell these to help fund their own respective national standardization activities. Therefore, protection of copyright is, on many levels, fundamental to the sustainability of the international standardization system.
Putting copyright into context

To fully grasp the importance of copyright and the need to protect it, it is essential to understand the main concepts and terminology:

**So what is copyright?**

Copyright is defined in the *Concise Oxford Dictionary* as: "the exclusive legal right, given to the originator or his or her assignee for a fixed number of years, to print publish, perform, film, or record literary, artistic or musical material, and to authorize others to do the same". Simply put, copyright protects the ownership and identity of the work of its creator.

The concept of copyright is included in a broader one known as Intellectual Property. The World Intellectual Property Organization defines intellectual property as any creation of the mind; inventions, literary and artistic works, and symbols, names, images and designs used in commerce.

Copyright infringement occurs when intellectual property is reproduced, performed, broadcast, translated or adapted without the express permission of the creator or the group/individual licensed to handle the material in question.
One of the reasons why copyright is so difficult to enforce on the Internet is because there are so many different ways that the rules can be broken – knowingly, or by accident. While the music industry’s copyright battle has put the spotlight on peer-to-peer sharing technologies, there are numerous other ways that the integrity of intellectual property can be compromised. In the case of standards some of the most common methods include:

- **Password abuse** – sharing passwords that have been issued to a single user for use on a specific site that sells standards.

- **Illegal distribution of copies of standards** – either by mass e-mailing or circulating paper photocopies of the purchased standard.

- **Uploading purchased standards** – either onto a publicly accessible Internet site or onto an organizational Intranet, making it available to a wide group of users.
Prevention measures

The sheer size of the Internet makes it virtually impossible to track down everyone who is accessing illegal versions of standards, but a number of different techniques have proven effective in deterring illegal sharing or reproduction of standards. ISO and IEC and their respective members are:

- **Raising awareness** – the simplest and most effective method being used by the standards community to minimize copyright abuse of standards is to ensure that stakeholders know the facts about copyright and understand the consequences of copyright infringement.

  To that end, ISO and IEC have recently decided to better highlight the fact that the International Standards which they publish are copyrighted by putting a visible warning sign next to the usual copyright notice.

- **Enforcing the law** – Given the cost and time necessary to actively track down all, or even a portion of the individuals abusing standards copyright, a full-scale enforcement strategy is unrealistic. However, wherever cases are identified, a number of steps are being taken to inform the individual of the situation, to communicate any related consequences and to limit further abuse.
Digital Rights Management (DRM) – There are currently a number of different DRM techniques in use to protect standards from copyright abuse. Embedding digital watermarks is one of the techniques chosen by ISO and IEC and which is explained in the following pages. Other techniques preventing files from being altered, shared or copied have also been implemented by ISO and/or IEC members in the context of specific offerings like pay-per-view or subscriptions services.

Creating incentives and proposing further options to exploit the content of standards to abide by copyright – Making the legitimate versions of standards more desirable and useful than copies is a method being employed by a number of distributors of International and National Standards. ISO and IEC and their respective members are offering many different options to companies and standards users to legally use the content of standards. Examples are given in the following pages.
Information technology — Method of measuring gloss uniformity on printed pages

1 Scope

The scope of this International Standard is to define methods and processes of measuring objective print-quality attributes for the assessment of gloss non-uniformity on printed pages in reflection mode, and to provide transforms, when applicable, that relate the objective results to subjective responses, if appropriate. There are many existing standards (see Normative references and Bibliography for details) typically used for gloss measurement. Our intent is to leverage the existing standards and adapt those for use on gloss uniformity measurements where appropriate.

This International Standard is composed of a standardized test methodology, which is based on established gloss measurement methodologies as noted in Clause 2 and in the Bibliography. The methodologies have been modified so that, when applied to printed pages created by different marking technologies and imaging algorithms on different substrates, the results indicate the level of the objective gloss uniformity of the printed pages (in reflection mode). If the objective measurement can be linked to the subjective impression of gloss uniformity, then the linkage from objective measurement to subjective impression via mathematical transforms is provided. The reflection prints that are to be used as the subject of these tests can be created via printers or copiers (analog and digital). This International Standard should be applied only to electro-photographic base prints. When more reflection prints made by other printing technologies become available for follow-up study, one may consider including those printing technologies in this International Standard as a revision. This International Standard does not address the measurement of gloss attributes of printed pages in transmission mode.

Gloss uniformity attributes currently included in this International Standard are: differential gloss, gloss uniformity within a page, and gloss consistency within a run. Due to the current level of immaturity of commercially available objective micro-gloss measurement instruments, gloss artefact attributes (such as gloss grain, gloss spot, gloss streak, gloss bend, gloss mottle/cloud, gloss mordé) are not included in this International Standard at the present time, since instrumented measurement procedure cannot be recommended at present. As instrumented measurement capability becomes available, they will be considered for adoption into this International Standard as a revision.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2813, Paints and varnishes — Determination of specular gloss of non-metallic paint films at 20°, 60° and 85°

Embedding digital watermarks that include identification information is a non-intrusive technique which has been chosen by ISO and IEC to protect the copyright on ISO and IEC International Standards. Digital watermarks may also be found on electronic versions of national adoptions of ISO or IEC standards.

The watermark is added to a document to identify the rightful licensee. In the case of downloaded standards in particular, using a watermark is a means of personalizing each standard downloaded. The watermark typically displays the name of the customer and his company, and the download date on each page of the standard. It shows that the named customer is the rightful licensee of that standard (see example opposite).
ISO and IEC and their respective members are offering many different options to companies and standards users when they need to legally make more extensive use of the content of standards. These include:

- **Making additional electronic copies** – By granting extensions to the customer’s original license, the customer can make legal copies for use by additionally defined users.

- **Printing multiple copies from one electronic file** – Customers wanting to have supplementary paper copies of the standards, for example for distribution at meetings, can pay simple additional fees.

- **Extracting parts of a standard for inclusion in the company’s internal documentation, user’s guide or manuals** – ISO and IEC encourage the use and adoption of their standards in company documentation. Depending on the scale of the extract, permission can be granted on a case-by-case basis.

A limited number of rights are given to customers when they purchase a standard. When a standard is ordered in electronic format from an online store, these rights are described in a license agreement which the customer has to read and accept before being authorized to download the requested document. Typically, the customer is allowed to print one copy only and is not authorized to make copies or transfer the electronic file which he or she has purchased, or reproduce parts of it.
including parts of a standard in books or software applications – Citing standards or including extracts is encouraged as long as acknowledgements and any necessary royalty arrangements are concluded.

Storing electronic copies of standards on the company Intranet for internal use and sharing between employees – ISO and IEC offer solutions for the networking of their standards on company Intranets that offer cost-effective and user-friendly access rights.

To find out how to obtain any additional rights or if you have any questions relating to copyright, please contact ISO or the IEC, or their respective members at the addresses indicated at the end of the brochure.
About ISO
ISO (International Organization for Standardization) is a global network of 156 national standards institutes from countries large and small, industrialized and developing, in all regions of the world. It has a current portfolio of some 16 500 standards for business, government and society. ISO’s standards make up a complete offering for all three dimensions of sustainable development – economic, environmental and social.

ISO standards provide solutions and achieve benefits for almost all sectors of activity, including agriculture, construction, mechanical engineering, manufacturing, distribution, transport, medical devices, information and communication technologies, the environment, energy, quality management, conformity assessment and services.

About IEC
The IEC, headquartered in Geneva, Switzerland, is the world’s leading organization that prepares and publishes International Standards for all electrical, electronic and related technologies – collectively known as “electrotechnology”. IEC standards cover a vast range of technologies from power generation, transmission and distribution to home appliances and office equipment, semiconductors, fibre optics, batteries, flat panel displays and solar energy, to mention just a few. Wherever you find electricity and electronics, you find the IEC supporting safety and performance, the environment, electrical energy efficiency and renewable energies.
Credits
The text of this brochure has been adapted from the publication "Navigating Copyright in a Digital World" with the kind permission of the Standards Council of Canada, the ISO member body for Canada, and the Canadian National Committee of the IEC.
Contact

For information related to copyright and ISO International Standards, please contact:

ISO
1, ch. de la Voie-Creuse
Case postale 56
CH-1211 Geneva 20
Tel: +41 22 749 01 11
Fax: +41 22 733 34 30
Email: copyright@iso.org
Web: www.iso.org

For information related to IEC International Standards, please contact:

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland
Tel: +41 22 919 02 11
Email: inmail@iec.ch
Web: www.iec.ch