Image Safety: Standardization of guidelines reducing undesirable health effects caused by moving images

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Abstract. Image Safety is the notion to reduced undesirable effects on human health particularly caused by moving images presented on electronic displays. Recent progress of moving image technology enables us to enjoy attractive and stimulating screen images through various electric devices and media. The broad diffusion of the technology, however, sometimes increases the possibility for us to suffer from some undesirable health effects, such as photosensitive seizures (PSS), visually induced motion sickness (VIMS), and visual fatigue from stereoscopic images (VFSI). Actual incidents have been reported in news media, and some guidelines have developed in some countries and in some business fields. From consumers' viewpoint, however, the risks of suffering those undesirable health effects should be reduced equally in any countries, in any moving images regardless of industry fields developing the images. Therefore, international standardization of the guidelines is necessary especially nowadays when moving images are distributing internationally.

For the international standardizations on Image Safety issues, we need to consider the followings:

(i) The guidelines will be developed on the consensus among various interests of consumers, image providers, and the society.

(ii) Scientific knowledge, on which the guidelines will be based, is reliable.

(iii) The guidelines should be practicable and effective.

To develop the international standard of the guidelines, an international collaboration especially among researchers has been promoted. In 2004, ISO International Workshop on Image Safety was held and its agreements have published as ISO/IWA3 on Image Safety in 2005. Following the IWA3, a new Technical Committee in CIE has developed to gathering scientific knowledge on the issues, and a new study group in ISO has developed to discuss the strategy to develop the standard. The discussion of the guidelines to be practicable and effective will be given.