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**Information technology — Multimedia  
application format (MPEG-A) —**

Part 11:

**Stereoscopic video application format**

AMENDMENT 2: Signalling of additional  
composition type and profiles

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*Technologies de l'information — Format pour application multimédia  
(MPEG-A) —*

*ISO/IEC 23000-11:2009/Amd 2:2011*

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*Partie 11: Format pour application vidéo stéréoscopique*

*AMENDEMENT 2: Signalement d'un type et de profils de composition  
additionnels*

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[ISO/IEC 23000-11:2009/Amd 2:2011](https://standards.iteh.ai/catalog/standards/sist/3e11663c-abfa-47ff-b788-b186e38d1ab/iso-iec-23000-11-2009-amd-2-2011)  
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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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

Amendment 2 to ISO/IEC 23000-11:2009 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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# Information technology — Multimedia application format (MPEG-A) —

## Part 11: Stereoscopic video application format

### AMENDMENT 2: Signalling of additional composition type and profiles

Replace 5.3.1 with:

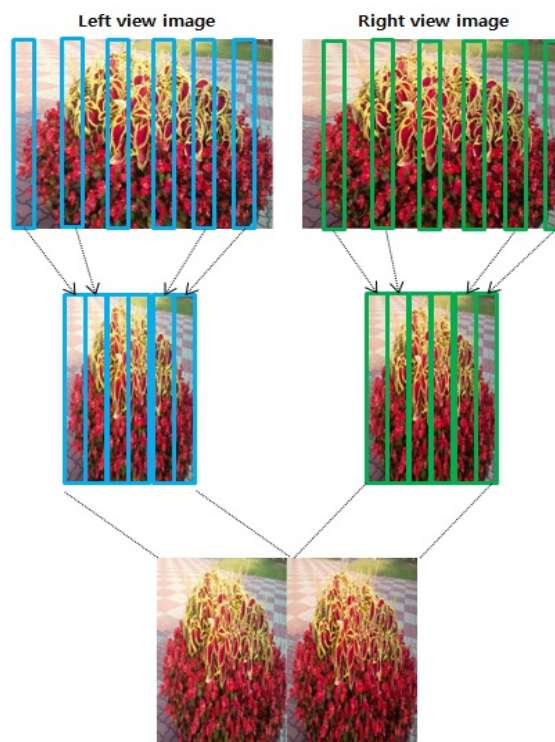
#### 5.3.1 Side-by-side type

Side-by-side type is one of the most widely used stereoscopic composition types. Two respective left view and right view images are put together into one composition image being shown in Figure 2, which shows examples of side-by-side type when the left (right) view part locates in the left (right) side of composition image. It can be rendered in the legacy player and implemented without modification of the system.

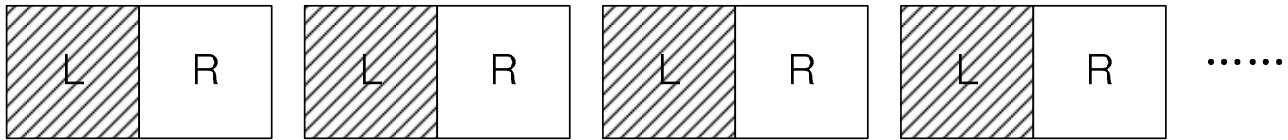


<https://standards.iteh.ai/catalog/standards/sist/3e11663c-abfa-47ff-b788-b166c7070707>

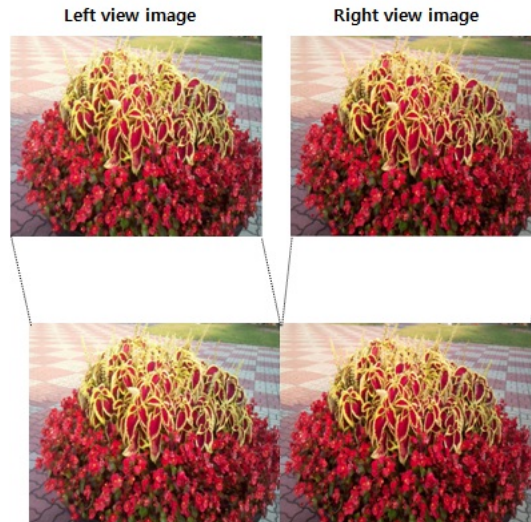
(a) Side-by-side (half) type stereoscopic sequence



(b) Side-by-side (half) type contents for real image



(c) Side-by-side (full) type stereoscopic sequence



(d) Side-by-side (full) type contents for real image

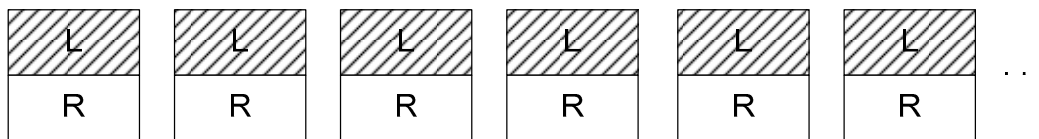
Figure 2 — Examples of the Side-by-side type

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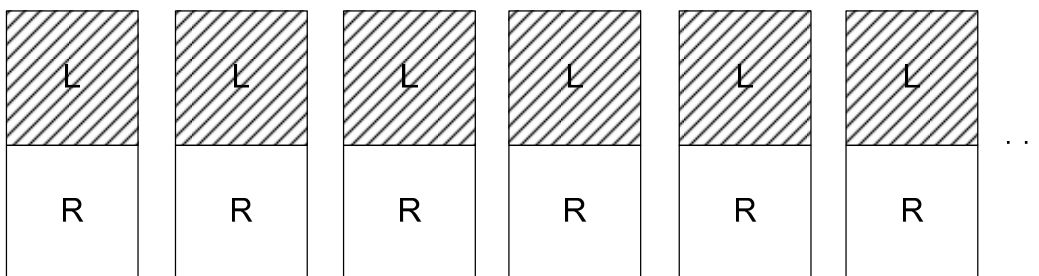
After 5.3.4, add the following: <https://standards.iteh.ai/catalog/standards/sist/3e11663c-abfa-47ff-b788-b186ef38d1ab/iso-iec-23000-11-2009-amd-2-2011>

5.3.5 Top-Bottom type

Two respective left view and right view images are put together into one composition image being shown in Figure AMD2.1, which shows examples of Top-Bottom type when the left (right) view part locates in top (bottom) side of composition image. It can be rendered in the legacy player and implemented without modification of the system.



(a) Top-Bottom (half) type stereoscopic sequence



(b) Top-Bottom (full) type stereoscopic sequence

Figure AMD2.1 — Examples of Top-Bottom type

In 6.1, replace Table 1 with:

**Table 1 — Supported components of Stereoscopic Video AF**

| Type        | Component Name             | Specification  | Standard              |
|-------------|----------------------------|--|-----------------------|
| File format | ISO base media file format | ISO/IEC 14496-12   | ISO/IEC Standards     |
| Visual      | MPEG-4 Video               | ISO/IEC 14496-2 Simple Profile Level 3,<br>ISO/IEC 14496-2 Advanced Simple Profile Level 5 |                       |
|             | MPEG-4 AVC                 | ISO/IEC 14496-10 Baseline Profile Level 1.3,<br>ISO/IEC 14496-10 High Profile Level 4.1    |                       |
| Audio       | MPEG-4 Audio AAC           | ISO/IEC 14496-3  |                       |
|             | MPEG-4 Audio HE-AAC        | ISO/IEC 14496-3  |                       |
| Data        | MPEG-4 LAsE R              | ISO/IEC 14496-20   |                       |
|             | JPEG Image                 | ISO/IEC 10918-1  |                       |
|             | PNG Image                  | ISO/IEC 15948  |                       |
| Voice       | AMR                        | 3GPP TS 26.071   | Non-ISO/IEC Standards |
|             | EVRC                       | TIA/EIA/IS-127   |                       |

In 8.4.3, replace Table 4 with: [ISO/IEC 23000-11:2009/Amd.2:2011](https://standards.iteh.ai/catalog/standards/sist/3e11663c-abfa-47ff-b788-b18c7e3d1b1c/iso-23000-11:2009/amd-2:2011)  
<https://standards.iteh.ai/catalog/standards/sist/3e11663c-abfa-47ff-b788-b18c7e3d1b1c/iso-23000-11:2009/amd-2:2011>

**Table 4 — Stereoscopic composition type**

| Value     | Stereoscopic_composition_type  |
|-----------|--------------------------------|
| 0x00      | Side-by-side (half) type       |
| 0x01      | Vertical line interleaved type |
| 0x02      | Frame sequential type          |
| 0x03      | Left/Right view sequence type  |
| 0x04      | Top-Bottom (half) type         |
| 0x05      | Side-by-side (full) type       |
| 0x06      | Top-Bottom (full) type         |
| 0x07-0xFF | Reserved                       |

In 8.4.3, replace Table 5 with:

**Table 5 — The positions of stereoscopic Left/Right view according to the is\_left\_first value**

| Type                      | is_left_first = 1     |                         | is_left_first = 0       |                       |
|---------------------------|-----------------------|-------------------------|-------------------------|-----------------------|
|                           | Left view             | Right view              | Left view               | Right view            |
| Side-by-side (half/full)  | Left side             | Right side              | Right side              | Left side             |
| Vertical line interleaved | Odd line              | Even line               | Even line               | Odd line              |
| Frame sequential          | Odd frame             | Even frame              | Even frame              | Odd frame             |
| Left/Right view sequence  | Primary view sequence | Secondary view sequence | Secondary view sequence | Primary view sequence |
| Top-Bottom (half/full)    | Top side              | Bottom side             | Bottom side             | Top side              |

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