

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Common Control Interface –**Part 3: Video****FOREWORD**

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International Standard IEC XXX has been prepared by subcommittee XX: TITLE, of IEC technical committee XX:

The text of this standard is based on the following documents:

FDIS	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date¹ indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

¹ The National Committees are requested to note that for this publication the stability date is

0 Introduction

IEC 62379 specifies the common control interface, a protocol for managing equipment which conveys audio and/or video across digital networks.

This part of IEC 62379 specifies those aspects that are specific to video equipment.

An introduction to the common control interface is given in IEC 62739-1.

0.1 Structure of the family of standards

IEC 62379 specifies the Common Control Interface, a protocol for managing networked audiovisual equipment. It is intended to include the following Parts:

- 1) General
- 2) Audio
- 3) Video
- 4) Data
- 5) Transmission over networks
- 6) Packet transfer service
- 7) Measurement for EBU ECN-IPM

Part 1 specifies aspects which are common to all equipment.

Parts 2 to 4 specify control of internal functions specific to equipment carrying particular types of live media. Part 4 does not refer to packet data such as the control messages themselves.

Part 3 (this document) specifies those aspects that are specific to video equipment.

Part 5 specifies control of transmission of these media over each individual network technology. It includes network specific management interfaces along with network specific control elements that integrate into the control framework.

Part 6 specifies carriage of control and status messages and non-audiovisual data over transports that do not support audio and video, such as RS232 serial links, with (as with Part 5) a separate subpart for each technology.

Part 7 specifies those aspects that are specific to the measurement requirements of the EBU ECN-IPM Group.

An introduction to the Common Control Interface is given in IEC 62739-1.

Common Control Interface –

Part 3: Video

1 Scope

This International Standard specifies aspects of the Common Control Interface of IEC 62379-1 that are specific to video.

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.

IEC 62379-1:2007 Common Control Interface for Networked Audio and Video Products – Part 1: General

IEC 62379-2:2008 Common Control Interface for Networked Audio and Video Products – Part 2: Audio

[Further references to be added as required]

[Should we include EBU TECH 3345 here? It is useful, but not indispensable, so maybe not here but somewhere else?]

3 Terms, definitions and abbreviations

For the purposes of this document, the terms and definitions given in IEC 62379-1 apply along with the following abbreviations.

Abbreviations

Internet Group Management Protocol
IGMP

Time Stamped Delay Factor
TS-DF

Programme ID
PID

Standard Definition
SD

High Definition
HD

Progressive Segmented Frame
PSF

Forward Error Correction

FEC

Asynchronous Serial Interface

ASI

Session Initiation Protocol

SIP

Media delivery Index

MDI

Real-time Protocol

RTP

4 Video format definitions**4.1 Video signal format definitions**

At any point in the video signal chain, the video data will be in a particular format. For management purposes, the format shall be identified by an object identifier, either a "Common control interface standard" object identifier as defined in this standard or an object identifier defined elsewhere.

NOTE Permitting video format identifiers to be defined outside this standard allows use of proprietary formats within the standard protocol and also allows industry standard formats to emerge that may eventually be incorporated into future revisions of this standard

4.1.1 Video parameters**4.1.1.1 General**

The definitions in 4.1.2 make reference to "parameters" which provide additional information about the format. These parameters shall be mapped to "sub-identifier" values as specified in the other subclauses of 4.1.1. Any parameter may be "unspecified".

The "sub-identifier" values shall be appended to the object identifiers as additional arcs, in the order in which the parameters are listed in the relevant subclause of 4.1.2; except that if a parameter is unspecified, and either it is the last parameter or all subsequent parameters are also unspecified, then it shall be omitted.

NOTE For all parameters, "unspecified" is coded as zero, so this rule ensures that the OID does not end with a zero arc.

EXAMPLE: If the last two parameters are line resolution and scan type, then 1080P would be coded as .1080.1, 1080P (with scan type unspecified) as .1080, and P (with line resolution unspecified) as .0.1.

4.1.1.2 Frame rate

The sub-identifier for frame rate shall be a value of the following type:

```
FrameRate ::= INTEGER
```

```
-- An integer representing the frame rate of the encoded video signal.
```

-- A value of zero shall indicate unspecified.

4.1.1.3 Source type

The sub-identifier for the source type of the video shall be a value of the following type:

```
SourceType ::= INTEGER {
    unspecified (0),
    sd          (1),
    hd          (2)
} (unspecified..hd)
```

-- An integer representing the source type of the encoded video signal.
-- A value of zero shall indicate unspecified.

4.1.1.4 Line resolution

The sub-identifier for the line resolution shall be a value of the following type:

```
LineResolution ::= INTEGER
-- An integer representing the number of vertical lines of
-- resolution of the encoded video signal.
-- A value of zero shall indicate unspecified.
```

4.1.1.5 Scan type

The sub-identifier for the video scan type shall be a value of the following type:

```
ScanType ::= INTEGER {
    unspecified (0),
    progressive (1),
    interlaced  (2),
    psf         (3)
} (unspecified..psf)
```

-- An integer representing the scan type of the encoded video signal.
-- A value of zero shall indicate unspecified.

4.1.1.6 Coding type

The sub-identifier for the video coding type shall be a value of the following type:

```
CodingType ::= INTEGER {
    unspecified (0),
    uncompressed (1),
    mpeg2       (2),
    h264        (3),
    jpeg2000    (4),
    smptevc2    (5),
    vp8         (6),
    h264ScaleExtn (7)
} (unspecified..h264ScaleExtn)
```

-- An integer representing the coding type of the encoded video signal.
-- A value of zero shall indicate unspecified.

4.1.1.7 Source Aspect Ratio

The sub-identifier for the source aspect ratio shall be a value of the following type:

```
SourceAspectRatio ::= INTEGER {
    Unspecified (0),
    fourByThree (43),
```

```
sixteenByNine (169),  
twoPointTwoOne (221  
} (unspecified..twoPointTwoOne)
```

```
-- An integer representing the source aspect ratio of the encoded  
-- video signal.  
-- A value of zero shall indicate unspecified.
```

4.1.1.8 Active Format Description Codes

The sub-identifier for the active format description codes shall be a value of the following type:

```
ActiveFormatDescriptionCodes ::= INTEGER  
-- An integer representing the active format description codes for  
-- video used with the range of source aspect ratios.  
-- The codes are from 0000-1111  
-- See SMPTE ST 2016-1:2009 for code descriptions.
```

4.1.2 Video signal formats

Video signal formats shall be rooted at the following location in the MIB tree:

```
iec62379          OBJECT IDENTIFIER ::= { iso(1) standard(0) 62379 }
videoFormat      OBJECT IDENTIFIER ::= { iec62379 video(3) format(2) }
videoSignalFormat OBJECT IDENTIFIER ::= { videoFormat Signal(1) }
```

The following definitions shall be used to identify the specified formats.

NOTE: 6.5.3 contains an exemplar set of formats defined by this standard.

4.1.2.1 Unspecified video

```
unspecifiedVideo OBJECT IDENTIFIER ::=
                                { videoSignalFormat unspecified(0) }
-- wildcard - any supported format allowed
```

4.1.2.2 No video

```
noVideo          OBJECT IDENTIFIER ::= { videoSignalFormat none(1) }
-- indicates the output is non-existent
```

4.1.2.3 Invalid video

```
invalidVideo     OBJECT IDENTIFIER ::= { videoSignalFormat invalid(2) }
-- indicates an error, such as inability to decode a signal earlier in
-- the chain
```

4.1.2.4 Video source

```
videoSource      OBJECT IDENTIFIER ::= { videoSignalFormat source(3) }
-- video source
```

The video source identifier shall have four parameters. The first shall be the frame rate, the second shall be the video source type, the third shall be the number of vertical lines of resolution and the fourth shall be the scan type.

4.1.2.5 Video coding type

```
videoCodingType  OBJECT IDENTIFIER ::= { videoSignalFormat coding(4) }
-- video coding type
```

The video coding type identifier shall have one parameter. This shall be either the coding type or uncompressed, if not coded.

4.1.2.6 Aspect ratio

```
aspectRatio      OBJECT IDENTIFIER ::=
                                { videoSignalFormat aspectRatio (5) }
-- aspect ratio of the video
```

The video aspect ratio identifier shall have two parameters. The first shall be the source aspect ratio, the second shall be the active format description code for the source aspect ratio.

4.2 Video transport format definitions

Video transport formats shall be rooted at the following location in the MIB tree:

```
videoTransportFormat OBJECT IDENTIFIER ::= { videoFormat transport(2) }
```

The following definitions shall be used to identify the specified transport formats.

```
unspecifiedTransport OBJECT IDENTIFIER ::=
    { videoTransportFormat unspecified(0) }
```

```
analogue OBJECT IDENTIFIER ::= { videoTransportFormat analogue(1) }
```

```
TBD1 OBJECT IDENTIFIER ::= { videoTransportFormat TBD1(2) }
```

```
TBD2 OBJECT IDENTIFIER ::= { videoTransportFormat TBD2(3) }
```

```
TBD3 OBJECT IDENTIFIER ::= { videoTransportFormat TBD3(4) }
```

4.3 Video metadata format definitions

Video metadata formats shall be rooted at the following location in the MIB tree:

```
videoMetadataFormat OBJECT IDENTIFIER ::= { videoFormat metadata(3) }
```

The following definitions shall be used to identify the specified metadata formats.

```
unspecifiedMetadata OBJECT IDENTIFIER ::=
    { videoMetadataFormat unspecified(0) }
```

5 MIB definitions for video blocks

5.1 General

This clause defines a set of managed object types for representing control functions in network controlled video equipment. The format of the definitions is as specified in IEC 62379-1.

For management purposes, a piece of video equipment shall be modelled as a number of discrete video blocks and video connectors, as specified in IEC 62379-1. Each video block may have zero or more inputs and zero or more outputs, and each input or output may carry one or more channels. Each video connector shall connect one video block output to one video block input with a one-to-one mapping of channels between the blocks.

NOTE 1 A piece of equipment may be fixed-function, in which case the number of video blocks present and the connections between them will be immutable, or it may be programmable, in which case the number of video blocks present and/or the connections between them may be changed by the user.

Each video block shall be modelled either by one of the standard video block types defined in this standard or by a video block type defined elsewhere. Associated with each defined block type shall be a (possibly empty) group of managed object types that represent the control functions for that block. A block type shall be identified by the node in the object identifier tree that is the root node for the group of managed object types associated with that block type.

NOTE 2 Permitting video block types to be defined outside this standard allows control of proprietary functions using the standard protocol and also allows industry standard block types to emerge that may eventually be incorporated into future revisions of this standard.

NOTE 3 An empty group of managed object types is permitted to allow for blocks that have no associated control functions.

NOTE 4 6.5.3 contains worked examples of the block structure.

5.2 Type definitions

In addition to the types defined in IEC 62379-1, the following types are used to specify the syntax of the abstract data structures representing managed object values.

5.3 Textual conventions

```
VideoTransportType ::= OBJECT IDENTIFIER
-- A reference to the transport used for an video connection.
-- The value may be defined in 4.2, or in a sub-part of IEC 62379-5, or
-- elsewhere.
```

[TBD. Not yet clear what these will be, but add as appropriate. Some could be imported from IEC 62379-7 See IEC62379-7-IPM-TC-MIB.]

5.3.1 Sequences

[Sequences to be added as appropriate according to which video blocks are to be generated].

5.4 Video port and associated managed object type definitions

5.4.1 Generic port functionality

All video inputs to and outputs from the unit shall be represented using a video port block. A base table of managed objects provides control common to all ports; extension tables provide functionality specific to certain types of port.

A video port block shall have the following structure, where c is the number of channels on the input or output:



Figure 1 – Video port blocks

The group of objects in table 1 shall be implemented by all compliant video equipment that contains one or more video ports. The root node for these objects shall be

```
{ iso(1) standard(0) iec62379 video(3) videoMIB(1) videoPort(1) }
```

This node shall be used as the video block type identifier for video port blocks.

Table 1: Managed objects for video ports

Identifier	Syntax	Index	Readable	Writable	Volatile	Status
vPortTable(1)	SEQUENCE OF VPortEntry		none	none	no	m
↳vPortEntry(1)	VPortEntry		none	none	no	m
↳vPortBlockId(1)	BlockId	yes	none	none	no	m
↳vPortDirection(2)	PortDirection		listener	none	no	m
↳vPortFormat(3)	MediaFormat		listener	none	yes	m
↳vPortTransport(4)	VideoTransportType		listener	none	no	o

Identifier	Syntax	Index	Readable	Writable	Volatile	Status
LvPortName(5)	Utf8String		listener	supervisor	no	o

5.4.1.1 vPortTable

A table of video port descriptors for this unit. Each video port on the unit has a corresponding entry in this table.

5.4.1.2 vPortEntry

An entry in the video port table.

5.4.1.3 vPortBlockId

The block identifier for this port. Used as an index when accessing the video port table.

5.4.1.4 vPortDirection

The direction (input or output) of this port.

5.4.1.5 vPortFormat

The format of the video data currently being received or transmitted via this port. If the port is not active, the value `noVideo` shall be returned.

5.4.1.6 vPortTransport

The type of transport used by the port.

5.4.1.7 vPortName

The name assigned to this port. This is an arbitrary text string assigned by the system manager.

[Add in at this point anything else that could be useful...see the Audio doc (IEC 62379-2) for what's at this point, e.g locked to reference, etc....]

5.5 Other video block and associated managed object type definitions

5.5.1 Video mixer blocks

[I'm assuming that this may well have a similar structure to audio mixer blocks, so have included that here, although it may require some adjustments in the light of detailed and/or any future information.]

A video mixer block shall have the following structure:

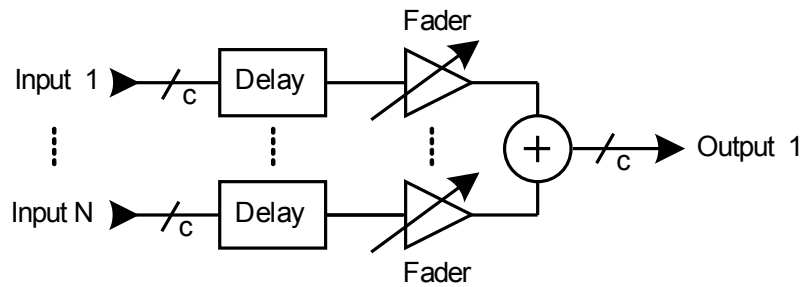


Figure 2 - Video mixer block

where c is the number of channels on a connection.

NOTE 1 A video mixer block may be used to represent a simple switched selector or combiner, by limiting the permitted values for the fader level controls to mInfinity or fullScale.

NOTE 2 The delay function permits video streams that have passed through various processing or transport paths to be brought back into time alignment, either with other video streams or with associated audio streams. Equipment that doesn't support this functionality is represented as having a fixed zero delay.

The group of objects in table 2 shall be implemented by all compliant audio equipment that has a management model that incorporates one or more audio mixer blocks. The root node for these objects shall be

{ iso(1) standard(0) iec62379 video(3) videoMIB(1) videoMixer(2) }

This node shall be used as the block type identifier for video mixer blocks.

Table 2 - Managed objects for video mixer blocks

Identifier	Syntax	Index	Readable	Writable	Volatile	Status
vMixerBlockTable(1)	SEQUENCE OF VMixerBlockEntry		none	none	no	m
└LvMixerBlockEntry(1)	VMixerBlockEntry		none	none	no	m
└└vMixerBlockId(1)	BlockId	yes	none	none	no	m
└└└vMixerFadeDuration(2)	CardinalNumber		listener	operator	no	o
└└└LvMixerFadeNow(3)	TruthValue		listener	operator	yes	o
vMixerInputTable(2)	SEQUENCE OF VMixerInputEntry		none	none	no	m
└LvMixerInputEntry(1)	VMixerInputEntry		none	none	no	m
└└vMixerInputBlockId(1)	BlockId	yes	none	none	no	m
└└└vMixerInputNumber(2)	IndexNumber	yes	none	none	no	m
└└└└vMixerInputLevel(3)	VideoLevel		listener	operator	no	m
└└└└vMixerInputFadeToLevel(4)	VideoLevel		listener	operator	no	o
└└└└└LvMixerInputDelay(5)	CardinalNumber		listener	operator	no	o

5.5.1.1 vMixerBlockTable

A table of video mixer block descriptors for this unit. Each video mixer block in the unit has a corresponding entry in this table.

5.5.1.2 vMixerBlockEntry

An entry in the video mixer block table.

5.5.1.3 vMixerBlockId

The block identifier for this block. Used as an index when accessing the video mixer block table.

5.5.1.4 vMixerFadeDuration

The transition time (in milliseconds) for a smooth fade or cross-fade operation performed by this block. A value of zero indicates a hard switchover.

5.5.1.5 vMixerFadeNow

When set to `true`, causes the block to perform a smooth fade or cross-fade operation. Using values taken from this block's entries in the mixer input table, the unit shall simultaneously ramp the fader level for each input in `vMixerInputEntry` from its current value to the value specified by `vMixerInputFadeToLevel`. Automatically reset to `false` when the operation is complete.

5.5.1.6 vMixerInputTable

A table of video mixer input descriptors for this unit. Each input of each video mixer block in the unit has a corresponding entry in this table.

5.5.1.7 vMixerInputEntry

An entry in the video mixer input table.

5.5.1.8 vMixerInputBlockId

The block identifier of the associated block. Used as an index when accessing the video mixer input table.

5.5.1.9 vMixerInputNumber

The block input number for this input. Used as an index when accessing the video mixer input table.

5.5.1.10 vMixerInputLevel

The fader level for this input. When a level is set, the fader immediately changes to the level specified, over the duration in `vMixerFadeDuration`. For blocks that only support switching between inputs, the only permitted values are `mInfinity` and `fullScale`. Blocks that automatically switch between inputs may reject `SET` operations on this object.

5.5.1.11 vMixerInputFadeToLevel

The fader level for this input that will be applied when `vMixerFadeNow` is set to `true`. For blocks that only support switching between inputs, the only permitted values are `mInfinity` and `fullScale`. Blocks that automatically switch between inputs may reject `SET` operations on this object.

5.5.1.12 vMixerInputDelay

The delay (in microseconds) applied to samples arriving at this input.

[Insert other (new?) video blocks (similar to audio?) as necessary here.]

6 Status broadcasts

6.1 General

NOTE Status broadcasts are specified in IEC 62379-1. This standard specifies video-related status pages and groups.

6.2 Type definitions

In addition to the types defined in IEC 62379-1, the following types are used to specify the syntax of the abstract data structures used in status pages:

[See 6.2.1 and 6.2.2 of IEC 62379-2 for examples of what to insert here – but for video, if required]

6.3 Video formats mapping

NOTE Due to the varying length of object identifiers, providing an indication of a particular video format in a status page is problematic. Consequently, a table assigning an arbitrary id to a video format is defined to allow a shorter, fixed length code to be associated with a format. The mapping chosen is equipment specific and management software should query the table with SNMP GET-NEXT requests on start-up to learn a device's map.

The group of objects in table 3 shall be implemented by all compliant video equipment that reports video format information in status pages. The root node for these objects shall be

{ iso(1) standard(0) iec62379 video(3) videoStatusMIB(4) }

Table 3: Managed objects for video format mappings

Identifier	Syntax	Index	Readable	Writable	Volatile	Status
videoFormatsMapTable (1)	SEQUENCE OF VideoFormatsMapEntry		none	none	no	m
↳videoFormatsMapEntry (1)	VideoFormatsMapEntry		none	none	no	m
↳vfmNumber (1)	IndexNumber	yes	none	none	no	m
↳vfmFormat (2)	MediaFormat		listener	supervisor	yes	m

6.3.1 videoFormatsMapTable

A table of video format to index number mappings for this unit. Each mapping has a corresponding entry in this table.

6.3.2 videoFormatsMapEntry

An entry in video formats map table.

6.3.3 vfmNumber

The video format number for this mapping.

6.3.4 vfmFormat

The format of the video data associated with this format number.

6.4 Page formats

6.4.1 Video port page

This page shall be produced by all video ports and shall contain the entries in table 4:

Table 4: Status entries for video port page

<i>Octet(s)</i>	<i>Description</i>	<i>Value</i>	<i>Note(s)</i>
1..2	Page number		
3..4	Block identifier	BlockId	1
5..8	Video format	IndexNumber	2
9..10	Channel 1 peak level	VideoLevel	3
...	repeat previous entry for each remaining channel	...	4

Notes:

- a) Coded with the block identifier for the block.
- b) Coded with the mapping from `videoFormatsMapTable` for the video format of the port as given by `vPortFormat`.
- c) Coded with the video peak level detected on the specified channel of the specified port since the last time this page was broadcast, in units of 0.01dB. A value of 0 represents full scale and values of 1 or greater indicate overload.
- d) The number of video channels shall be inferred from the page length.

6.4.2 Video mixer page

This page shall be produced by all video mixer blocks and shall contain the entries in table 5:

Table 5: Status entries for video mixer page

<i>Octet(s)</i>	<i>Description</i>	<i>Value</i>	<i>Note(s)</i>
1..2	Page number		
3..4	Block identifier	BlockId	1
5..8	Input number	IndexNumber	2
9..12	Delay	CardinalNumber	3
13..14	Level	VideoLevel	4
...	repeat previous three entries for each input	...	5

Notes:

- a) Coded with the block identifier for the block.
- b) Coded with the number of the current input as given by `vMixerInputNumber` in the table entry associated with this mixer input.
- c) Coded with the current value of `vMixerInputDelay` in the table entry associated with this mixer input.
- d) Coded with the current value of `vMixerInputLevel` in the table entry associated with this mixer input.
- e) The number of inputs to the mixer shall be inferred from the page length.

[Insert other video block format pages (similar to audio?) as necessary here Contents would depend upon video blocks present.]

6.5 Page groups

6.5.1 videoPorts

This group shall be supported by all video units with ports. The root node for this group shall be

{ iso(1) standard(0) iec62379 video(3) videoStatusGroup(3) videoPorts(1) }

A broadcast of this group shall consist of the following:

- page 1: Video port, broadcast at the base page rate
- page 2: AES3 ancillary data, broadcast at half the base page rate

The default base page rate for this group shall be 60 pages per minute (1 page every second).

6.5.2 standardVideoBlocks

This group shall be supported by all video units with some blocks defined in this standard. The root node for this group shall be

{ iso(1) standard(0) iec62379 video(3) videoStatusGroup(3) standardVideoBlocks(2) }

A broadcast of this group shall consist of the following:

- page 1: Video mixer, broadcast at the base page rate
- page 2: Video crosspoint, broadcast at the base page rate
- page 3: Video clip player, broadcast at the base page rate
- page 4: Video limiter, broadcast at the base page rate
- page 5: Video converter, broadcast at the base page rate

The default base page rate for this group shall be 60 pages per minute (1 page every second).

6.5.3 videoAlarms

This group shall be supported by all video units with alarms. The root node for this group shall be

{ iso(1) standard(0) iec62379 video(3) videoStatusGroup(3) videoAlarms (3) }

A broadcast of this group shall consist of the following:

- page 1: Video Level Alarm, broadcast at the base page rate

The default base page rate for this group shall be 60 pages per minute (1 page every second).

Annex A (informative)

Machine-readable video format definitions

This annex provides a machine-readable version of the video data format definitions which is intended to be interpretable by standard MIB browsing software tools. If there is any inconsistency between this annex and clause 4, clause 4 takes precedence.

The format used to describe the data format identifiers conforms to IETF STD 58 (SMIv2).

NOTE This annex is not intended to cover every format permitted by the definitions in clause 4.

```

IEC62379-3-FORMATS DEFINITIONS ::= BEGIN

    IMPORTS
        iec62379
            FROM IEC62379-1-MIB
        MODULE-IDENTITY, OBJECT-IDENTITY
            FROM SNMPv2-SMI
        TEXTUAL-CONVENTION
            FROM SNMPv2-TC;

    -- 1.0.62379.3.2
    videoFormat MODULE-IDENTITY
        LAST-UPDATED "201106211200Z"           -- June 21, 2011 at 12:00 GMT
        ORGANIZATION
            "IEC PT62379"
        CONTACT-INFO
            "Not specified"
        DESCRIPTION
            "The video format identifiers defined in clause 4 of
            IEC 62379-3 Ed.1.

            Note that although the video formats defined here have been
            specified

            for use by the EBU ECN-IPM group, they are likely
            to be usable elsewhere. The arrangement also allows the set
            of formats to be easily expanded to include future formats.
            These formats are currently used in IEC 62379-7, Measurements
            for EBU ECN-IPM."
        REVISION "201106101200Z"           -- June 10, 2011 at 12:00 GMT
        DESCRIPTION
            "Moved invalidVideo up and added additional coding types VP8
            and

            H264 Scalable Extn and also Aspect Ratio entries.
            Removed Video bit rate types and value."
        ::= { video 2 }

    --
    -- Textual conventions
    --

    -- 4.1 Video signal format definitions
    -- 4.1.1 Video parameters
        FrameRate ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "The video frame rate in Hz."
            SYNTAX INTEGER (0..2147483647)

        SourceType ::= TEXTUAL-CONVENTION
            STATUS current

```

```

        DESCRIPTION
            "An enumeration describing the video definition source type."
        SYNTAX INTEGER
            {
                unspecified(0),
                sd(1),
                hd(2)
            }
-- {
-- unspecified(0),
-- sd(1),
-- hd(2)
-- } (unspecified..hd)
--
        LineResolution ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "An integer representing the number of vertical lines of
resolution."
            SYNTAX INTEGER (0..2147483647)

        ScanType ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "An enumeration describing the video scan type.
                psf = Progressive Segmented Frame"
            SYNTAX INTEGER
                {
                    unspecified(0),
                    progressive(1),
                    interlaced(2),
                    psf(3)
                }
-- {
-- unspecified(0),
-- progressive(1),
-- interlaced(2),
-- psf(3)
-- } (unspecified..psf)
--
        CodingType ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "An enumeration describing the video coding type."
            SYNTAX INTEGER
                {
                    unspecified(0),
                    uncompressed(1),
                    mpeg2(2),
                    h264(3),
                    jpeg2000(4),
                    smptecvc2(5),
                    vP8(6),
                    h264ScaleExtn(7)
                }
-- {
-- unspecified(0),
-- uncompressed(1),
-- mpeg2(2),
-- h264(3),
-- jpeg2000(4),
-- smptecvc2(5),
-- vP8(6),
-- h264ScaleExtn(7)
-- } (unspecified..h264ScaleExtn)
--
        SourceAspectRatio ::= TEXTUAL-CONVENTION
            STATUS current
            DESCRIPTION
                "An enumeration describing the source aspect ratio.

```

```
        fourByThree = 4:3
        sixteenByNine = 16:9
        twoPointTwoOne = 2.12:1"
    SYNTAX INTEGER
        {
            unspecified(0),
            fourByThree(43),
            sixteenByNine(169),
            twoPointTwoOne(221)
        }
-- {
-- unspecified(0),
-- fourByThree(43),
-- sixteenByNine(169),
-- twoPointTwoOne(221)
-- } (unspecified..twoPointTwoOne)
--
    ActiveFormatDescriptionCodes ::= TEXTUAL-CONVENTION
        STATUS current
        DESCRIPTION
            "An integer representing the active format description codes
for video used
            with the range of source aspect ratios."
        SYNTAX INTEGER (0..15)

--
-- Node definitions
--

    -- 1.0.62379.3
    video OBJECT IDENTIFIER ::= { iec62379 3 }

-- 4.1.2 Video signal formats
    -- 1.0.62379.3.2.1
    videoSignalFormat OBJECT IDENTIFIER ::= { videoFormat 1 }

-- 4.1.2.1 Unspecified video
    -- 1.0.62379.3.2.1.0
    unspecifiedVideo OBJECT-IDENTITY
        STATUS current
        DESCRIPTION
            "VideoFormat wildcard value - any supported format allowed."
        ::= { videoSignalFormat 0 }

-- 4.1.2.2 No video
    -- 1.0.62379.3.2.1.1
    noVideo OBJECT-IDENTITY
        STATUS current
        DESCRIPTION
            "Indicates the output is non-existent."
        ::= { videoSignalFormat 1 }

-- 4.1.2.3 Invalid video
    -- 1.0.62379.3.2.1.2
    invalidVideo OBJECT-IDENTITY
        STATUS current
        DESCRIPTION
            "Indicates an error, such as an inability to decode a signal
earlier in the chain."
        ::= { videoSignalFormat 2 }

-- 4.1.2.4 Video Source
    -- 1.0.62379.3.2.1.3
```

```
videoSource OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video source descriptions."
  ::= { videoSignalFormat 3 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.23
frameRate23 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 23Hz.
    Actual value is 23.976Hz.

    Reserved for future use."
  ::= { videoSource 23 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.24
frameRate24 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 24Hz.

    Reserved for future use."
  ::= { videoSource 24 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.25
frameRate25 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 25Hz."
  ::= { videoSource 25 }

-- 4.1.1.3 Source Type
-- 1.0.62379.3.2.1.3.25.1
frameRate25SD OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Standard Definition Video at a Frame Rate of 25Hz."
  ::= { frameRate25 1 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.25.1.625
frameRate25SDat625 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Standard Definition Video at a Frame Rate of 25Hz at 625
vertical lines of
    resolution."
  ::= { frameRate25SD 625 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.1.625.1
frameRate25SDat625P OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Standard Definition Video at a Frame Rate of 25Hz at 625
vertical lines of
    resolution with progressive scanning."
  ::= { frameRate25SDat625 1 }
```

```
-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.1.625.2
frameRate25SDat625I OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Standard Definition Video at a Frame Rate of 25Hz at 625
vertical lines of
    resolution with interlaced scanning."
  ::= { frameRate25SDat625 2 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.1.625.3
frameRate25SDat625S OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Standard Definition Video at a Frame Rate of 25Hz at 625
vertical lines of
    resolution with progressive segmented frame."
  ::= { frameRate25SDat625 3 }

-- 4.1.1.3 Source Type
-- 1.0.62379.3.2.1.3.25.2
frameRate25HD OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 25Hz."
  ::= { frameRate25 2 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.25.2.1080
frameRate25HDat1080 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 25Hz at 1080
vertical lines of
    resolution."
  ::= { frameRate25HD 1080 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.2.1080.1
frameRate25HDat1080P OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 25Hz at 1080
vertical lines of
    resolution with progressive scanning."
  ::= { frameRate25HDat1080 1 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.2.1080.2
frameRate25HDat1080I OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 25Hz at 1080
vertical lines of
    resolution with interlaced scanning."
  ::= { frameRate25HDat1080 2 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.25.2.1080.3
frameRate25HDat1080S OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
```

```

        "High Definition Video at a Frame Rate of 25Hz at 1080
vertical lines of
        resolution with progressive segmented frame."
        ::= { frameRate25HDat1080 3 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.29
frameRate29 OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Video at a Frame Rate of 29Hz.
        Actual value is 29.97Hz."
        ::= { videoSource 29 }

-- 4.1.1.3 Source Type
-- 1.0.62379.3.2.1.3.29.1
frameRate29SD OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Standard Definition Video at a Frame Rate of 29Hz."
        ::= { frameRate29 1 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.29.1.525
frameRate29SDat525 OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Standard Definition Video at a Frame Rate of 29Hz at 525
vertical lines of
        resolution."
        ::= { frameRate29SD 525 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.1.525.1
frameRate29SDat525P OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Standard Definition Video at a Frame Rate of 29Hz at 525
vertical lines of
        resolution with progressive scanning."
        ::= { frameRate29SDat525 1 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.1.525.2
frameRate29SDat525I OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Standard Definition Video at a Frame Rate of 29Hz at 525
vertical lines of
        resolution with interlaced scanning."
        ::= { frameRate29SDat525 2 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.1.525.3
frameRate29SDat525S OBJECT-IDENTITY
    STATUS current
    DESCRIPTION
        "Standard Definition Video at a Frame Rate of 29Hz at 525
vertical lines of
        resolution with progressive segmented frame."
        ::= { frameRate29SDat525 3 }

-- 4.1.1.3 Source Type

```

```
-- 1.0.62379.3.2.1.3.29.2
frameRate29HD OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 29Hz."
  ::= { frameRate29 2 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.29.2.1080
frameRate29HDat1080 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 29Hz at 1080
vertical lines of
  resolution."
  ::= { frameRate29HD 1080 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.2.1080.1
frameRate29HDat1080P OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 29Hz at 1080
vertical lines of
  resolution with progressive scanning."
  ::= { frameRate29HDat1080 1 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.2.1080.2
frameRate29HDat1080I OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 29Hz at 1080
vertical lines of
  resolution with interlaced scanning."
  ::= { frameRate29HDat1080 2 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.29.2.1080.3
frameRate29HDat1080S OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 29Hz at 1080
vertical lines of
  resolution with progressive segmented frame."
  ::= { frameRate29HDat1080 3 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.30
frameRate30 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 30Hz.

    Reserved for future use."
  ::= { videoSource 30 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.50
frameRate50 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 50Hz."
  ::= { videoSource 50 }
```

```
-- 4.1.1.3 Source Type
-- 1.0.62379.3.2.1.3.50.2
frameRate50HD OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 50Hz."
  ::= { frameRate50 2 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.50.2.720
frameRate50HDat720 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 50Hz at 720 vertical
lines of
    resolution."
  ::= { frameRate50HD 720 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.50.2.720.1
frameRate50HDat720P OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 50Hz at 720 vertical
lines of
    resolution with progressive scanning."
  ::= { frameRate50HDat720 1 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.50.2.1080
frameRate50HDat1080 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 50Hz at 1080
vertical lines of
    resolution."
  ::= { frameRate50HD 1080 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.50.2.1080.1
frameRate50HDat1080P OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "High Definition Video at a Frame Rate of 50Hz at 1080
vertical lines of
    resolution with progressive scanning."
  ::= { frameRate50HDat1080 1 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.59
frameRate59 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video at a Frame Rate of 59Hz.
    Actual value is 59.94Hz.

    Colloquially also known as 60!"
  ::= { videoSource 59 }

-- 4.1.1.3 Source Type
-- 1.0.62379.3.2.1.3.59.2
frameRate59HD OBJECT-IDENTITY
```

```
STATUS current
DESCRIPTION
    "High Definition Video at a Frame Rate of 59Hz."
::= { frameRate59 2 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.59.2.720
frameRate59HDat720 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "High Definition Video at a Frame Rate of 59Hz at 720 vertical
lines of
    resolution."
::= { frameRate59HD 720 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.59.2.720.1
frameRate59HDat720P OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "High Definition Video at a Frame Rate of 59Hz at 720 vertical
lines of
    resolution with progressive scanning."
::= { frameRate59HDat720 1 }

-- 4.1.1.4 Line resolution
-- 1.0.62379.3.2.1.3.59.2.1080
frameRate59HDat1080 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "High Definition Video at a Frame Rate of 59Hz at 1080
vertical lines of
    resolution."
::= { frameRate59HD 1080 }

-- 4.1.1.5 Scan Type
-- 1.0.62379.3.2.1.3.59.2.1080.1
frameRate59HDat1080P OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "High Definition Video at a Frame Rate of 59Hz at 1080
vertical lines of
    resolution with progressive scanning."
::= { frameRate59HDat1080 1 }

-- 4.1.1.2 Frame Rate
-- 1.0.62379.3.2.1.3.60
frameRate60 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "Video at a Frame Rate 60Hz.

    Reserved for future use."
::= { videoSource 60 }

-- 4.1.2.5 Video Coding Type
-- 1.0.62379.3.2.1.4
videoCodingType OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "Video coding type (if applicable)."
::= { videoSignalFormat 4 }
```

```
-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.0
codingTypeUnspecified OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "Unspecified video."
::= { videoCodingType 0 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.1
codingTypeUncompressed OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "Uncompressed video."
::= { videoCodingType 1 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.2
codingTypeMPEG2 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "MPEG2 coded video."
::= { videoCodingType 2 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.3
codingTypeH264 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "H264 coded video."
::= { videoCodingType 3 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.4
codingTypeJPEG2000 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "JPEG2000 coded video."
::= { videoCodingType 4 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.5
codingTypeSMPTEVC2 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "SMPTE-VC2 coded video (DIRAC)"
::= { videoCodingType 5 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.6
codingTypeVP8 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "VP8 coded video"
::= { videoCodingType 6 }

-- 4.1.1.6 Coding Type
-- 1.0.62379.3.2.1.4.7
codingTypeH264ScaleExtn OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "H.264 Advanced Video Coding (AVC) with
    Scalable Video Coding (SVC) coded video"
```

```
 ::= { videoCodingType 7 }

-- 4.1.2.6 Video Aspect Ratio
-- 1.0.62379.3.2.1.5
aspectRatio OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video aspect ratio descriptions."
  ::= { videoSignalFormat 5 }

-- 4.1.1.7 Source Aspect Ratio
-- 1.0.62379.3.2.1.5.0
sourceAspectRatioUnspecified OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "The video source aspect ratio is unspecified."
  ::= { aspectRatio 0 }

-- 4.1.1.8 Active Format Description
-- 1.0.62379.3.2.1.5.0.0
srceARUnspecifiedAFD0000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatioUnspecified 0 }

-- 4.1.1.7 Source Aspect Ratio
-- 1.0.62379.3.2.1.5.43
sourceAspectRatio4x3 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video with an aspect ratio of 4:3."
  ::= { aspectRatio 43 }

-- 4.1.1.8 Active Format Description
-- 1.0.62379.3.2.1.5.43.0
srceAR4x3AFD0000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 0 }

-- 1.0.62379.3.2.1.5.43.1
srceAR4x3AFD0001 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 1 }

-- 1.0.62379.3.2.1.5.43.2
srceAR4x3AFD0010 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 2 }

-- 1.0.62379.3.2.1.5.43.3
srceAR4x3AFD0011 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 3 }
```

```
-- 1.0.62379.3.2.1.5.43.4
srceAR4x3AFD0100 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 4 }

-- 1.0.62379.3.2.1.5.43.5
srceAR4x3AFD0101 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 5 }

-- 1.0.62379.3.2.1.5.43.6
srceAR4x3AFD0110 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 6 }

-- 1.0.62379.3.2.1.5.43.7
srceAR4x3AFD0111 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 7 }

-- 1.0.62379.3.2.1.5.43.8
srceAR4x3AFD1000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 8 }

-- 1.0.62379.3.2.1.5.43.9
srceAR4x3AFD1001 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 9 }

-- 1.0.62379.3.2.1.5.43.10
srceAR4x3AFD1010 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 10 }

-- 1.0.62379.3.2.1.5.43.11
srceAR4x3AFD1011 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio4x3 11 }

-- 1.0.62379.3.2.1.5.43.12
srceAR4x3AFD1100 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
```

```
        "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio4x3 12 }

-- 1.0.62379.3.2.1.5.43.13
srceAR4x3AFD1101 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio4x3 13 }

-- 1.0.62379.3.2.1.5.43.14
srceAR4x3AFD1110 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio4x3 14 }

-- 1.0.62379.3.2.1.5.43.15
srceAR4x3AFD1111 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio4x3 15 }

-- 4.1.1.7 Source Aspect Ratio
-- 1.0.62379.3.2.1.5.169
sourceAspectRatio16x9 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video with an aspect ratio of 16:9."
 ::= { aspectRatio 169 }

-- 4.1.1.8 Active Format Description
-- 1.0.62379.3.2.1.5.169.0
srceAR16x9AFD0000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio16x9 0 }

-- 1.0.62379.3.2.1.5.169.1
srceAR16x9AFD0001 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio16x9 1 }

-- 1.0.62379.3.2.1.5.169.2
srceAR16x9AFD0010 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio16x9 2 }

-- 1.0.62379.3.2.1.5.169.3
srceAR16x9AFD0011 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
 ::= { sourceAspectRatio16x9 3 }
```

```
-- 1.0.62379.3.2.1.5.169.4
srceAR16x9AFD0100 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 4 }

-- 1.0.62379.3.2.1.5.169.5
srceAR16x9AFD0101 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 5 }

-- 1.0.62379.3.2.1.5.169.6
srceAR16x9AFD0110 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 6 }

-- 1.0.62379.3.2.1.5.169.7
srceAR16x9AFD0111 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 7 }

-- 1.0.62379.3.2.1.5.169.8
srceAR16x9AFD1000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 8 }

-- 1.0.62379.3.2.1.5.169.9
srceAR16x9AFD1001 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 9 }

-- 1.0.62379.3.2.1.5.169.10
srceAR16x9AFD1010 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 10 }

-- 1.0.62379.3.2.1.5.169.11
srceAR16x9AFD1011 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 11 }

-- 1.0.62379.3.2.1.5.169.12
srceAR16x9AFD1100 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 12 }
```

```
-- 1.0.62379.3.2.1.5.169.13
srceAR16x9AFD1101 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 13 }

-- 1.0.62379.3.2.1.5.169.14
srceAR16x9AFD1110 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 14 }

-- 1.0.62379.3.2.1.5.169.15
srceAR16x9AFD1111 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio16x9 15 }

-- 4.1.1.7 Source Aspect Ratio
-- 1.0.62379.3.2.1.5.221
sourceAspectRatio2pt21 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "Video with an aspect ratio of 2.21:1"
  ::= { aspectRatio 221 }

-- 4.1.1.8 Active Format Description
-- 1.0.62379.3.2.1.5.221.0
srceAR2pt21AFD0000 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 0 }

-- 1.0.62379.3.2.1.5.221.1
srceAR2pt21AFD0001 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 1 }

-- 1.0.62379.3.2.1.5.221.2
srceAR2pt21AFD0010 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 2 }

-- 1.0.62379.3.2.1.5.221.3
srceAR2pt21AFD0011 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 3 }

-- 1.0.62379.3.2.1.5.221.4
srceAR2pt21AFD0100 OBJECT-IDENTITY
```

```
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 4 }

-- 1.0.62379.3.2.1.5.221.5
srceAR2pt21AFD0101 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 5 }

-- 1.0.62379.3.2.1.5.221.6
srceAR2pt21AFD0110 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 6 }

-- 1.0.62379.3.2.1.5.221.7
srceAR2pt21AFD0111 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 7 }

-- 1.0.62379.3.2.1.5.221.8
srceAR2pt21AFD1000 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 8 }

-- 1.0.62379.3.2.1.5.221.9
srceAR2pt21AFD1001 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 9 }

-- 1.0.62379.3.2.1.5.221.10
srceAR2pt21AFD1010 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 10 }

-- 1.0.62379.3.2.1.5.221.11
srceAR2pt21AFD1011 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 11 }

-- 1.0.62379.3.2.1.5.221.12
srceAR2pt21AFD1100 OBJECT-IDENTITY
STATUS current
DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
::= { sourceAspectRatio2pt21 12 }
```

```
-- 1.0.62379.3.2.1.5.221.13
srceAR2pt21AFD1101 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 13 }

-- 1.0.62379.3.2.1.5.221.14
srceAR2pt21AFD1110 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 14 }

-- 1.0.62379.3.2.1.5.221.15
srceAR2pt21AFD1111 OBJECT-IDENTITY
  STATUS current
  DESCRIPTION
    "See SMPTE ST 2016-1:2009 for code descriptions."
  ::= { sourceAspectRatio2pt21 15 }
```

END

Annex B (informative)

Machine-readable video block definitions

This annex provides a machine-readable version of the video block definitions which is intended to be interpretable by standard MIB browsing software tools. It does not express all the requirements of the Standard, for instance where access to an object is restricted at certain privilege levels. If there is any inconsistency between this annex and clause 5, clause 5 takes precedence.

The format used to describe the MIB objects conforms to IETF STD 58 (SMIv2).

[TBD]

Annex C (informative)

Machine-readable textual conventions definitions

This annex provides a machine-readable version of the textual conventions definitions specific to this standard which is intended to be interpretable by standard MIB browsing software tools. If there is any inconsistency between this annex and clause 5.3, clause 5.3 takes precedence.

The format used to describe the textual conventions definitions conforms to IETF STD 58 (SMIv2).

[TBD]

Annex D (informative)

Machine-readable status page group definitions

This Annex provides a machine-readable version of the status page group definitions which is intended to be interpretable by standard MIB browsing software tools. If there is any inconsistency between this Annex and clause 6, clause 6 takes precedence.

The format used to describe the status page group identifiers conforms to IETF STD 58 (SMIV2).

```
IEC62379-3-STATUS-GROUPS DEFINITIONS ::= BEGIN
```

```
[TBD]
```

Annex E

(informative)

Machine-readable status page MIB definitions

This Annex provides a machine-readable version of the status page MIB definitions which is intended to be interpretable by standard MIB browsing software tools. If there is any inconsistency between this Annex and clause 6, clause 6 takes precedence.

The format used to describe the status page group identifiers conforms to IETF STD 58 (SMIV2).

```
IEC62379-3-STATUS-MIB DEFINITIONS ::= BEGIN
```

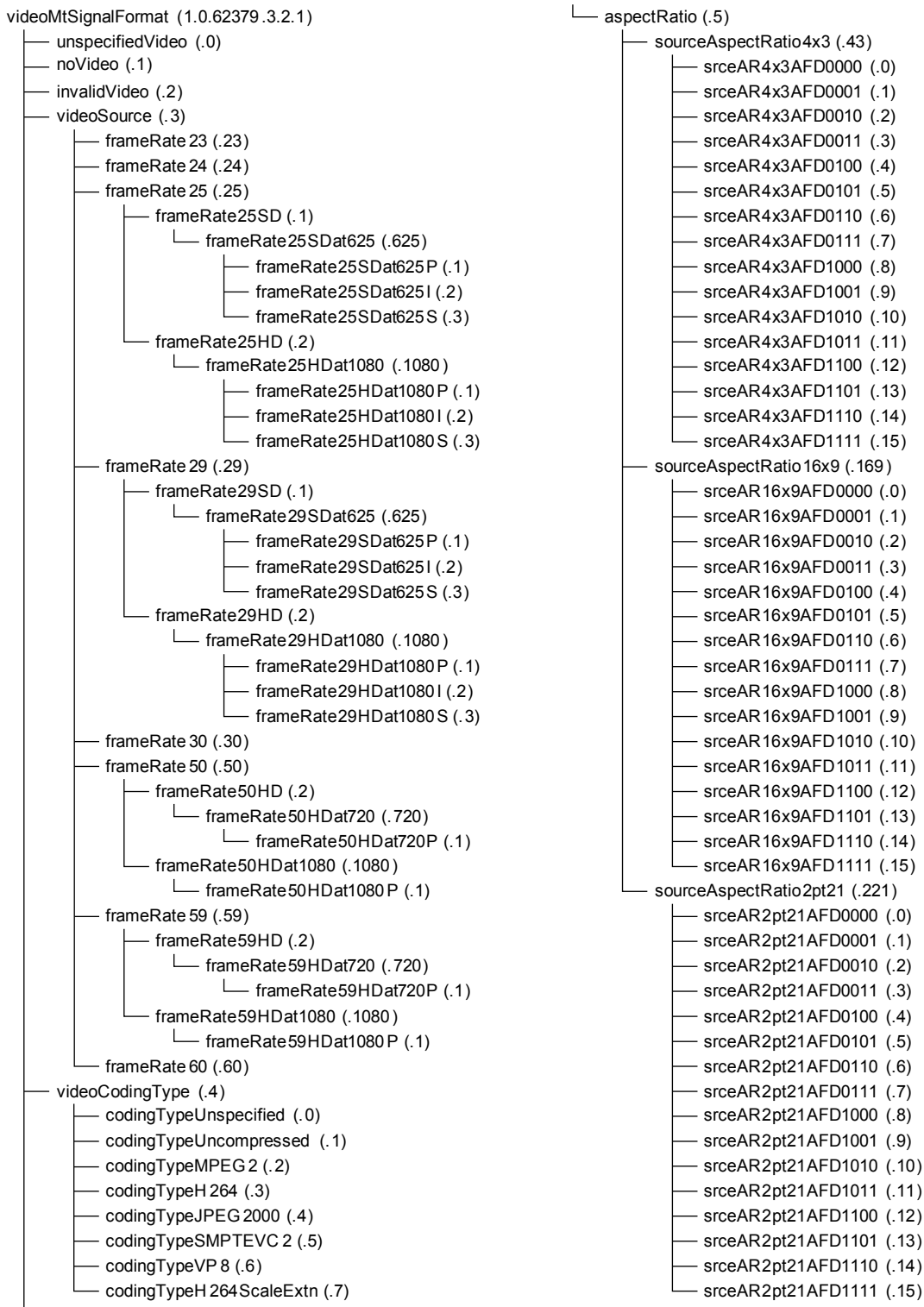
```
[TBD]
```

Annex F (informative)

Tree of example video formats

This annex shows a graphical tree of the example video formats defined in IEC 62379-3 Ed.1. If there is any inconsistency between this annex and those in the appropriate section of IEC 62379-3 Ed.1, then IEC 62379-3 Ed.1 takes precedence.

NOTE This annex is not intended to cover every format permitted by the definitions in IEC 62379-3 Ed.1.



Annex G (informative)

Worked examples

This annex provides **[two?]** worked examples to show how parts 1, 2 and 3 of this standard may be used to model video devices. If there is any inconsistency between this annex and the main clauses of parts 1,2 and 3, those clauses take precedence.

G.1 Example 1

[TBD]