

Need for Investigation of Hybrid 1080P-60 Video Specification

Based on:

**MPEG-2 Video
+
MPEG-AVC**

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Next-Gen HDTV → 1080P-60 (or 50) Hz

Consumer's view :

- “How can it be better than current HDTV just bought for much money ?
- What's motivation for consumer to buy CE products capable of processing 1080P-60 video signals?

Camera ?

1080P-60 (50) DVDs ?

What about broadcast channels?

Broadcaster / Network

- **Why should 1080P-60 be broadcast?**
- **Will it be displaced or co-exist with current HDTV video signals?**
- **Current broadcast HDTV video is worst case in resource consumption. – How could both co-exist?**

Dual-cast does not appear an option

How do we give (**by then**) legacy HDTV receivers a current HDTV video signal (MPEG-2 Video) and “**the then**” new 1080P/60 receivers a 1080P/60 signal?

- **How can broadcast 1080P-60 (or 50) Hertz video signals be backward compatible with existing “MPEG-2-Video-based” HD systems ?**

1080P/60 MPEG-2 video is unlikely

Channel is already limited

Twice the pixel rate of what is already worst-case in receiver

1080P-60 (or 50) Hz

Given market penetration/investment on HDTV, industry would benefit from a video spec that:

- 1. Provides a 1080P-60 signal to future 1080P-60 receivers; and**
- 2. Simultaneously giving legacy HD receivers a current HDTV signal extracted from the same broadcast 1080P-60 signal.**

1080P-60 (or 50) Hz

Feasibility of 1080P-60 video coding spec that:

- **Complements a 1080P-30 (or 1080i-60) MPEG-2 Video**
- **With an interspersed 1080P-30 (or 1080i-60) MPEG-AVC stream**
- **But transmitted with a new and unique stream type.**