

# Department of Communications meeting with the Australian Industry Group (AIG)

2 pm, 17 June 2013

AIG Offices, 51 Walker Street, North Sydney, NSW

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- AIG members presented data concerning the use of various digital video encoding technologies, including the MPEG-2, MPEG-4 (or H.264/AVB) and HEVC standards, in broadcast receivers.
- They noted that each encoding technology has gone through a ten year cycle including development, release and high penetration and obsolescence. AIG indicated that they would provide the Department with a number of related charts (although these are yet to be received).
- AIG members are interested in maximising 'market efficiency', which involves releasing
  products and technologies to the Australian market at the optimal point in time not too
  long before other countries.
- Such market efficiency reduces the costs of product development and manufacturing and ensures that the technology and products have the longest reasonable lifespan.

#### MPEG-2

- AIG's figures showed that there were still small numbers of MPEG-2 only products on the Australian market, but that these were largely set-top boxes, and were no longer being produced or sold by any major manufacturer.
- The final MPEG-2 only products are expected to leave the market by 2020-2021.

#### MPEG-4

- AIG stated that MPEG-4 compatible devices entered the Australian market in late 2005/early 2006 after the standard was published in 2003, added to DVB in 2004 and first broadcast overseas in 2005. Since 2009, most Australian sales have involved MPEG-4 compatible devices.
- With a major spike in sales during 2011 and 2012, AIG estimates that MPEG-4 compatible devices reached 80% penetration at the start of 2013, and 85% to 90% by the end of 2013. However, as these numbers are only drawn from sales, it is not possible to gauge true penetration figures, as multiple units may be purchased by households that already own MPEG-4 devices. Sales in 2009 and 2012 involved 2.5 million units per year, while 3.1 million and 3.4 million units were sold in 2010 and 2011 respectively.

 AIG also predicted that Tasmania may have a lower rate of MPEG-4 penetration due to its early adoption of digital television (to gain access to a third commercial service) at a time when MPEG-2 only set-top boxes were common

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#### **HEVC**

- HEVC standard was published in 2013 and AIG expected it to be added to DVB in 2014 and first broadcast overseas in 2015.
- AIG expects the first HEVC-compatible receivers to reach the Australian market in 2015 to 2016. Broadcasters will need to replace their head end equipment – which usually has a 5 to 7 year replacement cycle - and consumers will need to purchase new receivers or, potentially, upgrade their existing receivers. There is a possibility that some existing receivers could be firmware-upgraded to support this standard; however most manufacturers represented noted that they only offer 'over the air' firmware upgrades to address issues, and not to add new features.
- AIG predict it would take until 2024 to 2026 (or later) for more than 80% of receivers to be HEVC compliant.
- HEVC offers improvements in terms of quantity and quality. It is more spectrum efficient and can deliver 'ultra-HDTV' resolutions. In conjunction with DVB-T2, it delivers a 50% saving on MPEG-4. HEVC also makes HbbTV cheaper.
- However, manufacturers may be subject to large licence fees to use the standard (unlike MPEG-4 which is an open standard), and they see no immediate compelling consumerdriven case to immediately adopt this technology.

#### **Transitioning to MPEG-4**

- AIG clarified that it supported a staged transition to MPEG-4 but noted that transitioning
  was not just a 'flick-the-switch' process. They suggested it would likely involve 'a fairly
  serious hardware and software upgrade for broadcasters.'
- A number of members very strongly emphasised the need for broadcasters to consult with manufacturers to conduct tests that would ensure the interoperability of their equipment with transmissions. Additionally, previous trials of MPEG-4 broadcasting in Australia have interfered with MPEG-2 reception.
- AIG members also did not view legacy issues as a serious problem for a potential MPEG-4 transition, due to the high penetration rates in Australia.

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