

# UltraHD (4K)

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# Future Business Trends

- ▶ 1080p@60
- ▶ Full HD 3DTV
- ▶ Ultra HD (4K)

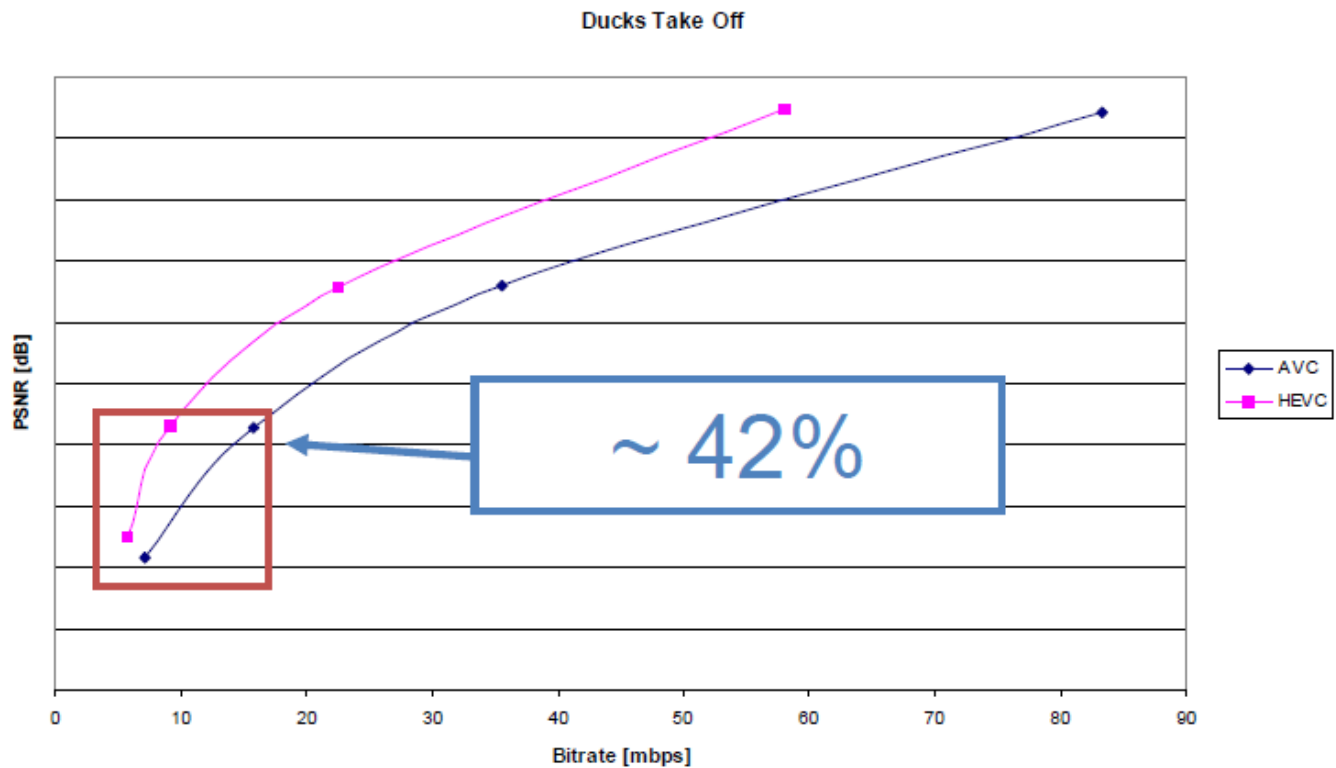


# Motivation



- ▶ HEVC
  - Full HD1080p

See Ref. 1

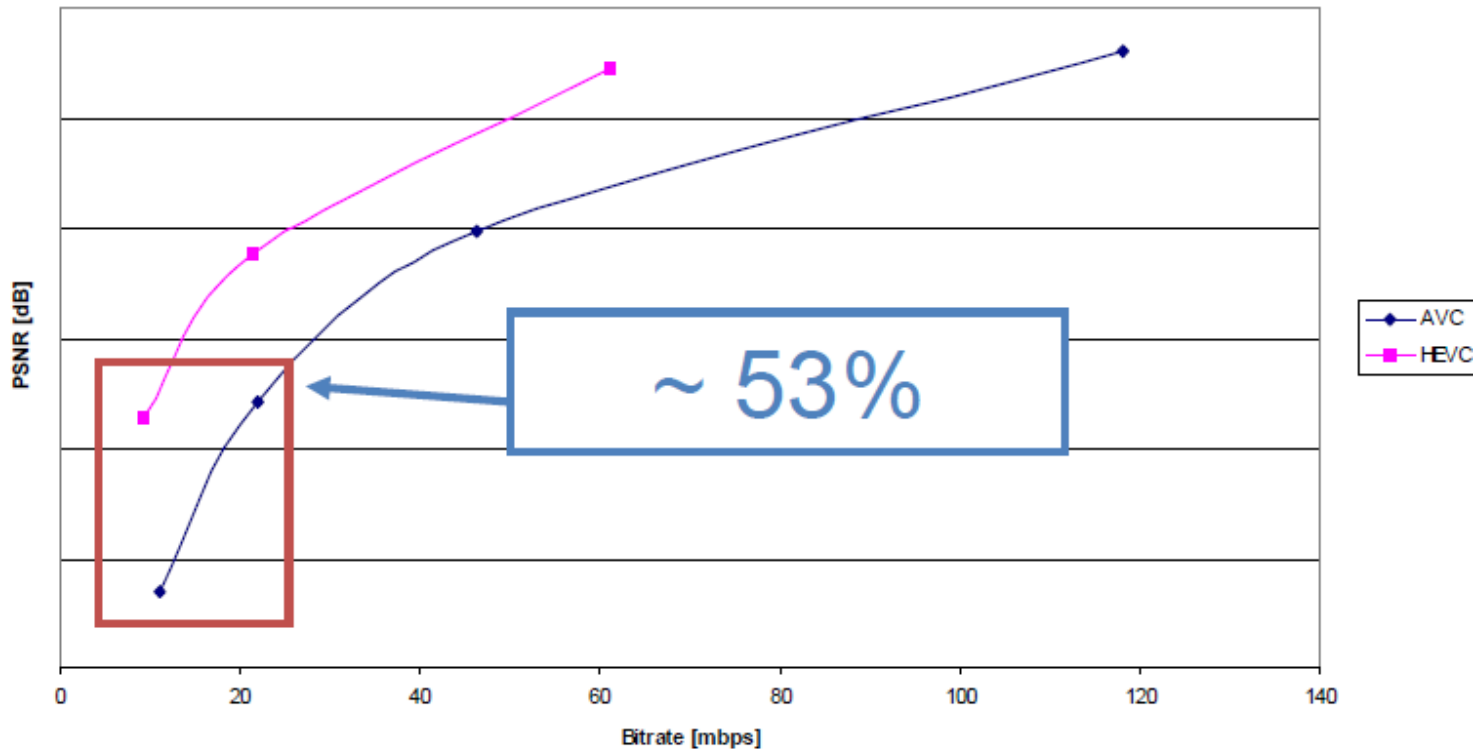


# Motivation

- ▶ HEVC
  - 4K (3840x2160)



Ducks Take Off



See Ref. 1

# Where are we

- ▶ Sony, LG, Samsung etc have launched 4K TV
- ▶ Japan has tested 4K internet streaming
- ▶ BBC produced new wild life series “Meerkat” in 4K

<http://www.telegraph.co.uk/culture/tvandradio/9828573/BBC-films-meerkats-using-new-ultra-high-definition-4K.html>



# Where are we

- ▶ SONY and BBC had a plan to trail 4K broadcast during Wimbledon 2013.
- ▶ Japan has a plan to launch 4K TV in 214 (NTT is heavily involved)

# VQEG contribution

- ▶ Vittorio has 4K TV that can be exploited to do subjective evaluation
- ▶ Closely follows HEVC activities for 4K
- ▶ We can try to encode some sequences at 4K (Raw video sequene @4K  
<http://medialab.sjtu.edu.cn/web4k/index.html>)
- ▶ Define the methodology for subjective evaluation for 4k

# References

1. “AVC and HEVC: the future of encoding” by Mathew Goldman

## Action items

- ▶ Raw 4K sequences
  - ▶ Encoding material (definition of encoding parameter)
  - ▶ Start defining subjective methodology
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