

PCG#14(05)19

Agenda 3.1

Codec Licensing Conditions

Public

All GSM Association meetings are conducted in full compliance with the GSM Association's anti-trust compliance policy



Background

Action PCG13/1: GSMA to conduct a study into the use of 3GPP codecs and the extent to which that use is determined by the prevailing licensing conditions.

Considerable debate occurred during the R6 Video and Audio codec selection process. Many issues were raised, both technical and commercial. Selection now 'resolved', however, the underlying issues remain – this presentation focuses on Video Codecs, although the issues are applicable to many areas.

Video Codecs in 3GPP (R6)

- Video Codec choice is a key aspect of many services, the following codecs are 'available' in 3GPP R6 specs:
 - H.264/AVC
 - MMS, PSS, Video Telephony & MBMS
 - MPEG-4 Visual
 - MMS, PSS & Video Telephony
 - H.263
 - MMS, PSS & Video Telephony & MBMS

MPEG-4 Licensing Timeline

- H.264/MPEG-4 Licensing
 - Usage element
 - ‘Books & Records’ requirement
- November 2002 - MPEG-4 Visual Patent Portfolio License published, introducing usage-based royalties for video content providers.
- February 2003 - MPEG-4 System Patent Portfolio Licence published, including the usage-based pricing model.
- July 2004 - license agreement for ITU-T H.264/MPEG-4 Part 10: Advanced Video Coding (AVC) standard published.
- September 2004 - MPEG-LA revised its MPEG-4 Visual Patent Portfolio Licence, usage-based pricing model still in place.

General Issues for Operators

- Cost
 - Direct
 - high \$ payment, precedent may lead to potentially continual incremental cost when deploying services
 - Indirect
 - Measuring use imposes a high administrative overhead
- Uncertainty/Applicability
 - Who pays & when?
 - Licence terms don't necessarily support all service models
- Unknown or unfavourable commercial terms
 - Adoption of solutions by 3GPP with unknown or unfavourable commercial terms is unacceptable to the Operator community

General Issues

- Risk of multiple 'Non-standard' solution adoption
 - Example: current MPEG-LA licensing terms may lead to uptake of 'non-standard' solutions with more favourable licensing terms, leading to fragmentation in the market
 - Multiple Solutions -> Interoperability issues
 - Negative service adoption impact
- Business Model
 - Current licensing terms may set a precedent
 - Implies spiralling service delivery cost, which may lead to higher end-user prices
 - Negative service adoption impact
 - Detrimental to end-user
 - Detrimental to industry

Video Codec Uptake

- Survey of 16 GSMA Executive Management Committee Companies unanimously revealed:
 - Any usage based license terms such as those as currently offered by MPEG LA for MPEG-4 are likely to prevent adoption by their company
 - All companies polled would investigate alternative solutions if MPEG LA's MPEG-4 licence terms remain unchanged

FRAND

- Fair?
- Reasonable?
- Ultimately decided by the courts, however:
 - Based on feedback to-date, the 'FRAND' status of some IPR in 3GPP would appear to be debatable.

Impact Summary

- Now: licensing terms may be indirectly contributing to the number of options in 3GPP
 - 3GPP specifications in danger of becoming a menu of options as opposed to a ‘Standard’.
- Future: licensing terms may lead to the adoption of ‘non-standard’ solutions, which may ultimately lead to fragmentation in the market.
- If unchecked, the current situation provides a credible threat to Interoperability, service uptake and the industry at large.