

Copy Protection for Over-The-Air Broadcast Content
November 7, 2001
Presentation of Fox, Viacom, and Walt Disney

I. History of the 5C Negotiations

- 5C negotiations began between MPAA, CEA, and ITI in July 1996 to develop content protection technologies for securely delivering content between devices in the home and to protect from unauthorized interception, retransmission, and copying.
- For the past two and a half years, seven Hollywood studios have been negotiating with DTLA, the Digital Transmission Licensing Administrator, licensor of the content protection technology (known as DTCP). DTLA represents the five firms of Hitachi, Intel, Matsushita, Sony, and Toshiba – collectively known as the “5C” companies. Through DTLA, the DTCP/5C content protection technology will be licensed to manufacturers of electronic products and content providers.
- Historically, 5C has refused to include broadcast protection as a part of the DTCP protocol. Earlier this year, two studios (AOL Time Warner and Sony) entered into an agreement with the 5C companies. While this agreement provides protection for content delivered via cable, the agreement contains no protection for content delivered via over-the-air broadcasting.
- The remaining five studios (Fox, MGM, Universal, Viacom, and Walt Disney – collectively, the “5 Studios”) are in accord with the principal terms of the agreement, but have declined to enter into an agreement with the 5C companies unless that agreement protects broadcast content. Without such protection, broadcast content will be relegated to second-class status, because programmers will be unlikely to provide their content to broadcasters if their content won’t be protected.

II. Technologies to Protect Broadcast Content

- As described in the attachment, technology exists TODAY to protect broadcast content from redistribution and it can be added to devices at a minimal cost. Moreover, adding the technology to 5C-enabled set top boxes (STBs), television sets, and other devices delivering over-the-air broadcast would involve only nominal design changes.

III. Recent Developments & The Government’s Role

- On October 30, 5C and the 5 Studios had a “breakthrough” discussion.
- During this meeting, the 5C companies stated, “There has never been any disagreement about whether unencrypted broadcast content should be protected.”

- 5C also stated that the 5 Studio technical proposal to add watermark and flag detection to protect broadcast content is a “good basis for resolving the issue” and is “implementable.”
- However, 5C raised two potential problems:
 - A fear (not shared by lawyers for the 5 Studios) that requiring watermark detection upstream from the 5C module as a condition of the 5C license could raise antitrust issues; and
 - A concern that addition of watermark detection might tip the balance of perceived burden and cause some device manufacturers to bring devices to market without any 5C content protection.
- The 5 Studios suggested that the studios and 5C come together to visit the FCC and key legislators to seek assistance to resolve the two concerns expressed by 5C. The 5 Studios currently are waiting for a response to their proposal from 5C.

Digital Television Protection

Concerns

- Redistribution of DTV outside the Home*

Solutions

- Digital Labeling, Detection and Compliance
- Consumer friendly transition from unprotected outputs to protected outputs

Implementation

- **ATSC Transport Stream Processor reacting to proposed ATSC Redistribution Control Descriptor**
- **DTCP protection using the 1394 connection for compressed video**
- **HDCP protection using the DVI connection for baseband video**

* *As articulated in ATSC doc T3-556*

AVC

PROTECTION (Encryption)

CBS

Flags

PROTECTION

Flags

NBSS

Flags

TSP (NO Encryption)

None

Flags

PLATFORM

DVD

DSS

OpenCable

DTV

