

ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

In the Matter of)
)
Digital Data Transmission Within)
the Video Portion of Television)
Broadcast Station Transmissions)

MM Docket No. 95-42

RECEIVED

JUL 10 1995

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

TO: The Commission

REPLY COMMENTS OF SCIENTIFIC-ATLANTA, INC.

Scientific-Atlanta, Inc. ("Scientific-Atlanta") hereby submits its reply comments in response to the Notice of Proposed Rulemaking ("Notice") in the above-captioned proceeding. This Notice proposes solutions to a number of regulatory and technical issues related to digital data transmission within the video portion of broadcast television signals and discusses whether the FCC should adopt standards for digital data broadcast, possibly relying on the work of the National Data Broadcasting Committee. Having reviewed the comments filed to date, Scientific-Atlanta wishes to join in this proceeding to ensure that rules governing digital data transmission take into account certain significant cable interests implicated -- but little addressed -- in this rulemaking. Specifically, rules adopted in this proceeding could bear on: (1) cable converters' use of Vertical Blanking Interval ("VBI") bandwidth; (2) the proposed decoder interface standard being developed by EIA and the NCTA; and (3) the video scrambling processes used by most cable TV systems.

Scientific-Atlanta has been a leader in the information delivery business for more than 40 years. Its expertise lies in connecting information providers and users

No. of Copies rec'd
FASCODE

4

via terrestrial and satellite networks and in developing new applications for integrated systems within those markets. In this capacity, Scientific-Atlanta has been a major supplier of equipment to the cable television, broadcast, satellite and telephone industries. It has been involved in the development of new digital technologies and integrated systems for each of these industries.

In reviewing the comments filed in this proceeding, Scientific-Atlanta has noted the absence of references to the fact that cable converter products currently use VBI bandwidth. For example, the Scientific-Atlanta Model 8600 X Home Communications Terminal ("HCT") uses the VBI data transmission capability to deliver:

- (1) Conditional access data: These functions include addressing transactions and session keys, global parameters, tuning/channel data, parental control configuration and terminal feature configuration;
- (2) Virtual channel data: This includes on-demand graphics and text data which the subscriber can access by selecting a "channel" number outside of the normal video channels -- news, sports, weather and traffic information can be delivered to subscribers without using any video bandwidth;
- (3) Electronic program guide data: The electronic program guide provides on-demand information about current and future television programming;
- (4) On-screen barker message data: The on-screen barker provides the subscriber with information related to events or channels which may be subscribed to;
- (5) Messages addressed to individuals or groups of subscribers: The messages may be sent directly to a specific subscriber or group of subscribers; and
- (6) On-screen channel ID data.

The Model 8600 X Home Communications Terminal has the capability to receive and process VBI signals on any normal video channel.

The data can be transmitted to the HCT at a rate of about 9.4 Kilobits per second using just one VBI line. Data can be inserted on up to ten VBI lines. The network operator has the option to use any line for data transmission. However, usage is generally restricted to VBI lines 11-20 and line 22. Selection is flexible and is completed by the network operator using the Subscriber System Manager computer located at the headend. Any effort by the FCC to regulate or set standards for digital data transmission should take into account these existing uses of the VBI.

Scientific-Atlanta also notes that this proceeding has implications for the IS-105 decoder interface standard that is being developed pursuant to the 1992 Cable Act and the Commission's cable/consumer electronics equipment compatibility proceeding.¹ Several of the proposed digital data transmission technologies may not be able to be supported by the proposed EIA/NCTA IS-105 Decoder Interface. Thus, the decoder interface may limit or prevent future capabilities.

In addition, data transmitted in the over-scanned lines of video will likely be affected by the video scrambling processes used by most cable TV systems; satellite transmission scrambling systems also may affect data transmission. Finally, Scientific-Atlanta believes that data transmitted on an in-band data sub-carrier ("sub-video") may not survive the process of digital video compression.

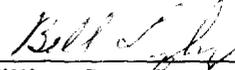
¹See Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992: Compatibility Between Cable Systems and Consumer Electronics Equipment, 9 FCC Rcd 1981 (1994).

Digital data transmission rules should reflect these operational and technical issues of concern to the cable industry.

Scientific-Atlanta urges the Commission to account for these cable implications of the issues raised in this proceeding and welcomes the opportunity to provide the Commission with further information useful in formulating such rules.

Respectfully submitted,

SCIENTIFIC-ATLANTA, INC.



William Loughrey
Director of Government Affairs
Corporate Communications Department
Scientific-Atlanta, Inc.
1 Technology Parkway South
Norcross, Georgia 30092-2967

July 10, 1995