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September 25, 2006

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: CS Docket No. 97-80 (Commercial Availability of Navigation Devices)

Dear Ms. Dortch:

In its Second Report and Order in CS Docket No. 97-80,¹ the Commission directed certain multiple system operators (“MSOs”) – Adelphia Cable, Cablevision, Charter Communications, Comcast Corporation, Cox Communications, and Time Warner Cable – to file with the Commission “reports detailing CableCARD deployment and support” as well as “the effort to develop and deploy a multistream CableCARD.”² The Commission noted that the “cable operators may file separate reports or a joint report.” As a matter of convenience, NCTA has compiled the individual company reports and is submitting them as attachments to this letter. Should the Commission have questions about any of these reports, please contact me and I will ensure that the questions are forwarded to the appropriate person at the relevant company for a response. Since the submission of the last report, the cable systems formerly owned by Adelphia were acquired by Comcast and Time Warner Cable and, in related transactions, Comcast and Time Warner Cable swapped various systems. Given the integration process still underway for the former Adelphia systems and those systems swapped between Time Warner and Comcast, this report may reflect slight variations in the CableCARD data as compared with that provided by the three companies in past reports. Any such anomalies will be reconciled in the next status report.

CableCARD Deployment and Support. The MSOs which are reporting today and which serve over 80% of the cable subscribers in the country have deployed nearly 180,000 CableCARDS. When the CableCARDS deployed by the next five largest companies are included, *there have been over 200,000 CableCARDS deployed by cable operators serving over 89% of the cable subscribers in the country.* In addition to this significant deployment of CableCARDS, as of September 19, 2006, 26 consumer electronics (“CE”) manufacturers have

¹ *Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Second Report and Order, 20 FCC Rcd 6794 (2005).

² *Id.* at 21-23 (¶¶ 39, 44).

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had over 524 product models (such as Digital Cable Ready DTV sets) certified or verified for use with CableCARDS.

Multistream CableCARDS. The Commission also asked for periodic reports on the “effort to develop and deploy a multistream CableCARD.” As reported in our March 30, 2006 report, CableLabs has qualified a Multistream CableCARD device from CISCO/Scientific-Atlanta. Since our last report, CableLabs has qualified a Multistream CableCARD device from Motorola. So, both Motorola and CISCO/Scientific-Atlanta MultiStream CableCARDS are now qualified.

The Multistream CableCARD will operate in a backwards compatible, single-stream manner with a single stream device (*e.g.*, in a unidirectional digital cable ready device) or in the multi-stream manner when paired with a multi-stream device (*e.g.*, OCAP 2.0 devices). To greatly facilitate rapid development of the Host Multistream CableCARD interface, the HPNx Pro test tool is also commercially available to manufacturers. It is expected that Multistream CableCARDS will be available from major MSOs within the next few months.

If you have any questions about the information being submitted with this letter, please do not hesitate to contact me.

Respectfully submitted,

/s/ Neal M. Goldberg

Neal M. Goldberg

cc: Brendan Murray
Julie M. Kearney
Robert Schwartz

**Cablevision
FCC CableCARD Quarterly Report**

Introduction: CableCARD technology, which enables digital televisions to display encrypted programming, has been available to 100% of Cablevision customers since July 1, 2004. The installation and service of CableCARDS is a routine practice and has been fully incorporated into the business. As with all technical issues with a service provided by the company, when a problem is experienced and a resolution is determined, the information is entered into an automated database for escalation and resolution.

1. Current Number of CableCARD Subscribers: 10,120 (as of September 15, 2006). A 12.5% increase in deployment from the 2006 2nd quarter report.

2. Number of CableCARDS in Inventory: 16,314 [6,214 in reserve (non-deployed) inventory].

3. How are CableCARDS deployed: All CableCARDS are professionally installed.

4. Percentage of Installs: 100% of installs are professional installs requiring a truck roll

5. Average Number of Truck Rolls to Install a CableCARD: 1.1

6. Monthly Lease rate for CableCARD: \$1.25

7. Average installation Cost (if applicable): Professional install fee is \$46.95. This installation fee applies to all installations, including the installation of other Cablevision customer equipment, such as a set top box or modem installation.

8. Number of problems* encountered with CableCARDS: 2,332 installation and post-installation problems were encountered during the period of July 1, 2006 through September June 15, 2006.

1. Host Related: 63%
2. CableCARD related, including provisioning the card from the headend : 32%
3. Network Related: 5%

9. Of the problems encountered, please list how they were resolved: (Ex. TV Firmware upgrade)

Host Consumer Equipment Issues (Sample)

Problem Description:

CableCARD does not bind with the host .

Occurs During:

Install

Resolution:

The technician will unbind the first CableCARD with Cablevision's Addressable Systems Department and install/bind another CableCARD. In some instances, the customer needs to contact the host TV manufacturer for a patch/chip to be sent out for the specific host TV or professional visit by the manufacture's technician to allow proper functioning.

Problem Description:

Pixilation on most digital channels

Occurs During:

Post-Install

Resolution:

Customers need to contact the manufacturer directly to have a manufacturer's Certified Technician perform a service call to install new hardware in the digital television.

Problem Description:

During install the CableCARD goes into a code down load even though the CableCARD has the most current code.

Occurs During:

Install

Resolution: Engineering is working with the consumer electronics manufacturers to determine the corrective action.

CableCARD Issues (sample)**Problem Description**

Customer getting CableCARD "no service" message every few minutes

Occurs During:

Post-install

Resolution:

Generally, resolved with a reprovisioning of the card from the headend.

Problem Description

Encrypted premium channels not shown

Occurs During:

Post-install

Resolution:

Generally resolved by performing a "reboot" by removing CableCARD and turning off power to the consumer equipment.

**Charter Communications
FCC CableCARD Report
June 1, 2006 – August 31, 2006**

1. Current Number of CableCARD Subscribers as of August 31, 2006:

The total number of Subscribers who have leased or purchased CableCARD devices through August 31, 2006 is 14,879.

2. Provide the number of CableCARDs in inventory:

SA CableCARD devices: 3285
Moto CableCARD devices: 7279
Total CableCARD devices: 10564

3. How are CableCARDs placed in service?

Installations of a CableCARD requires a professional installation, including a truck roll, in all serviced areas with the exception of the North Carolina/Virginia market area, in which there is a self-installation process. Self installations account for .005% of all CableCARD installations during the reporting period.

4. Whether service calls are required for all CableCARD installations?

Yes.

5. Average Number of Truck Rolls to Install a CableCARD?

The average number of truck rolls to install a CableCARD (i.e., the initial truck roll and any truck rolls within 30 days from the date of installation) through August 31 was 1.3.

6. Monthly Lease rate for a CableCARD?

The average monthly lease for a CableCARD device is \$1.50.

7. Average installation cost of a CableCARD (if applicable):

The average cost for a professional installation is \$32.00.

8. Process for Resolving CableCARD trouble calls:

Customers with a CableCARD problem are directed to call the Charter customer service number. Customer Service Representatives (CSRs) are trained about the features and benefits of CableCARDs, just as they are trained on any other Charter product offering. Some CableCARD calls are forwarded to the Advanced Services Team, whose members have more training and expertise on troubleshooting such calls. If the problem cannot be

resolved over the phone, the CSR places a service order, which is then fulfilled by the cable installers and technicians. Charter maintains a record of any service calls for which a technician is dispatched.

Should a local cable installer or technician encounter a CableCARD problem, he/she reports such problem to his/her supervisor and the local technical support group. If the problem is not resolved at the local level, it is then escalated to corporate engineering or billing. If there appears to be a host problem, Charter has a designated member of its engineering department contact and place a report with the consumer electronics vendor or with the host manufacturer to resolve the issue as appropriate.

9. Reported problems associated with CableCARDs and how they were resolved:

Charter's records indicate that problems with the manufacture of digital televisions are responsible for all reported CableCARD issues Charter has experienced this reporting quarter.

Issues with digital televisions (CableCARD "host" devices) have made up the overwhelming majority of reported problems Charter has experienced since CableCARD reporting began. Charter's June 1 to August 31, 2005 report to the Commission showed 69% of problems were caused by faulty digital television hosts.¹ Problems with CableCARDs decreased thereafter as reflected in Charter's installation experience and reports to the Commission, which showed that host digital televisions were responsible for 76% and 74% of CableCARD installation problems over the following two quarters.² Digital television host problems climbed to 94% of all installation problems in the subsequent quarter.³ During the current quarter, it appears that 100% of installation issues were caused by host digital televisions issues. Problems with digital television host devices range from digital televisions unable to receive CableCARDs due to software defects, hardware defects, and other indeterminate reasons. Such TV issues have been addressed with power cycling, TV software updates, and similar measures summarized in the table below.

Finally, the few installation issues associated with the network which were encountered this quarter were resolved *at the time of installation* through Charter's standard troubleshooting processes. Charter continues to troubleshoot and resolve problems occurring with various makes and models of digital television hosts as they arise.

¹ See *Charter Communications FCC CableCARD Reporting Through August 31, 2005*, Attachment to Letter from Neal M. Goldberg to Marlene H. Dortch, Commercial Availability of Navigation Devices, CS Docket 97-80 (filed October 3, 2005).

² See *Charter Communications FCC CableCARD Reporting, September 1, 2005 to November 31, 2005*, Attachment to Letter from Neal M. Goldberg to Marlene H. Dortch, Commercial Availability of Navigation Devices, CS Docket 97-80 (filed December 29, 2005); *Charter Communications FCC CableCARD Reporting December 1, 2005 to February 28, 2006*, Attachment to Letter from Neal M. Goldberg to Marlene H. Dortch, Commercial Availability of Navigation Devices, CS Docket 97-80 (filed March 30, 2006).

³ See *Charter Communications FCC CableCARD Reporting, March 1, 2006 to May 31, 2006*, Attachment to Letter from Neal M. Goldberg to Marlene H. Dortch, Commercial Availability of Navigation Devices, CS Docket 97-80 (filed June 26, 2006).

The problems and resolutions listed on the chart below are illustrative of the problems encountered at both the local and regional level as well as those that were escalated to Charter's corporate offices. The digital television host manufacturer for each problem is identified by a letter only to maintain confidentiality, with such letter corresponding to the same identified manufacturer(s) from previous reports.

DIVISION	TYPE	ISSUE	RESOLUTION	TV MFGR.
East	Host	Host DTV only displaying analog channels.	The troubleshooting was completed without resolution and the customer was directed to contact the manufacturer. The manufacturer was unaware of the problem and escalated to Charter Corporate. Work continues between Charter and the manufacturer.	C
Great Lakes	Host	The picture was freezing.	The power was reset.	E
West	Host	No HD channels 161 to 164 (error message).	Technician sent initialization hit and power cycled the host DTV.	J
West	Host	No music channels were received.	The technician sent an initialization hit to the host DTV.	H
West	Host	Failed installation, no host data was displayed.	Technician had to set the time on the new DTV before certain data could be displayed.	H
West	Host	Programming was lost.	Technician power cycled the DTV and re-inserted the card.	F
West	Host	Technician could not obtain host identification information.	The subscriber spoke directly with the manufacturer and he was told that he needed an upgrade and that at this time his DTV was not compatible. The subscriber plans to follow up later with the manufacturer and the technician.	A
West	Host	The DTV needs a firmware update.	Technician is working with the vendor to get the required update.	K

**Comcast
FCC CableCARD Report**

Current Number of CableCARD Subscribers	96,419 ¹	
Number of CableCARD in Inventory	26,503	
How are CableCARDs deployed:	Truck	Both
Roll / Self Install / Both		
Total CableCARD Installs		
Number of Installs - Truck Rolls	11,064	
Percentage of Installs - Truck Rolls	94%	
Number of Installs - Self Installs	682	
Percentage of Installs - Self Installs	6%	
Average Number of Truck Rolls to Install a CableCARD	1.13	
Monthly Lease Rate for CableCARD	\$0.00	
Average Installation Cost (if applicable)	\$25.45	

Problems encountered and how resolved

Comcast detailed the problems it has encountered with CableCARD host devices in NCTA's June 29, 2006 filing and continues to experience similar problems. We have also had reports of a Pioneer Set with a detachable media receiver that will not function properly with a CableCARD. We are working to address this issue.

Process for resolving existing and newly discovered CableCARD problems

Comcast has a CableCARD problem escalation process that starts with the local installer/technician and escalates to local supervisory personnel, then to the Division office, and finally to corporate engineering for further escalation to CableLabs or to senior contacts at the CE manufacturer as needed. The local market is expected to review CableCARD issues lists and troubleshooting information posted on an internal website prior to escalation. If an issue with the CE Host device is suspected the local market personnel also make an initial contact to the CE manufacturer's standard support line for help prior to escalation.

¹ As the Commission is aware, there were a number of cable systems whose ownership changed during the period in question as a result of the Adelphia transactions. Comcast has begun the process of updating its CableCARD data to reflect changes in system ownership, but that process is not yet complete. As a result, CableCARDs that are deployed in systems previously owned by Time Warner and Adelphia but now owned by Comcast are not fully accounted for in Comcast's report today. Likewise, there is also a possibility that Comcast's report includes CableCARDs deployed in Comcast systems that were transferred to Time Warner as part of the Adelphia transactions. These accounting issues will not affect future Comcast reports, as the systems acquired from Adelphia or swapped between Comcast and Time Warner are more fully integrated.

Cox Communications
FCC CableCARD Report
June 01, 2006 through August 31, 2006

1. General availability of CableCARD devices:
Total CableCARD devices available: 8770
 - a. Please provide an indication of supply availability for SA and Motorola CableCARDS
SA CableCARD devices: 5228
Moto CableCARD devices: 3482

*The above numbers only include inventory available in our billing system and inventory currently assigned to FSRs. It does not include inventory assigned to subscriber accounts, inventory pending disposition or repair, etc.
2. The number of Residential CableCARD devices in service:
Cox TOTAL: 17,323
Moto Total: 8413
SA Total: 8910
3. How cards are placed in service
A professional installation, requiring a truck roll, is currently required for all CableCARD device installs.
4. Whether service calls are required for all CableCARD device installations?
Yes.
5. Average number of truck rolls to install a CableCARD device?
The average number of truck rolls needed to install a CableCARD device includes the initial truck roll for the install itself and any truck rolls required within 30 days of the install.

The average number of truck rolls to install a CableCARD was: 1.104

The breakdown for each month is as follows:
 - May 2006: 1.112
 - June 2006: 1.109
 - July 2006: 1.091
6. Monthly price charged for a CableCARD?
The average monthly rental for a CableCARD device is \$ 1.96
7. Average installation cost of a CableCARD if applicable?
 - a. What is the service charge to the subscriber for the installation?
The average cost for a professional installation is \$ 27.56
8. Problems encountered in deploying CableCARDS and how problems are resolved?
Total number of trouble calls for all CableCARD issues, escalated and un-escalated:
 - June 2006: 1372
 - July 2006: 1275
 - August 2006: 1199

Only the issues that were escalated to the Atlanta corporate offices are described below. Cox also uses a bi-weekly conference call to distribute information to the systems, such as issues lists and CE-supplied troubleshooting documentation, in an effort to provide the systems with the information they'll need to avoid escalation.

Host Problems:

Site 19, Manufacturer 12

- Problem: DCR device had problems receiving channels in the 200's
Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 7

- Problem: : DCR device had problems receiving Showtime and HBO
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 21

- Problem: DCR device would not pick up channels 947-973. It would pick up audio only on some channels.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 12

- Problem: DCR device will not pair with CableCARD device. Multiple attempts and CableCARDS were tried.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 9

- Problem: DCR device would not display video, however audio was available.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 21

- Problem: DCR device was missing radio station channels 940-973
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 13

- Problem: DCR devices would freeze on channel 6
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 12

- Problem: DCR device had problems displaying HBO and Cinemax.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 13

- Problem: DCR device will not display channels 7-72
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Swapped card with DVR.

Site 19, Manufacturer 12

- Problem: DCR device has tiling on all channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 13

- Problem: DCR device was missing numerous digital channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Problem persisted after the manufacturer completed a software upgrade. Additional Cox troubleshooting has been completed with no further resolution. We have swapped the CableCARD device with a HD STB until further assistance can be obtained from the DCR device manufacturer.

Site 19, Manufacturer 13

- Problem: DCR device was not receiving channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 13

- Problem: DCR device was missing numerous digital channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Problem persisted after the manufacturer completed a software upgrade. Additional Cox troubleshooting has been completed with no further resolution

Site 19, Manufacturer 13

- Problem: DCR device was missing numerous digital channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Problem persisted after the manufacturer completed a software upgrade. Additional Cox troubleshooting has been completed with no further resolution. At the customer's request we have swapped the CableCARD device with a HD STB until further assistance can be obtained from the DCR device manufacturer.

Site 19, Manufacturer 13

- Problem: DCR device was missing numerous digital channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 7

- Problem: Encrypted channels were not working on the DCR device.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 7, Manufacturer 7

- Problem: DCR device would not read CableCARD devices. Multiple CableCARD devices were attempted.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. At the customer's request we have swapped the CableCARD device with HD STB until further assistance can be obtained from the DCR device manufacturer.

Site 19, Manufacturer 9

- Problem: DCR device displays tiling on channel 64
- Resolution: Cox Engineers are on site working with the DCR device manufacturer to try to resolve the issue.

Site 19, Manufacturer 13

- Problem: DCR device was missing numerous digital channels.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Problem persisted after the manufacturer completed a software upgrade. Additional Cox troubleshooting has been completed with no further resolution. We have swapped the CableCARD device with a HD STB until further assistance can be obtained from the DCR device manufacturer.

Site 19, Manufacturer 13

- Problem: DCR device having problems displaying digital channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 21

- Problem: DCR device will not display any premium channels.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 17

- Problem: DCR device would not display digital channels.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 19, Manufacturer 13

- Problem: DCR device would not display digital channels.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 6, Manufacturer 19.

- Problem: DCR device was missing several digital channels from the channel lineup
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Customer opted to return the DCR TV

Site 24, Manufacturer 16.

- Problem: Channel 734 missing from the channel list on the DCR device
- Resolution: All Cox troubleshooting was completed with no resolution found. Manufacturer continues to work with the customer on the issue. Manufacturer is scheduled to send a technician to the customer's home.

Site 24, Manufacturer 7.

- Problem: DCR device tiles on all channels above 100. Levels are within specs.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Manufacturer continues to work with the customer to resolve the issue.

Site 6, Manufacturer 17.

- Problem: Intermittently, the DCR device would not recognize certain channels in the 300s. If the customer tuned away from a channel, then the DCR device would not let the customer to go back to that channel.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance.

Site 24, Manufacturer 16.

- Problem: DCR device displayed "invalid date" and then the screen would go blank.
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for a specific upgrade.

Site 24, Manufacturer 19

- Problem: DCR device was unable to receive channels
- Resolution: After completing all Cox troubleshooting with no issue found, customer was referred to contact the host manufacturer for further assistance. Customer opted to return the host.

CableCARD Device Problems

Site 19, Manufacturer 17

- Problem: DCR device would not display HBO HD
- Resolution: A CableCARD device swap addressed the issue.

Site 19, Manufacturer 19

- Problem: CableCARD device would not pair correctly.
- Resolution: A CableCARD device swap addressed the issue.

Site 19, Manufacturer 19

- Problem: Problems were experienced during the pairing process.
- Resolution: The CableCARD device replaced and the DCR device was power cycled, which addressed the issue.

Site 19, Manufacturer 21

- Problem: Problems were experienced during the pairing process.
- Resolution: The CableCARD device replaced and the DCR device was power cycled, which addressed the issue.

Site 19, Manufacturer 16

- Problem: DCR device was missing various digital channels
- Resolution: A CableCARD device swap addressed the issue

Site 19, Manufacturer 17

- Problem: DCR device had problems displaying Fox Sport HD
- Resolution: The DCR device was reset and the CableCARD device was reinstalled. Issue resolved.

Site 19, Manufacturer 14

- Problem: DCR device was not displaying digital channels
- Resolution: Downstream Plant ID had to be adjusted and the CableCARD device was reinstalled. Issue was resolved.
-

Site 19, Manufacturer 17

- Problem: DCR device is not able to surf to channel 716
- Resolution: Cox troubleshooting in progress.

Site 19, Manufacturer .12

- Problem: DCR device was not receiving HD channels
- Resolution: A CableCARD device swap addressed the issue.

Site 19, Manufacturer 24

- Problem: DCR device was not receiving channels
- Resolution: Downstream Plant ID had to be adjusted and the CableCARD device was reinstalled. Issue was resolved.

Site 19, Manufacturer 19

- Problem: Not receiving HD channels
- Resolution: The DCR device was reset and the CableCARD device reinstalled.

Site 24, Manufacturer 16.

- Problem: DCR device cannot tune to channel 734
- Resolution: Experienced pairing issues with the CableCARD which were resolved.

Site24, Manufacturer 8.

- Problem: DCR Device lost channels
- Resolution: A CableCARD swap addressed the issue.

Site 6, Manufacturer 6.

- Problem: Customer was not receiving any digital or HD channels with the right levels
- Resolution: Customer misunderstood associated charges and returned the CableCARD Device

Site 6, Manufacturer 16.

- Problem: DCR device was not receiving any digital channels.
- Resolution: Customer decided to lease a receiver to retain the Cox program guide.

Site 6, Manufacturer 19.

- Problem: DCR device failed to tune to 200 series HBO, HD HBO, 746 and 754 channels.
- Resolution: A CableCARD swap addressed the issue.

Site 16, Manufacturer 7.

- Problem: DCR device will only display analog channels.
- Resolution: While troubleshooting the issues, customer opted transition to a HD digital box.

9. Process in place for resolving existing any newly discovered CableCARD implementation problems

- a. Please describe any internal business process you have in place to report/track/resolve problems prior to escalation to the weekly call or joint call with CE.

For any CableCARD issues encountered by a subscriber, Cox follows the attached troubleshooting process. If the troubleshooting resolves the issue, no further action is taken. If the troubleshooting procedures do not correct the issue, the issue is escalated to one or more of the following personnel within the system: (i) the Digital test desk; (ii) the IT group, and/or; (iii) the system's DAC or DNCS administrator. If none of the foregoing is able to resolve the issue, a problem form is completed and sent to corporate engineering. The problem form collects specific details about the problem and alerts the engineering team to the relevant issues. Corporate engineering then follows up on the issue, contacting all of the necessary parties (including the CE manufacturers) until the issue is resolved.

In addition, a representative from each Cox system attends a platform specific bi-weekly conference call to discuss relevant CableCARD issues that have not yet been escalated, significant trends in the installation and maintenance of CableCARDs, and customer concerns within the system. Cox also uses this conference call to distribute important information to the systems, such as CE-supplied troubleshooting procedures or installation documentation. Atlanta operations and Engineering personnel are usually engaged on the call and work with the systems to resolve any issues or concerns.

In addition, Cox maintains an intranet site containing information about CableCARDs and specific issue updates. Cox Customer Support, Field Service, and Field Service Support also may use this site to review troubleshooting guidelines or details from CE manufacturers.

The DAC and DNCS administrators in each system also have direct connections with ATL operations and engineering to escalate any issues that require immediate assistance.

Time Warner Cable¹
FCC CableCARD™ Status Report

Current number of CableCARDs customers: 38,492

Number of CableCARDs available in inventory: 14,863

How are CableCARDs deployed? Majority of TWC divisions require a service appointment.

Percentage of installs: Service Appointment: 95%; Self Install: 5%

Average number of truck rolls required to install a CableCARD: 1.2

Monthly lease rate for CableCARD: Average: \$1.87. Most divisions are at \$1.75.

Do you charge for CableCARD installs? Some divisions charge a standard installation fee for CableCARDs while others waive the installation charge per division business procedure

What is the average installation cost? \$15.82

What is your process in resolving existing and newly discovered CableCARD implementation problems?

The process reported in our previous submission is still in place. The web forum referred to as “eRoom” is still in use for resolving existing and newly discovered CableCARD implementation problems. The eRoom also allows TWC divisions to share information on issues and work together to resolve them.

Problems encountered with CableCARDs and their resolution

Our divisions continue to report a variety of different issues arising with respect to CableCARD host device installations.

Problem: Incorrect software/ firmware on host device. This continues to cause the most reported issues to date and is common across all CE brands.

¹ This report reflects changes in TWC’s operations as a result of the recently closed transactions involving cable systems formerly owned by Adelphia Communications Corporation and related system swaps with Comcast Communications Corporation. As a result of the ongoing integration of the acquired properties and their disparate billing systems, the totals reported above may not include some numbers from those properties. Although we believe that the reported totals are substantially accurate, any inadvertent omissions that may exist will be incorporated in the next CableCARD progress report.

Resolution: The cable technician informs the customer to contact their CE manufacturer and request a software patch to upgrade their Host device. A follow-up service appointment is needed after the CE manufacturer has completed the upgrade

Problem: 161-6 error on host device. This error has occurred predominately on one brand of CE Host and is random and can go unnoticed for weeks. The device will stop displaying all content and show error 161-6. Although the error can be resolved by resetting the Host device, this is only a temporary fix.

Resolution: The permanent fix is to contact the Host manufacturer and have the DTV tuner replaced by a CE service technician.

Problem: Missing or no channels on Host device. In most cases this is caused by non-compliant customer installed in home wiring devices such as splitters and coaxial jumper cables.

Resolution: A cable technician will replace equipment and bring signal levels into spec along the lines for other equipment.

Problem: Host device needs clock reset before installing CableCARD

Resolution: System contacted Host manufacturer after unsuccessful installation to find that some of their devices require their clocks to be reset manually before installing a CableCARD. Host installation manuals did not include this information.

Problem: CableCARDS not seated properly into Host device at time of installation.

Resolution: Technician/customer reseats the CableCARD activating the MMI screen and initializing authorization.

Problem: CableCARDS staged longer than 30 days in inventory. Entitlement Management Messages (EMMs) for conditional access expire resulting in inoperable CableCARD.

Resolution: CableCARD must be re-staged either at customer's equipment or in division warehouse facility adding updated EMMs to CableCARD.