

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

In the Matter of:)	
)	
Telecommunications Services Inside Wiring)	CS Docket No. 95-184
)	
Customer Premises Equipment)	
)	
In the Matter of:)	
)	
Implementation of the Cable Television Consumer)	MM Docket No. 92-260
Protection and Competition Act of 1992: Cable)	
Home Wiring)	

COMMENTS OF RCN TELECOM SERVICES, INC.

RCN Telecom Services, Inc. (“RCN”), through its undersigned counsel, hereby submits these comments in response to the Commission’s Further Notice of Proposed Rulemaking released on September 29, 2004 (FCC 04-228).¹ RCN provides these comments in support of the Commission’s finding that “home run wiring located behind sheetrock is considered to be physically inaccessible for purposes of determining the demarcation point between home wiring and home run wiring.”²

As demonstrated herein, sheetrock is a preexisting structural element in multiple dwelling units (“MDUs”), which makes it physically difficult to access the home run wiring (also referred

¹ In the Matter of Telecommunications Services Inside Wiring, Customer Premises Equipment, CS Docket No. 95-184, In the Matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring, MM Docket No. 92-260, *Further Notice of Proposed Rulemaking*, FCC 04-228 (Rel. Sept. 29, 2004) (hereinafter, “*Sheet Rock NPRM*”).

² *Id.* ¶1.

to herein as “subscriber lines”) located behind it. Moreover, such access involves significant modification and damage to the walls and ceilings in MDUs and imposes significant costs on competitive carriers. It is important to understand that setting the demarcation point at 12” outside the customer premise, whereby it is typically behind a wall or ceiling, entails much more than cutting a hole into the sheetrock and patching it up. Not only does such access itself involve significant modification to and result in significant damage to the sheetrock, the process is far more complicated in that carriers must still get their own subscriber lines from the demarcation point to the junction box. This process entails added physical difficulty, damages, and costs that serve to underscore how physically inaccessible the home run wiring is behind sheetrock. Moreover, because of these issues, as well as concerns about security, property damage, and esthetics, MDU owners are often reluctant to permit competitive providers of video programming services to access the home run wiring located behind sheetrock. For these reasons, the Commission was correct in its finding that sheetrock is physically inaccessible for purposes of establishing the demarcation point for home run wiring. Accordingly, the Commission’s rule as set forth in section 76.5(mm) (4) and the applicable Note as stated in the Commission’s *Reconsideration Order*, should stand and, if necessary, be clarified to indicate that an MDU owner’s refusal to grant access to the wiring behind sheetrock renders it physically inaccessible.³

³ In the Matter of Telecommunications Services Inside Wiring, Customer Premises Equipment, CS Docket No. 95-184, In the Matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring, MM Docket No. 92-260, 18 FCC Rcd 1342 (2003) (hereinafter, “*Reconsideration Order*”).

Section 76.5(mm)(4) of the Commission’s rules define “physically inaccessible” as a location that “(i) would require significant modification of, or significant damage to, preexisting structural elements, and (ii) would add significantly to the physical difficulty and/or cost of

I. Accessing Cable Wiring Through Sheet Rock Requires Significant Modification and Damage to a Preexisting Structural Element.

A. Sheet Rock is a Preexisting Structural Element.

It is well established that sheetrock is a preexisting structural element that is an integral and permanent part of the building structure of MDUs. Sheetrock, also known as plasterboard or drywall, is used in many cases instead of plaster or wood panels to form walls or ceilings in MDUs. *See* Affidavit of John Holbert at ¶ 5, attached as Attachment A (hereinafter “Holbert Aff.”). To access facilities behind sheetrock, whether it be wiring, ducts, pipes or other types of utility conduit, it is not a matter of simply opening and closing the sheetrock, in the way that one would open and close an electrical access panel. Moreover, sheetrock is not easily removable or replaceable in the same manner as removable hallway molding. *Id.* Indeed, the only alternative to cutting holes in the sheetrock in order to access the facilities behind it would be to effectively remove and then replace an entire wall or ceiling. Although sheetrock, from a materials’ standpoint, is not difficult to cut through, the physical difficulty, damage and costs associated with accessing a demarcation point set behind the sheetrock are significant enough to render it physically inaccessible. *See* Holbert Aff. These factors of inaccessibility, as explained in more detail below, are exacerbated by the integral and permanent nature of sheetrock.

accessing the subscriber’s home wiring.” 47 C.F.R. 76.5(mm)(4). The applicable Note states: “For example, wiring embedded in brick, metal conduit, cinder blocks, or sheet rock with limited or without access openings would likely be physically inaccessible; wiring enclosed within hallway molding would not.” *Id.*

B. Access to the Demarcation Point Behind Sheet Rock requires significant modification and creates significant damage.

When RCN is required to access the demarcation point through sheetrock, it results in significant modification and damage to the walls and ceilings in MDUs. In RCN's experience, it is common for the incumbent cable operator to deny a competitor, such as RCN, access to the closets or junction boxes in MDUs for the purpose of interconnecting RCN's subscriber lines to the cable home run wiring. *See* Holbert Aff. at ¶ 3. Under such circumstances,⁴ RCN subcontractors must cut through the sheetrock in order to access the "demarcation point" 12" outside of the subscriber's premises. This is because in many cases the demarcation point is located behind the wall or ceiling outside of the customer's premise. Holbert Aff. at ¶¶ 7-8.

As Mr. Holbert describes in the attached affidavit, RCN must cut a hole in the sheetrock that is at least 12" by 12" to gain access behind the sheetrock, whereby RCN is literally cutting a hole into the wall or ceiling. *Id.* ¶ 8. Although the actual cutting of the hole in the sheetrock is relatively easy, albeit rather messy, it results in permanent damage to a wall or ceiling within the MDU. And, because MDU owners, for safety and esthetic reasons, will not and cannot keep holes in their walls and ceilings, the damage must be repaired. *Id.* ¶¶ 4, 8.

In order to repair the damage, RCN subcontractors must "plug" the hole by cutting another piece of sheetrock that is large enough to fill the hole. *Id.* ¶ 9. The hole is then spackled, taped and sanded. *Id.* The area around the hole must then be repainted or re-wallpapered in a way so that it matches the existing wall or ceiling. *Id.* In some cases, especially older buildings, the whole wall or ceiling may need to be repainted or re-wallpapered to harmonize the

⁴ This example assumes that the MDU owner is willing to grant such access. *But see* II.A. *infra.*

appearance of the wall or ceiling. *Id.* Moreover, repeated access to the sheetrock may eventually weaken its structure and require that a whole wall or ceiling be replaced. *Id.* As explained in more detail below, additional difficulties associated with getting the subscriber line back to the junction box can add to the significant modification and damage done to the walls and ceilings. Thus, it is clear that setting the demarcation point at a location behind sheetrock requires carriers to make significant modifications to the sheetrock and results in significant damage, that may ultimately jeopardize the integrity of the sheetrock structure.

II. Setting the Demarcation Point at a Location Behind Sheet Rock Adds Significantly to the Physical Difficulty and Cost of Accessing the Subscriber's Home Run Wiring.

A. It is Physically Difficult to Access a Demarcation Point Behind Sheet Rock.

In addition to the significant damage and modification that must be made to the walls and ceilings in order to access the home run wiring demarcation point when it is behind sheetrock, it is also physically difficult to locate the actual demarcation point, establish the interconnection, and get RCN's subscriber line back to the junction box. Once RCN has cut a hole in the sheetrock there are no guarantees that where RCN cut the hole it will actually be able to locate and retrieve the home run wiring for interconnection with RCN's own subscriber lines. Holbert Aff. at ¶ 7. If this is the case, then RCN must cut additional holes in the sheetrock, until it has been able to locate and retrieve the existing subscriber line. *Id.* Once the line has been retrieved, RCN then must connect its own subscriber line to the existing subscriber line at this demarcation point. *Id.* Thereafter, RCN must still get its own subscriber line back to the junction box to its network interface. This process can be extremely difficult to undertake behind sheetrock, particularly in MDUs where RCN faces unknown obstacles such as heating ducts, water pipes, and other facilities. *Id.* In the case where RCN encounters such obstacles, it may be necessary to cut additional holes in the sheetrock in order to get the subscriber lines around these obstacles.

Id. Thus, accessing and interconnecting at a demarcation point set 12” outside of the customer’s premises where that point is behind sheetrock is physically difficult. Moreover, as described above, each time RCN has to cut a hole in the sheetrock, it requires a significant modification to and results in significant damage to the MDUs walls and ceilings and threatens the physical integrity of these preexisting structural elements. *Id.* ¶ 9.

It also has been clearly demonstrated in the FCC’s earlier proceedings on this issue, that many MDU owners are reluctant to permit overbuilders to cut holes in their walls and ceilings.⁵ As RCN pointed out in its initial request for Letter Ruling, “MDU owners and managers will not allow RCN to cut, open, plug, spackle, tape, sand and paint the ceilings and walls in order to install new lines because it is disruptive and eventually could require the replacement of entire ceilings and walls.”⁶ Mr. Holbert also gives an example of where the owner of the Flagship Wharf apartments in Boston has refused to grant RCN the right to cut through the walls and ceilings necessary to access the demarcation point 12” outside of each unit. Holbert Aff. at ¶ 4. As a result, RCN has been foreclosed from serving approximately 209 units in that building. This is not an isolated instance. RCN believes that such a factor is critical in determining whether a demarcation point located behind sheetrock is physically inaccessible. If an MDU owner prohibits a competitive provider from cutting holes in the building’s walls and ceilings in order to access the subscriber lines behind them, it is, in fact, physically impossible to access such lines. Thus, from a practical standpoint, if the MDU owner refuses to grant access to the

⁵ See Letter to Deborah A. Lathen, Chief, Cable Services Bureau, from William L. Fishman, Swidler Berlin Shereff Friedman, LLP, Inside Wiring – Request for Letter Ruling (filed September 23, 1998) (hereinafter “RCN Letter Ruling”); see also Ex Parte filing of Independent Cable & Telecommunications Association, CS Docket No. 95-184 (filed June 6, 2000) at 10.

⁶ RCN Letter Ruling at 3; see also Holbert Aff. at ¶ 9.

subscriber line through the sheetrock and the incumbent cable operator refuses to grant a competitor access to the subscriber line at the junction box, new entrants, such as RCN, are unable to provide competitive video services to consumers. The simple solution is to move the demarcation point to the first most accessible point outside of the sheetrock, which is typically the junction box.

B. The Costs Associated with Accessing Cable Home Run Wiring Behind Sheet Rock are Significant.

Contrary to what the incumbent cable operators would like the Commission to believe, the costs associated with accessing the cable home run wiring behind sheetrock are significant.⁷ Indeed, as explained in Mr. Holbert's affidavit, these costs can range from \$450 to \$1,000 per unit, depending on the degree of difficulty RCN encounters in its efforts to locate, retrieve and connect the cable home run wiring to its own subscriber lines at the demarcation point and run it back to the junction box in the MDU. Holbert Aff. at ¶ 13. In the Flagship Wharf example given above, if the FCC were to keep the demarcation point behind sheetrock (and assuming the owner would permit RCN to access the demarcation point), it would cost RCN *at a minimum*, approximately \$60,000 to cut into the sheetrock, locate and retrieve the home run wiring, and bring its subscriber wiring back to the junction box for all 209 units. This cost estimate is based on a best-case scenario under which the RCN subcontractor would be able to complete the work in one day (highly unlikely) and would be willing to charge the lesser cost of \$150 per unit

⁷ See Letter to Magalie Roman Salas, Secretary from Craig A. Gilley, Fleischman and Walsh, LLP, Attorney for Time Warner Cable, attaching the Declaration of Al Costanzi, ¶ 6, in which Mr. Costanzi indicates that it may cost as little as \$25 to cut into sheet rock, access the cable home run wiring behind it, and restore it to its original condition. As demonstrated herein, the cable operators' price quote is so low as to border on the absurd. It also ignores the difficulty and costs associated with the fact that competitors must still get their own subscriber wiring from the demarcation point to the junction box.

associated with subsequent installs of the subscriber lines from the demarcation point to the junction box (also unlikely).⁸ *Id.* ¶ 11. More than likely, it will cost RCN much more than \$60,000. *Id.* Regardless, even under the best-case scenario, a finding that sheetrock is physically accessible would add significantly to the cost of accessing the subscriber's home wiring. These costs would be avoided altogether if RCN were permitted to access the cable home run wiring at the last physically accessible point before the wiring enters the sheetrock, which, in MDUs, is typically the junction box.

III. Conclusion

In sum, as clearly demonstrated herein, home run wiring located behind sheetrock is “physically inaccessible” within the meaning of the Commission’s rules at section 76.5(mm)(4) for purposes of determining the demarcation point between home wiring and home run wiring. Being required to access cable home run wiring located behind sheetrock requires significant modification and damage to a preexisting structural element. Moreover, it adds significantly to the physical difficulty and cost of accessing the cable home run wiring. RCN also believes that the Commission should consider an MDU owner’s refusal to grant access to the wiring behind sheetrock a key factor in whether or not it is physically inaccessible. Accordingly, the Commission’s rule as set forth in section 76.5(mm) (4) and the applicable Note as stated in the Commission’s *Reconsideration Order*, should stand, and if necessary, be clarified to indicate that

⁸ See Holbert Aff. at ¶11. The more likely scenario is that the \$350 charge for each initial subscriber line install would be charged for each floor in the building and, as explained by Mr. Holbert, the \$150 charge for subsequent lines to adjacent units, but only if the subcontractor was pulling the line for adjacent units on the same day.

an MDU owner's refusal to grant access to the wiring behind sheetrock renders it physically inaccessible.

Respectfully submitted,



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Dated: November 15, 2004

ATTACHMENT A

AFFIDAVIT OF JOHN HOLBERT

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

In the Matter of:)
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Home Wiring)

AFFIDAVIT OF JOHN HOLBERT

Commonwealth of Massachusetts)
) ss
County of Suffolk)

I, John Holbert, being duly sworn, state that:

1. I am the ISP Construction Manager for RCN-BecoCom, LLC ("RCN"). I make this affidavit in support of RCN's comments being filed in the Federal Communications Commission's Further Notice of Proposed Rulemaking released on September 29, 2004, in the above-referenced proceedings on the issue of whether sheetrock is "physically inaccessible" for purposes of section 76.5(mm) of the Commission's rules (47 C.F.R. § 76.5(mm)).

2. I am responsible for coordinating and managing RCN's multiple dwelling unite ("MDU") buildouts consisting of risers, horizontal cabling and unit cabling. It is RCN's practice to hire subcontractors to perform this work. I will explain the process and subcontracting costs in more detail below. It is RCN's expectation that it will have access to the existing subscriber

lines running from the junction box or closet to the subscriber's premise, pursuant to the FCC's cable home wiring rules (47 C.F.R. § 76.801 *et seq.*).

3. In most cases, the incumbent cable operator refuses to cooperate with us to enable us to access the subscriber lines at an accessible demarcation point outside of the sheetrock. If the incumbent cable operator does not permit RCN to access the subscriber lines at the junction box, then RCN is forced to access the subscriber lines behind the walls or ceilings, which can consist of brick, cinderblock, wood, metal or sheetrock.

4. It also has been my experience that building owners are extremely reluctant to permit new services providers, such as RCN, to cut into sheetrock to access the wiring necessary to connect consumers to the provider's network. The building owners have expressed concern with the difficulty, inconvenience to tenants, and damage to the building that is involved in accessing the wiring through sheetrock. For example, RCN proposed to connect residents of Flagship Wharf apartments in Boston to our network for service availability. RCN built a riser up to the common closets for telecom services on each floor. However, the landlord would not allow RCN to cut the walls and ceiling necessary to reach a demarcation point 12" outside the unit. If the FCC rules clearly establish that wiring behind sheetrock is physically inaccessible then RCN can provide service to these units by connecting to the existing wiring at the junction box on each floor, satisfying the landlord's concerns, and service can be available to 209 units within a week.

5. Sheetrock, also known as wallboard, is an integral and permanent part of the structure of a building. It covers up or serves as the actual wall or ceiling that forms the basis for the room or hallway in MDUs. Thus, it is not simply a matter of removing and replacing the sheetrock in order to access the wiring behind it.

6. Moreover, it is expensive and time consuming to locate subscriber lines concealed behind walls and ceilings, and particularly in an MDU building, where the cable is concealed behind walls and ceilings in close proximity to other facilities such as metal decking, metal studs, electric lines, plumbing, insulation, sprinkler systems and HVAC.

7. If the landlord does permit RCN to cut a hole in the sheetrock, in every case, RCN is forced to "fish" its subscriber line behind the wall or ceiling to reach the length of the hallway to its own junction box with network interface. Fishing involves cutting into the sheetrock in order to locate the demarcation point 12" outside of the particular unit, and then attempting to find the subscriber line, in order to attach to RCN's feeder cables. If RCN is unable to locate the subscriber line within the initial hole, it must cut another hole into the sheetrock. Once RCN has located the subscriber line, it must connect its own subscriber line to the existing subscriber line at this demarcation point. RCN then must get its own line, which is attached at the demarcation point, to the junction box. In its travels from the demarcation point back to the junction box, RCN faces many unknown impediments, including heating ducts, water pipes, alarm systems or studs. Moreover, in some instances, the wiring is behind insulation batting that can be damaged in the process of fishing the line or lines. If an impediment is encountered, RCN must cut a new hole in the sheetrock in order reach behind it and then must clear the obstacle in order to continue to move its own subscriber line to the junction box.

8. In terms of actual access to the sheetrock, RCN must cut at least a 12" by 12" hole in the sheetrock to reach the demarcation point. This entails cutting through the sheetrock with a knife or related tool, a process which creates considerable dust and debris, while avoiding damage to elements behind the sheetrock, such as electrical wiring, insulation, duct work,

plumbing, etc. Cutting holes in sheet rock unavoidably damages the permanent structure of the MDU, and neither good construction practice nor the owners and managers of the buildings will allow the holes to remain open and unrepaired. Wiring an entire building typically requires at least one hole for each unit served, and as explained above, if the demarcation point cannot be located or if RCN is facing difficulties in fishing the lines to the junction box, more holes may need to be made.

9. Repairing the hole in sheetrock starts with putting a "plug" in the hole. The plug is cut from another piece of sheet rock to a size just large enough to fill the hole. The plugged hole is spackled, taped and sanded. The area is then repainted or re-wallpapered so that the patched hole is no longer visible and matches the existing interior finish of the building. In order to match the paint or wallpaper, especially if it has not been replaced for some time, it may be necessary to re-cover the entire wall or ceiling so that the area has a uniform appearance. The repeated cutting and repairing of holes in sheetrock eventually leads to the disintegration of the sheetrock and requires the replacement of the entire ceiling or wall.

10. As described herein, it is readily apparent that there is a great deal of work potentially involved in MDU inside wiring construction. For purposes of this proceeding, the cost impact is assessed after the riser construction and at a point where RCN's network interface begins at the junction box either in a common closet on an MDU floor or in the basement. The wire goes behind sheet rock at this point and, if the demarcation point remains 12" outside the unit and we are not allowed to access the wiring at the point before it enters the wall or ceiling, then the adventure begins. We must now begin our costly quest from the demarcation point inside the hall ceiling and down the wall back to the junction box, as described in paragraph 7 above.

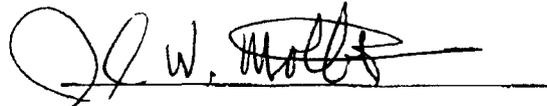
11. Our subcontractors are paid a minimum of \$127.00 to cut 12" by 12" holes in the sheetrock at the demarcation point 12" outside the apartment unit. This cost also includes the work necessary to repair the sheetrock, as described above. In rare instances, the MDU owner may permit RCN to install an access panel at this point. Under either scenario, the cost is \$127.00 per unit. The construction begins here and works back toward the box: As described above, there are often problems in locating the existing wiring. The trial and error process may result in more holes needing to be cut and subsequently repaired by the subcontractor. This work is not covered by our flat rate and the extra time and effort will be billed back to us at \$46.50/hour per tradesman. Whether or not the subcontractor finds the inside wire at the supposed demarcation point the work must be done to reach the RCN point of network interface in the closet or basement. This is paid at a rate of \$350.00 to install, terminate, test and document RG-6 and Cat-3 cable homeruns per unit. There may be a lesser cost of \$150.00 per unit for added unit(s) along the same hallway if the subcontractor is called upon to bring our service to another adjacent unit on the same day as the original installation.

12. If the inside wiring cannot be located at the established demarcation point 12" outside the unit then RCN must wire the apartment and this, of course, adds to the cost. The subcontractor receives \$375.00 to install the outlet homerun to the wall plate in the unit. A second jack would cost \$225.00. This cost is not incurred by RCN if we are allowed to access the inside wiring at the first accessible demarcation point before the wiring goes behind sheetrock.

13. The determination that wiring behind sheet rock is accessible results in costs to RCN seeking access to residents as a competitor in an average range from approximately \$450.00 to over \$1,000.00 per unit as outlined above. Thus, for example, if the MDU owner at

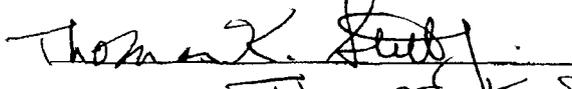
Flagship Wharf were to permit RCN to cut holes in its walls and ceilings and the demarcation point was left at 12" outside each unit, the cost to access the subscriber wiring for the 209 units would be, at a minimum \$58,093.00. This cost assumes that only one hole would need to be cut into the sheetrock for each unit (at \$127 per hole) and that the subcontractor would only charge \$350 for the initial RCN subscriber line install to the junction box and charge \$150 per additional line for each additional unit. Because it is highly unlikely that the subcontractor could do all of the work in a single day, the cost is more than likely be much higher than the \$60,000 estimated above.

14. As a result of the physical inaccessibility of wiring behind sheetrock, either because landlords prohibit cutting through it to reach the demarcation point 12" outside each unit and/or because it is cost-prohibitive, we have been unable to reach as many as 8,000 to 10,000 potential MDU customers in the Boston metropolitan market alone.


John Holbert

State of Massachusetts)
) ss
County of Suffolk)

Sworn to before me this 12th day of November, 2004


Notary Public Thomas K. Steel, Jr.

My Commission expires January 31, 2010