The Telecommunications Act of 1996 and the Internet: Reciprocal Compensation or Irreconcilable Compensation?

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Introduction

In 1996 the United States Government passed 47 U.S.C. § 251, better known as the Telecommunications Act of 1996. The purpose of this act was to help break up the Bell Telephone monopoly and create a more competitive telecommunications marketplace. This purpose was primarily accomplished by § 251(a)(1), which essentially mandated that all telecommunications carriers interconnect with the networks of other telecommunications carriers. Although this act achieved the goal of a more competitive communications industry, several large problems arose with the explosion of the Internet in the late nineties. These problems are rooted in the compensation method mandated by 47 U.S.C. § 251 to deal with the constitutional takings issues raised by mandatory interconnection. A veritable horde of litigation has ensued as a result of this compensation mechanism and although steps have been taken to correct this problem the area of law dealing with compensation and internet communications is far from settled.

The compensation method at the core of the litigation resulting from 47 U.S.C. § 251 is called reciprocal compensation and in light

2. Id.
4. MCI Worldcom Communs., Inc., 810 N.E.2d at 805-06 (noting explosion in Internet use and opportunity for problems it created).
5. See generally Id. at 805-06 (describing how reciprocal compensation provision of 47 U.S.C.S. § 251 created problem when applied to Internet).
of the state of technology in the early nineties it was theoretically a good idea. However, like many ideas that are sound in theory, external realities, namely changes in technology, have shown flaws in reciprocal compensation. It is the position of this note that reciprocal compensation is inherently flawed with respect to at least one key technological advancement, internet communications, and should therefore be removed as the unilateral compensation method in 47 U.S.C. § 251. The support for this position will come from examining the history and reasoning behind reciprocal compensation, as well as some of the cases and FCC orders arising out of its implementation. Specifically, the Legislative purpose and language of 47 U.S.C. § 251, as well as practical implementation problems, will show that reciprocal compensation is the wrong compensation system for a technologically advanced world.

History

When the Bell patent on the telephone expired in 1897 the problem of interconnection grew in its place. Interconnection became a problem because of the need for a competitive telecommunications industry. This necessity eventually gave rise to governmental regulation to assure that a competitive telecommunications industry was achieved. However, as with most governmental regulation, this created problems, specifically, constitutional problems. These problems came from early common carrier law and the takings clause

13. Id.
of the constitution. Specifically, the early common law rules stated that common carriers do not have to interconnect. Since telecommunications companies are viewed as common carriers constitutional issues arise in the form of the takings clause because with no common law right to interconnection the government is mandating the use of private property when mandating interconnection. Thus, mandatory interconnection creates a situation where the government is taking the property of one telephone company for the use of another.

The constitutional issues raised above came to a head when the government passed the Telecommunications Act of 1996. The goal of that act was to break up the regional monopolies on telecommunications that had been created when Bell Telephone was broken up into regional companies known as Incumbent Local Exchange Carriers (“ILECs”). The Telecommunications Act of 1996 accomplished its goal of creating a more competitive telecommunications industry by mandating that these ILECs interconnect with smaller companies that were at a disadvantage because they had not established a large physical network. Thus, because of the mandatory interconnection agreements the Competing Local Exchange Carriers (“CLECs”) could compete with the ILECs because now they were all on a larger interconnected network.

16. Id.
17. Id at 377-79. The early common carrier laws mostly grew out of the regulation of the railroad industry. Id. In that vain, mandating that one railroad company be given access to another railroad company’s rails offended private property rights and received little justification from competition. Id. Thus, a common law right to interconnect was disregarded in favor of a right of hand-off. Id.
19. Id.
20. MCI Worldcom Commns., Inc., 810 N.E.2d at 804-05.
21. Id. The Bell telephone monopoly was broken up in 1984 into regional telephone companies called “baby Bells”. Bell System Memorial at http://www.bellsystemmemorial.com/bellsystem_history.html#INTRODUCTION. However, these “baby Bells” now merely held smaller regional monopolies which regulators felt could only be broken up through mandatory interconnection. Id. These regional telecommunications carriers are often referred to as “Incumbent Local Exchange Carriers or ILECs”. MCI Worldcom Commns., Inc., 810 N.E.2d at 804-05.
22. MCI Worldcom Commns., Inc., 810 N.E.2d at 804-05. These smaller companies are often referred to as Competing Local Exchange Carriers or CLECs. Id.
23. See Id. (describing how Telecommunications Act of 1996 neutralized competitive advantage inherent in ILEC's ownership of physical networks).
only problem with this mandatory interconnection is that it violates the takings clause of the constitution in that the Government was now taking the private networks of the ILECs and requiring that the CLECs be allowed access to those networks. This governmental action has been viewed as both a regulatory and physical taking because it imposes economic damage and dispossesses the ILECs of their property. The only way that the government could get around this unconstitutional taking is to come up with some sort of compensations system.

The solution to the takings problems raised by the Telecommunications Act of 1996 was addressed in § 251(b)(5) of that Act. This section deals with what are referred to as reciprocal compensation agreements. This section simply states that when ILECs and CLECs interconnect they must enter into an agreement by which they will compensate each other. These agreements will be approved by State Telecommunications Commissions and, if a contract dispute arises, the State Commissions will interpret the agreements.

It is common knowledge that when a phone call is made only the customer that placed the call is charged. Thus, if a Verizon customer calls an MCI customer only Verizon makes any money even though MCI incurred some cost because its customer and corresponding network had to be used to complete the call. The way the compensation agreements under § 251(b)(5) were designed to work was that they recognized the costs incurred by one provider in terminating a call which that provider could not charge to its customer. Under reciprocal compensation these termination costs

24. See Candeub, Supra note 9 at 400-01.
25. See Id. (stating that regulation which authorizes third party to establish permanent physical invasion constitutes per se taking). Furthermore, there are also regulatory takings that do not require physical possession, but rather only imposition of additional costs. Id.
26. See Id. at 398 (stating that all government needs to do to make taking constitutional is compensate in such method as to “allow for a just and reasonable return on capital”).
29. Id.
31. Id. at 105 (describing how compensation works when calls are made between customers of two different networks).
32. Id. Only the originator pays for the call; a receiver does not pay a fee to receive a call even though there are costs associated with receiving the call. Id.
33. MCI Worldcom Communs., Inc., 810 N.E.2d at 805-06.
would be paid by the provider that originated the call after that provider had billed its customer.\(^{34}\) Thus, in our previous example Verizon would actually pay MCI the cost that MCI had incurred in completing the call after the Verizon customer had been billed.\(^{35}\) In theory these payments would eventually even out as customers called each other back and forth, thus alternating which network was the originating provider.\(^{36}\) The agreements set a flat per minute rate that the originating provider would pay for using the terminating providers network and thus, these reciprocal compensation agreements seemed like the perfect solution to the takings problems.\(^{37}\)

The reciprocal compensation agreements seemed to be the perfect solution to the interconnection problem until the Internet exploded on to the scene in the late 1990’s.\(^{38}\) With the explosion of the Internet, many of these new CLECs started soliciting Internet Service Providers (ISP) as their customers.\(^{39}\) The problem that arose is that ISPs did not fit into the reciprocal compensation model.\(^{40}\) The model now consisted of the customers of ILECs calling the ISP customers of the CLECs.\(^{41}\) This created a problem because the ISPs/CLECs did not call anybody back.\(^{42}\) Thus the ILECs were left with extremely long, one sided calls to the CLECs and huge reciprocal compensation bills while the CLECs had virtually no reciprocal compensation bill because their ISP customers were not calling anybody.\(^{43}\) The ILECs naturally did not think this was fair and started challenging the reciprocal compensation agreements on the basis that calls to an ISP are not similar to local telephone calls and thus should not be governed by reciprocal compensation which only applies to local telecommunications traffic.\(^{44}\)

\(^{34}\) Id.

\(^{35}\) Id.

\(^{36}\) Id.

\(^{37}\) MCI Worldcom Commun. Inc., 810 N.E.2d at 805 n. 8 (demonstrating example agreement set flat rate of $.008 a minute). But See 16 F.C.C.R. 9151, supra note 8 (suggesting that although reciprocal compensation was once viewed as viable solution, numerous problems have arisen).

\(^{38}\) Candeub, Supra note 9 at 415-18.


\(^{40}\) Id. at 805-06. Because calls to ISPs are primarily one way and of long duration, they do not fit into the reciprocal compensation model that assumes compensation will balance out. Id.

\(^{41}\) Candeub, Supra note 9 at 417-18.

\(^{42}\) Id. at 417.

\(^{43}\) Id.

When the above problems started to play out, the FCC was called upon to decide whether calls to an ISP are local for the purposes of reciprocal compensation or fall outside reciprocal compensation because they are interstate.\textsuperscript{45} Originally a two-call analysis was used to categorize calls to an ISP.\textsuperscript{46} Under this analysis the call from the ILEC to the ISP/CLEC was viewed as one local call and then the call from the ISP to points unknown over the internet was viewed as a second interstate call.\textsuperscript{47} Under this analysis it was clear that calls to ISPs were local and thus were subject to reciprocal compensation.\textsuperscript{48} However, in 1999 the FCC issued the Internet Traffic Order which changed the analysis from the two call analysis to an end to end analysis.\textsuperscript{49} Under this new analysis the call to the ISP was not viewed as terminating at the ISP, but rather merely being rerouted over the internet as one continuous phone call.\textsuperscript{50} Under the “end to end analysis” it was decided that calls to ISPs were inherently interstate in nature and thus were not subject to reciprocal compensation at all.\textsuperscript{51}

The FCC’s Internet Traffic Order would have seemingly ended the controversy, but shortly after inception it was challenged in the case of Bell Atlantic Telephone Companies v. F.C.C.\textsuperscript{52} In Bell Atlantic a United States Court of Appeals vacated and remanded the Internet Traffic Order holding that the FCC had not adequately explained why the two call analysis no longer applied, nor why the end to end analysis was more appropriate.\textsuperscript{53} On remand the FCC again found that calls to ISPs are inherently interstate.\textsuperscript{54} This time the FCC did not apply the end to end analysis, but rather determined that the Telecommunications Act of 1996 and reciprocal compensation did not apply to calls to an ISP whether in state or out of state because

\begin{itemize}
\item 45. \textit{See Generally 14 F.C.C.R.. 3689 (1999)}.
\item 46. \textit{MCI Worldcom Communs., Inc.}, 802 N.E.2d at 807.
\item 47. \textit{Id.}
\item 48. \textit{MCI Worldcom Communs., Inc.}, 810 N.E. 2d at 807 (describing how the first call to the ISPs were local in many respects, including billing, dialing, and local calling region).
\item 49. \textit{Id} at 807. The FCC Internet traffic order definitively rejected the two-call theory in favor of an “end to end analysis”. \textit{Id.} at 807-08.
\item 50. \textit{Id.}
\item 51. \textit{MCI Worldcom Communs., Inc.}, 810 N.E. 2d at 807.
\item 52. \textit{Bell Atl. Tel. Cos v. FCC}, 206 F.3d 1 (2000).
\item 53. \textit{MCI Worldcom Communs., Inc.}, 810 N.E.2d at 807-08. “The United States Court of Appeals for the District of Columbia Circuit vacated and remanded the Internet Traffic Order for want of reasoned decision-making”. \textit{Id.}
\item 54. \textit{Id} at 808.
\end{itemize}
ISP traffic was “information access” traffic under 47 U.S.C. § 251(g) and thus exempt from reciprocal compensation. This order was again remanded by the United States Court of Appeals for the District of Columbia Circuit because of deficiencies in the FCC’s reasoning; however, this time the order was not vacated. This means that while FCC proceedings are still ongoing, the FCC order declaring that reciprocal compensation does not apply to calls to an ISP is still in effect.

While this remand to the FCC has been pending, several cases have gone forward on the basis that State Communications Commissions are given the right to interpret reciprocal compensation agreements using state contract law principles. These cases have come out on opposite ends of the spectrum with some commissions holding that calls to ISPs were included in the individual reciprocal compensation agreements and others holding that agreements were intended to mirror the federal law and thus the standing FCC order says reciprocal compensation does not apply. Thus, with a new FCC order still pending, differing case decisions emerging, and constitutional issues underlying everything, this area of law remains unsettled.

Facts

For the purposes of this note, I intend to use two case decisions to illustrate that the FCC orders removing ISP traffic from reciprocal compensation were correct because the Telecommunications Act of 1996 was not meant to apply to internet traffic. Two illustrative cases are MCI Worldcom Communications, Inc. v. Department of Telecommunications and Energy (MCI) and Worldcom, Inc. v. FCC (Worldcom). I will describe the facts of each case separately, starting with MCI because it does an excellent job of describing the

55. Id.
56. MCI Worldcom Communs., Inc., 810 N.E.2d at 808.
57. Id.
59. Compare MCI Worldcom Communs., Inc., 810 N.E.2d at 804-805, Verizon Md Inc. v. RCN Telecomm. Servs., Inc., 248 F.Supp.2d 468 (2003) (holding in the first case that reciprocal compensation does not apply to ISP bound traffic, however; in the latter holding that reciprocal compensation applied to ISP bound traffic due to the intent of the parties at the time of their agreement).
60. See Generally MCI Worldcom Communs., Inc., 810 N.E.2d at 804 (holding that reciprocal compensation did not apply to ISP bound traffic, but noting that state of Federal law is still open question).
issues and gives a good example of the typical challenge to these agreements. MCI will be followed by Worldcom as it addresses the most recent FCC order and thus illustrates the current position of the law.

After detailing the facts of each of these two cases separately, I will use them in one general discussion section to show that reciprocal compensation was an inherently incorrect way to deal with the constitutional takings problems of interconnection and that in fact the FCC order of 2001 has implemented the correct way to deal with the constitutional takings. The 2001 FCC order should therefore become the governing law and reciprocal compensation should be phased out of the telecommunications industry in favor of the “Bill and Keep” system of recovery.

**MCI Worldcom Communications, Inc. v. Department of Telecommunications and Energy**

This case arises out of a reciprocal compensation agreement between Verizon New England and MCI Worldcom Communications. Prior to the passage of the Telecommunications act of 1996 Verizon New England had a near monopoly over telephone service in eastern and central Massachusetts. MCI Worldcom Communications entered the telephone service market in eastern and central Massachusetts after the passage of the Telecommunications Act of 1996, and in doing so, entered into a reciprocal compensation agreement with Verizon New England pursuant to that act.

The agreement provided that reciprocal compensation would only apply to local calls, in which a customer initiates a phone call on one

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62. See Generally MCI Worldcom Commns., Inc., 802 N.E.2d 804 (discussing the state of the law and applying it to a challenge brought by a CLEC to have reciprocal compensation applied to Internet traffic).
63. See Generally Worldcom, Inc. v. FCC, 288 F.3d 429 (D.C. Cir. 2002) (reviewing the most recent FCC order concerning the Telecommunications Act of 1996 and remanding it without vacating it).
65. See Id at 9198 (Suggesting that a phase out towards “Bill & Keep” is a viable solution to the problems created from the application of reciprocal compensation to Internet communications).
66. MCI Worldcom Commns., Inc., 810 N.E.2d at 804.
67. Id at 806.
68. Id.
network and terminates on another network. There was nothing in the agreement that explicitly addressed whether calls to an ISP were local or long distance. For approximately ten months the agreement was carried out without incident, with both parties including calls to ISPs in their payment of reciprocal compensation. However, in April of 1997, Verizon New England stopped making reciprocal compensation payments for calls to ISPs because it felt these calls were interstate and not local. In June of 1997, MCI Worldcom Communications filed a petition with the Department of Telecommunications & Energy in Massachusetts (“Dept.”) alleging that Verizon New England had breached the agreement and prayed that the Dept. would enforce the agreement under their exclusive jurisdiction to interpret such agreements.

After a hearing, the Dept. determined that calls to ISPs were local and subject to reciprocal compensation on the basis of the two-call theory that was presently being used by the FCC. In 1999, the FCC issued a ruling that rejected the two-call theory in favor of an end to end analysis and thus found that reciprocal compensation did not apply to calls to ISPs. However, the FCC said that it would not interfere with the rulings of the State commissions until it had established another adequate compensation method. Shortly after this ruling, Verizon New England moved for the Dept. to modify its earlier order that mandated payment of reciprocal compensation for calls to ISPs. The Dept. accepted Verizon New England’s motion

69. Id.
70. MCI Worldcom Communis., Inc., 810 N.E.2d at 806-07.
71. Id.
72. Id.
73. MCI Worldcom Communis., Inc., 810 N.E.2d at 807.
74. Id. The two-call theory concludes that calls to an ISP are comprised of two separate services: (1) a local call to an ISP server, and (2) a subsequent (possibly interstate) communication from the ISP to the Internet. Id. The first part of this theory is considered local because it has all the hallmarks of a local call, originating and receiving callers in same local region, local dialing, and local billing. Id.
75. See Generally 14 F.C.C.R. 3689 (1999). The end to end analysis used by the FCC looked at the fact that the calls to the ISP do not terminate at the ISPs local server, they continue to other destinations that are often located in another state and thus the service is primarily interstate in nature. Id.
76. Id.
77. MCI Worldcom Communis., Inc., 810 N.E.2d at 807. Although the FCC found no reason to interfere with state commission findings as to whether reciprocal compensation applied to ISP traffic, the commissions were free to review their decisions depending on the bases underlying those decisions. Id. Thus, Verizon could petition the commission to review its earlier decision and the commission would likely do so if the commission
and reversed it’s earlier order, thus holding that Verizon New England no longer had to pay reciprocal compensation for calls to an ISP.78

In March of 2000, the United States Court of Appeals for the District of Columbia vacated and remanded the FCC’s order that had utilized the end to end analysis for lack of reasoned decision making.79 This reversal prompted MCI Worldcom Communications to ask the Dept. to reverse the order of 1999.80 The Dept. declined to reverse its order of 1999 and has continued to hold that reciprocal compensation is not required for calls to an ISP even though the FCC orders on this point have continued to be remanded.81

MCI Worldcom Communications then brought this action against the Dept. claiming that the Dept.’s orders were against Federal law because the Dept. did not interpret the contract to decide the issue, but instead relied on the FCC rulings.82 A Federal court agreed with this claim and remanded the case to the Dept. to do a contract analysis.83 On remand the Dept. construed the contract to show an intention that the parties would follow the interpretations of the FCC concerning the scope of reciprocal compensation.84 The Dept. therefore held that because the FCC had shown an intention to exclude calls to ISPs from reciprocal compensation the agreement should exclude them from reciprocal compensation.85 This decision is an appeal from the decision of the Dept. finding that the was no error in the Dept’s interpretation of the contract.86 Upon review the court agreed with the Dept.’s finding that the intent of the parties was

felt it’s earlier decision was based on no longer applicable law. Id.

78. Id at 807-08
79. MCI Worldcom Communs., Inc., 810 N.E.2d at 808.
80. Id at 808-09. Presumably, MCI Worldcom assumed that the commission had based the reversal of its original order on the 1999 FCC order and thus now that the FCC order had been vacated the commission should again reverse it’s order. Id.
81. MCI Worldcom Communs., Inc., 810 N.E.2d at 807-808. The commission felt that it was impractical to sway back and forth making arbitrary decisions while the issue was on remand to the FCC. Id.
82. Id. at 808-09.
83. Id. (finding that commission had reversed its order based merely on Internet Traffic Order, which was not intended to be foundation for overturning earlier decisions).
84. MCI Worldcom Communs., Inc., 810 N.E.2d at 809. The commission found that the plain language of the agreement tied reciprocal compensation to FCC interpretations and determined that the FCC interpretation of 47 U.S.C.S. § 251 (b)(5) was compensable under the agreement. Id.
85. Id.
86. MCI Worldcom Communs., Inc., 810 N.E.2d at 809.
to comply with Federal Law and that since the Federal Law at issue is subject to FCC orders the agreement was tied to FCC orders.87

**Worldcom Inc. v. FCC**

Worldcom arises out the 1999 FCC order that declared calls to ISPs to be non-local by way of an end-to-end analysis.88 When that order was vacated and remanded for a lack of reasoned decision making the order at issue in this case was born.89 This case is a challenge to the subsequent 2001 FCC order brought by a group of local telephone service exchange carriers and by a group of states and their regulatory commissions.90

The FCC order at issue in this case again declared that calls to an ISP are not subject to reciprocal compensation, but did it this time by finding Internet traffic is completely outside the scope of 47 U.S.C.S. § 251 rather than by going through some intrastate-interstate analysis.91 The FCC came to this determination by way of 47 U.S.C.S. § 251(g).92 The FCC found § 251(g) applicable because it provides that in the absence of express legislation certain types of telecommunications, such as “information exchange”, are to be governed by the provisions that existed before the passage of the Telecommunications Act of 1996.93 The FCC then extrapolated that because calls to an ISP were classified as information exchange before the passage of the Telecommunications Act of 1996 and there was no prior reciprocal compensation requirement, neither the Telecommunications Act of 1996 nor reciprocal compensation could apply to calls to an ISP.94

After making the determination that calls to an ISP were exempt from reciprocal compensation, the FCC proceeded to establish a new

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87. *Id* at 809-12
90. *Worldcom, Inc.*, 288 F.3d at 432. The petitioners in this case consist of state regulatory commissions contesting the removal of their jurisdiction over reciprocal compensation and CLECs arguing that Internet traffic should be subject to reciprocal compensation because they stand to lose substantial payments. *Id*.
91. *Id* at 431. Effectively, the FCC found that Internet traffic was completely outside the scope of the Telecommunications Act of 1996, rather than merely outside the intrastate requirements of § (b)(5) of that act. *Id*.
93. *Id* at 432-33.
94. *Id*.
cost recovery system for calls to an ISP. This new recovery system was termed “bill-and-keep” and consisted of a system where each telephone service provider would recover the costs of interconnection from its own end users. However, this new “bill-and-keep” recovery system would only apply to those contracts negotiated after the date of the FCC order, thus there would be a transition between reciprocal compensation to “bill-and-keep”. The final significant mandate of the FCC order was to remove the jurisdiction to resolve and interpret interconnection issues that had previously been conferred on the state regulatory commissions.

The first challenges to the FCC’s 1999 order came from two different directions, one in the form of telephone service providers that would like to see reciprocal compensation continue and the other from state regulatory commissions that would like to retain their jurisdiction over these interconnection agreements. As to the first attack, the service providers felt that the FCC erred in it’s determination that § 251(g) removes calls to ISPs from reciprocal compensation. The appeals court in this case agreed with the service providers attack and remanded the order to the FCC to find a more adequate explanation for why calls to ISPs should be exempt from reciprocal compensation. As to the attack from the state regulatory commissions concerning the removal of their jurisdiction, the appeals court declined to make a ruling on that issue until the

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95. Id. at 431
96. Worldcom, Inc., 288 F.3d at 431. (the “bill-and-keep” system recovers costs in small amounts from customers of both networks, in this context that would be both individuals and ISPs).
98. Worldcom, Inc., 288 F.3d at 432. The FCC exercised its general authority to regulate the rates and terms of interstate telecommunications services and interconnections between carriers, resulting in the removal of jurisdiction it that had previously conferred upon state regulatory commissions to interpret interconnection agreements. Id.
99. See supra note 90 and accompanying text.
100. Worldcom, Inc., 288 F.3d at 432. The CLECs also felt that the interim “bill and keep” compensation method was not a product of reasoned decision making and thus should be struck down as contrary to the terms of the Telecommunications Act of 1996. Id.
101. Worldcom, Inc., 288 F.3d at 433-34. The court essentially held that § 251(g) was not specific enough to be given the meaning that the FCC suggested. Id. The court found that § 251(g) was a “transitional enforcement mechanism” that was to be used to ensure that telecommunications providers would continue to abide by regulations in place before the Telecommunications Act of 1996. Id. As such a tool § 251(g) could not reasonably be used to take types of communications out of the scope of the Telecommunications Act of 1996. Id.
FCC had given an adequate reason for exempting calls to ISPs from reciprocal compensation.\textsuperscript{102} However, the Appeals Court did not vacate the FCC order, thus the “bill-and-keep” system is still intact and the state regulatory commissions will not have jurisdiction over newly negotiated agreements.\textsuperscript{103} It remains unclear whether the state regulatory commissions will retain jurisdiction over previously negotiated agreements.\textsuperscript{104}

Analysis

Inherent Problems Between Reciprocal Compensation and Internet Communications

Lack of Relevant Statutory Language

Although the two cases listed above do not completely detail the state of the law with respect to reciprocal compensation and calls to ISP’s, what can be taken from them is the fact that there is simply no way that the reciprocal compensation requirements of 47 USCS § 251(b)(5) were ever meant to apply to calls to an ISP.\textsuperscript{105} The first clue that reciprocal compensation was never meant to apply to calls to an ISP is the statute itself.\textsuperscript{106} It would truly be amazing for a statute that supposedly governs calls to ISP’s and thus internet communications to be totally devoid of reference to the internet.\textsuperscript{107} Although some would this is based on the fact that the internet has

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  \item \textsuperscript{102} \textit{Worldcom, Inc.}, 288 F.3d at 434. The court declined to decide whether or not the FCC could take away the jurisdiction conferred on the state commissions by § 251(b)(5) because it was remanding the case to the FCC for another attempt at showing § 251(b)(5) does not apply to Internet communications. \textit{Id.} Thus, the jurisdiction question will turn on whether the FCC can show that § 251(b)(5) does not apply to internet communications. \textit{Id.}
  \item \textsuperscript{103} \textit{Id.}
  \item \textsuperscript{104} \textit{Id.} See \textit{Worldcom, Inc.}, 288 F.3d at 434 (explaining that host of issues left unresolved while this case is on remand to FCC).
  \item \textsuperscript{105} 16 F.C.C.R. 9151, 9154 (2001). After finding that intercarrier compensation for ISP-bound traffic is within their jurisdiction under § 201 of the Telecommunications Act of 1996, the FCC concluded that § 251(g) expressly limited the reach of § 251(b)(5) to exclude ISP-bound traffic. \textit{Id.}
  \item \textsuperscript{106} See 47 U.S.C.S. § 251(b)(5) (2004).
  \item \textsuperscript{107} 16 F.C.C.R. at 9167-68 (2001) (finding the only reference to the internet in the statute to be in an exclusionary section). Calls to an ISP are more correctly termed “information access”, which is excluded under section 251(g), than they are to the generic and overly broad term “telecommunications”, which is used in section 251(b)(5). \textit{Id.}
\end{itemize}
become more prevalent since the statute’s inception, it can hardly be said that the internet did not exist in 1996 when 47 USCS § 251 was enacted.108 Thus, it would seemingly have been prudent for the legislature to have included at least some reference to the internet in the language § 251(b)(5).109 The fact that 47 USCS § 251 does not refer to the internet in any way logically leads to the conclusion that the legislature never contemplated 47 USCS § 251(b)(5) and reciprocal compensation’s application to calls to an ISP and internet communications.110

Reciprocity and Legislative Purpose Issues

However, even if one ignores the fact that 47 USCS § 251(b)(5) does not specifically apply reciprocal compensation to calls to an ISP and assumes that it must apply because calls to an ISP are telecommunications, there is still no way that reciprocal compensation can be effectively applied to calls to an ISP.111 The problem with effectively applying reciprocal compensation to calls to an ISP presents two interrelated issues.112 The first issue is a substantive failure of reciprocal compensation, while the second is a resulting byproduct of that substantive failure.113

The substantive failure referred to is the fact that reciprocal compensation relies on reciprocity to be effective.114 Reciprocity is inherent in mandatory interconnection because when two telecommunications carriers interconnect they are necessarily deriving a reciprocal benefit from that interconnection.115 They both have access to each other’s networks, thus in theory they both have the same opportunity to derive benefits from the other network.116

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108. Id. at 9161-62 (2001) (noting that communications have changed over last decade).
112. See infra note 114.
113. Id.
114. Candeub, supra note 111, at 405-08 (detailing how interconnection is reciprocal, but how reciprocal compensation fails to capture that reciprocity).
115. Id.
116. Candeub, 54 SYRACUSE L. REV. at 405. “The costs of interconnection must be shared because its benefits are reciprocal; both networks get larger
However, these shared reciprocal gains are not built in to reciprocal compensation because reciprocal compensation hinges on the variable of making phone calls.117 Thus, because ISPs do not return calls to network from which they received them, the all important variable in reciprocal compensation falls to zero and the inherent reciprocity of interconnection is never realized by the network that is calling the ISP.118

No matter how one classifies calls to an ISP, reciprocal compensation will always hinge on the variable of making phone calls to recognize the joint gains of the interconnected parties.119 Since ISP’s will never make the phone calls required for this to work, reciprocal compensation is simply an ineffective way to recognize the reciprocal nature of interconnection.120 Although this failure, in and of itself, dictates that reciprocal compensation should not apply to calls to an ISP there are further ramifications that go to the core of 47 USCS § 251.121

The legislative purpose behind 47 USCS § 251 was to create a more competitive telecommunications industry.122 One of the keys to accomplishing this goal is that telecommunications providers be able to compete on one large interconnected network, thus putting everyone on the same playing field.123 The substantive failure of reciprocal compensation referred to above has the effect of segmenting this playing field because it does not accurately realize the joint benefits of interconnection.124

When one considers that a network calling ISPs on another network is required to make large one-way payments to that receiving network, it is easy to see how any benefit to the calling network that
was created by interconnection has now been negated.\textsuperscript{125} This effectively places the calling network on a smaller playing field because the ISP network is of no benefit to the calling network even though they are interconnected.\textsuperscript{126} Conversely, the ISP network is on the largest playing field where it derives huge benefits from the calling network and still gets the benefit of its own network.\textsuperscript{127}

This inequality in the playing field does nothing to foster competition, but what is perhaps most damaging to the legislative intent of 47 USCS § 251 are the large one-way payments to the ISP networks.\textsuperscript{128} These payments are generally nothing more that a windfall to the telecommunications provider that serves the ISPs and as such they have the effect of actually hindering competition.\textsuperscript{129} Probably the most disconcerting fact is that these payments have the effect of destroying the relationship between the cost of providing service and the price charged to the customer.\textsuperscript{130} Thus, there is little incentive to reduce the cost of service through innovation and pass those savings on to the customer.\textsuperscript{131} Furthermore, the payments tend to monopolize the ISP market in the telecommunications carrier that can sign up the most, the quickest.\textsuperscript{132} Thus, the telecommunications carriers that signed up ISPs as customers early and often would have

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\item \textsuperscript{125} Candeub, 54 SYRACUSE L. REV. at 408 (noting that one party paying for the costs of interconnection is untenable). “The costs of interconnection must be shared because its benefits are reciprocal”. \textit{Id.} at 405.
\item \textsuperscript{126} Candeub, \textit{supra} note 125, at 405-06 (discussing how intercarrier payments have always failed to recognize that both networks benefit and by doing so does not equally recognize the benefits of interconnection).
\item \textsuperscript{127} 16 F.C.C.R. at 9182 (describing economic distortions in favor of networks serving ISPs).
\item \textsuperscript{128} \textit{Id}. at 9181-86 (discussing how reciprocal compensation has hindered the development of competitive markets and distorted economics).
\item \textsuperscript{129} \textit{Id}.
\item \textsuperscript{130} \textit{Id}. at 9182-83. “Because intercarrier compensation rates do not reflect the degree to which the carrier can recover costs from its end-users, payments from other carriers may enable a carrier to offer service to its customers at rates that bear little relationship to its actual costs.” \textit{Id.} at 9182.
\item \textsuperscript{131} 16 F.C.C.R. 9151, 9183 (2001) (describing how reciprocal compensation does not reward efficiency or quality). “The large one-way flows of cash made it possible for LECs serving ISPs to afford to pay their own customers to use their services, potentially driving ISP rates to consumers to uneconomic levels”. \textit{Id} at 9162.
\item \textsuperscript{132} \textit{Id}. at 9182-83 (describing how competitive local exchange carriers fought to sign up as many ISPs as possible and thus take advantage of reciprocal compensation benefits). Reciprocal compensation “created incentives for inefficient entry of LECs intent on serving ISPs exclusively and not offering viable local telephone competition, as Congress had intended to facilitate with the 1996 Act.” \textit{Id}. at 9162.
\end{itemize}
a huge competitive advantage over any new competition.\textsuperscript{133} Thus, reciprocal compensation fosters the exact kind of monopolization and unfair advantage that 47 USCS § 251 was intended to eliminate.\textsuperscript{134}

**Inherent Problems with the Intrastate-Interstate Analysis**

As if the aforementioned issues were not enough there are even more application problems when one tries to determine whether calls to an ISP are intrastate or interstate.\textsuperscript{135} These problems present themselves in the form of the analysis that the FCC and courts have applied to calls to an ISP.\textsuperscript{136} It is universally agreed that reciprocal compensation only applies to intrastate calls, thus the analysis of whether a call is intrastate or interstate becomes critical.\textsuperscript{137} As it applies to calls to an ISP there are basically two forms of analysis, “end-to-end” and the “two-call” analysis.\textsuperscript{138} It is the position of this paper that under either analysis, reciprocal compensation cannot apply to calls to an ISP in the manner that courts and regulatory commissions have been applied it.\textsuperscript{139}

The end-to-end analysis is the most common sense approach to determining whether a call is interstate or intrastate and thus was the original analysis adopted by the FCC.\textsuperscript{140} Under this analysis, one simply looks at the point of origin for a call and its point of termination.\textsuperscript{141} If those two points are in the same state, then the call is intrastate and reciprocal compensation applies.\textsuperscript{142} If the point of termination and the point of origin are not in the same state, then the

\begin{itemize}
  \item \textsuperscript{133} 16 F.C.C.R. at 9182-83 (2001).
  \item \textsuperscript{134} See 16 F.C.C.R. 9151 (2001), supra note 128 and accompanying text.
  \item \textsuperscript{135} Id. at 9163-66 (discussing the difficulties encountered in doing “interstate”, “intrastate” analysis).
  \item \textsuperscript{136} Id.
  \item \textsuperscript{137} MCI Worldcom Communis., Inc., 810 N.E.2d at 806 (stating that reciprocal compensation is only available for local calls). The historical view has been that there were only two kinds of intercarrier compensation, one for local telephone exchange service and one for long distance services. 16 F.C.C.R. at 9164.
  \item \textsuperscript{138} MCI Worldcom Communis., Inc., 810 N.E2d at 807-08 (acknowledging that only two theories ever used for reciprocal compensation analysis as the “two-call” theory and the “end-to-end” theory).
  \item \textsuperscript{139} See 16 F.C.C.R. at 9163-65 (discussing problems with reciprocal compensation analysis).
  \item \textsuperscript{140} See 14 F.C.C.R. 3689, 3696 (1999) (stating commission has traditionally used an endpoints jurisdictional analysis).
  \item \textsuperscript{141} See Id. at 3696-98 (discussing application of end-to-end analysis in previous cases).
  \item \textsuperscript{142} Id.
\end{itemize}
call is interstate and reciprocal compensation does not apply.\textsuperscript{143} If you apply this analysis to calls to an ISP it is fairly obvious that calls to an ISP are not intrastate.\textsuperscript{144}

The following hypothetical illustrates that calls to an ISP are not intrastate. If an individual is sitting at a computer in Boston Massachusetts and logs on to the Internet it is obvious that the point of origin for the call to their ISP is Boston Massachusetts. If their ISP is Verizon, and Verizon is located in Massachusetts, we know this because the computer is dialing a Massachusetts number. However, the call has not terminated with this call to the ISP in Massachusetts, all that has happened is that the line to Verizon’s computer has been left open and then rerouted to any location so chosen, with the majority of those choices being located outside of Massachusetts and thus interstate.\textsuperscript{145} A good analogy is that of a passenger traveling on a train.\textsuperscript{146} If an individual is located in Boston and wants to go to Los Angeles, their trip is not in-state simply because they got on the subway in Boston and road it to the station in Boston where the train for Los Angeles departs.\textsuperscript{147} Thus, an end-to-end analysis demonstrates that calls to an ISP are interstate and not subject to reciprocal compensation.\textsuperscript{148}

The other form of analysis is the two-call theory.\textsuperscript{149} That analysis was forwarded by telecommunications carriers serving ISPs because it seemed to lend itself easier to the calls to an ISP scenario.\textsuperscript{150} Under this analysis, the call to the ISP is viewed as an intrastate call and then the corresponding calls from the ISP to points unknown as an interstate call.\textsuperscript{151} This form of analysis was rejected by the FCC while interpreting this issue even though it does actually seem to

\begin{itemize}
\item \textsuperscript{143} Id.
\item \textsuperscript{144} See 14 F.C.C.R. 3689, 3697 (1999). In remaining consistent with precedent the FCC concluded that calls to an ISP do not terminate at the ISP’s local server, but continue to the ultimate destination or destinations, specifically at a Internet website that is often located in another state. Id.
\item \textsuperscript{145} Id.
\item \textsuperscript{146} See generally Adam Candeub, \textit{Network Interconnection and Takings}, 54 SYRACUSE L. REV. 369, 381-87 (2004) (using common carrier law and trains as a comparison to telecommunications interconnection).
\item \textsuperscript{147} 14 F.C.C.R. 3689, 3697 (1999). “An interstate communication itself extends from the inception of a call to its completion, regardless of any intermediate facilities.” Id.
\item \textsuperscript{148} 14 F.C.C.R. 3689 (1999), supra note 144.
\item \textsuperscript{149} MCI Worldcom Communs., Inc., 810 N.E.2d at 807-08; See also supra note 138 and accompanying text.
\item \textsuperscript{150} 14 F.C.C.R. 3689, 3694-95 (1999) (describing how two-call theory works and where it came from).
\item \textsuperscript{151} Id.
\end{itemize}
make the most sense. However, when one really looks closely, this form of analysis does not work very well either. The major problem with this analysis is that the initial call from the customer to the ISP does not end when it connects to the ISP, rather the connection continues throughout the time that the user is on the internet and so to do the costs that reciprocal compensation agreements are designed to recoup. The call from the user to the ISP is not one short intrastate call and thus that is the reason that it has never been billed as one in reciprocal compensation agreements and the reason that the two-call analysis has been rejected by the FCC.

When you consider that the two-call analysis is inconsistent with the facts of a call to an ISP and that by the end-to-end analysis calls to an ISP simply cannot be classified as an intrastate call, there is only one solution as to how calls to an ISP should be handled with regards to reciprocal compensation. Reciprocal compensation should not apply to calls to an ISP because they have to be covered by the end-to-end analysis and under that analysis they are inherently interstate calls. However, with this being said how do we solve the still present constitutional takings problem that is created by mandatory interconnection, i.e. giving ISP customers of one telecommunications provider access to the network and customers of another telecommunications provider.

152. MCI Worldcom Communis., Inc., 810 N.E.2d at 807 (noting that FCC rejected the two-call theory in favor of end-to-end).
153. See generally 14 F.C.C.R. 3689 (1999) (citing numerous reasons that the two-call analysis does not properly describe internet communications and offends precedent).
154. 14 F.C.C.R. 3689, 3699 (1999) (noting the fact that under the provisions of the Telecommunications Act of 1996 internet communications are treated as one continuous call). The Telecommunications Act of 1996 “recognizes the inseparability, for purposes of jurisdictional analysis, of the information service and the underlying telecommunications….Thus, we analyze ISP traffic for jurisdictional purposes as a continuous transmission from the end user to a distant Internet site.” Id
155. Id.; See also supra notes 152, 154 and accompanying text.
156. See generally 14 F.C.C.R. 3689 (1999) (holding that calls to an ISP are interstate by the end-to-end analysis and that the two-call analysis is invalid). Reciprocal compensation only applies to local calls, thus if calls to an ISP are deemed to be interstate then reciprocal compensation should not be applied. MCI Worldcom Communis, Inc., 810 N.E.2d at 806).
“Bill & Keep”, The Correct Solution to Constitutional Takings

There are basically two schools of thought when it comes to compensation for the takings problems raised by the mandatory interconnection of 47 USCS §251.159 Obviously one of those schools of thought is reciprocal compensation, but because this method is based on reciprocity there are inherent problems with respect to calls to an ISP.160 ISPs do not return phone calls and this lack of reciprocity means that reciprocal compensation is ill-suited to handle calls to ISPs.161 The other school of thought on how to compensate for takings under mandatory interconnection is called “Bill & Keep”.162 “Bill & Keep” basically assumes that there are no constitutional takings under mandatory interconnection or at least that the costs which create the taking can be shared.163 Although this paper is not the place for an intricate discussion of the economic theories behind this assumption, a short discussion should be included.

The basic assumption behind “Bill & Keep” is that mandatory connection does not necessarily create a constitutional takings problem.164 This is because of the economic benefits that arise out of mandatory interconnection.165 The benefits of mandatory connection to the customer of a telecommunications carrier are obvious, the customer gets a larger network and theoretically better service and prices due to increased competition.166 However, “Bill & Keep”

159. Id at 404 (comparing two schools of thought, intercarrier payments and “Bill and Keep”).
160. Candeub, see supra note 126. ISPs do not call people back, thus there is no reciprocity. MCI Worldcom Communis., Inc., 810 N.E.2d at 806 (describing basic assumption of reciprocal compensation as equivalent calls placed, but that ISPs do not fit into this model).
161. Candeub, see supra note 126. Applying reciprocal compensation to calls to an ISP created significant market distortions because of the primarily one-way nature of this traffic. 16 F.C.C.R. at 9182.
162. Candeub, see supra note 159.
163. See Candeub, 54 SYRACUSE L. REV. at 405. “Bill and Keep” assumes that both parties share the cost of interconnection. Id.
164. See generally Adam Candeub, Network Interconnection and Takings, 54 SYRACUSE L. REV. 369, 398-99 (2004) (suggesting that because interconnecting networks both profit from their interconnection there may not be a takings problem).
165. Id. at 399. “Interconnection benefits both phone companies because both companies customers can call more people and receive more calls, thus interconnection makes each network more valuable”. Id.
166. Candeub, see supra note 165. 16 F.C.C.R. 9151, 9183 (2001) (stating that the most efficient prices result when carriers are forced to compete, not when they can price there services without regard to cost).
assumes benefits from mandatory interconnection to the telecommunications provider as well as to the customer.167 “Bill and Keep” finds benefits to the provider in the form of a larger network and thus a larger pool of potential customers.168 The larger pool of potential customers leads to more customers, more use, and thus more revenues.169 Thus, “Bill & Keep” assumes that these benefits from mandatory interconnection negate any takings of physical networks when it is mandatory that a customer of one telecommunications provider be given access to the network of another telecommunications provider.170

The end result is that there is compensation for any takings by allowing the telecommunications providers to “bill” customers that have been newly created through mandatory interconnection and “keep” the revenues to offset any takings.171 Furthermore, this method has some significant benefits over the current Reciprocal Compensation system of recovery.172 One benefit is that it places compensation in the hands of the party best suited to determine what that compensation should be, namely the telecommunications provider whose network is being used.173 Theoretically the telecommunications providers are in a better position to determine the costs associated with losing part of their networks than the FCC.174 Thus, by allowing telecommunications providers to set their

167. See Candeub, 54 SYRACUSE L. REV. at 419-23 (outlining how “Bill and Keep” recognizes benefits of interconnection and thus better recoup the costs).
168. Id. at 420. The motivating idea behind “Bill and Keep” is that interconnection provides a clear benefit to both carriers. Id. “It increases both networks calling universe, thereby increasing the value of each network and presumably allows carriers to charge more for subscription.” Id.
169. Candeub, see supra note 168.
170. See Candeub, 54 SYRACUSE L. REV. at 420 (arguing that because “Bill and Keep” better balances the benefits of interconnection with its burdens there is no takings issue and thus no need for reciprocal compensation).
171. See generally Id. at 419-424 (outlining possible “Bill and Keep” pricing systems that would result in no takings issues).
173. See Id. at 9185-86 (discussing how reciprocal compensations pricing scheme does not accurately reflect costs of communications providers). See also Candeub, 54 SYRACUSE L. REV. at 416-21 (2004) (discussing how hard it is for regulator to set correct interconnection prices and how “Bill and Keep” does not suffer from this problem because regulators set no price under “Bill and Keep”).
174. 16 F.C.C.R. at 9185 (2001). “Bill and Keep also may address the problem
own rates under the “Bill & Keep” system economic waste is
minimized and the reciprocity problems of Reciprocal Compensation
are eliminated.\textsuperscript{175}

Some critics would suggest that the “Bill & Keep” system, by
eliminating the reciprocal compensation payments to the
telecommunications providers that signed up ISPs, would drive up
the price of internet access to the consumer, thus limiting internet
usage.\textsuperscript{176} However, this criticism ignores the fact that the majority of
the reciprocal compensation payments related to ISPs were a windfall
to the telecommunications providers, thus demonstrating little
relation between the actual costs associated with providing internet
service and the prices to consumers.\textsuperscript{177} This lack of a relation
between costs and prices means that competition between ISPs is
negligible.\textsuperscript{178} Thus, this criticism of “Bill & Keep” ignores the effect
that competition will have on the costs of internet service.\textsuperscript{179} Under
the “Bill & Keep” system prices to the consumer will actually relate
to the costs of the provider, thus competition will create incentives to
lower costs of provision in order to simultaneously drive down prices
to the consumer.

In light of the fact that the constitutional takings problem behind
reciprocal compensation may not actually exist and that “Bill &
Keep” does not suffer from the reciprocity problems that reciprocal
compensation does, replacing reciprocal compensation with “Bill &
Keep” seems like a viable solution to a large problem.\textsuperscript{181} However,

\begin{itemize}
\item \textsuperscript{175} 16 F.C.C.R. at 9186 (2001) (admitting difficulties in setting inter-carrier compensation rates while noting reciprocity problems inherent with calls to ISPs).
\item \textsuperscript{176} See \textit{Id.} at 9184-85 (suggesting that “Bill and Keep is likely to provide a viable solution to the market distortions caused by the application of reciprocal compensation to ISP bound traffic).
\item \textsuperscript{177} See \textit{supra} notes 126, 176 and accompanying text.
\item \textsuperscript{178} See \textit{supra} note 128.
\item \textsuperscript{179} See \textit{supra} note 161.
\item \textsuperscript{180} 16 F.C.C.R. at 9183-84 (stating that efficient prices result when they are based on the cost of service and suggesting that “Bill and Keep” may do this).
\item \textsuperscript{181} See Candeub, \textit{54 SYRACUSE L. REV.} at 419-21 (suggesting that proper compensation system may eliminate constitutional takings problem). The central problem with reciprocal compensation is that it relies on other carriers to recover costs rather ones own customers. 16 F.C.C.R. at 9182. “Bill and Keep” limits cost recovery to ones own customers rather than other carriers. \textit{Id.} at 9184. See also \textit{supra} note 176.
\end{itemize}
when you further factor in that “Bill & Keep” has the potential to actually drive down the cost of internet service to the consumer it is obvious that reciprocal compensation should be replaced by the “Bill & Keep” system.182

Conclusion
The idea behind 47 USCS §251 was noble; create a more competitive telecommunications industry, and in many respects it was largely successful. The telecommunications industry of today is certainly a more diverse place that it was before the passage of 47 USCS §251. However, like many noble ideas, 47 USCS §251 suffers from some flaws. Indeed, it is hard to expect that such a grandiose idea could be without flaws and when one takes into account the technological explosion that occurred in the late nineties it is impossible to expect that 47 USCS §251 could have been implemented any smoother. However, with that being said, one of the things that differentiates a well thought out, but failing idea from a well thought out, but successful idea is the ability to change the idea during its implementation.

The flaw at issue here is reciprocal compensation as it applies to internet communications. As suggested above, this flaw is but one part of an otherwise well thought out and successful idea. Thus, to make 47 USCS §251 a truly great idea and its implementation undeniably successful all that needs to be done is to eliminate the flaw.

The FCC has taken steps in the right direction to eliminate this flaw. The FCC has consistently determined that reciprocal compensation should not apply to internet communications and has even gone so far as to implement the “Bill & Keep” system on an interim basis. However, courts have been slow to recognize that reciprocal compensation is indeed a flaw and their largely irreconcilable decisions on this issue have done little to remedy the situation.

The only way that the reciprocal compensation flaw in 47 USCS §251 is going to be remedied is for courts to affirm the FCC order that is currently on remand and thus take internet communications out of the scope of reciprocal compensation once and for all. In doing this, “Bill & Keep” will be simultaneously implemented and the confusion hanging over this area of law will become settled. Once this issue is settled, 47 USCS §251 can finally be recognized as the successful piece of legislation that it is.

182. See supra note 180.