

Decision No. C01-1225

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO**

DOCKET NO. 00I-494T

---

IN THE MATTER OF THE INVESTIGATION INTO MODIFICATION OF  
COMMISSION PRACTICES AND POLICIES REGARDING INTERCARRIER  
COMPENSATION.

---

**ORDER PROVIDING FOR TESTIMONY  
AND SETTING PROCEDURAL SCHEDULE**

---

Mailed Date: December 4, 2001  
Adopted Date: November 28, 2001

**T A B L E O F C O N T E N T S**

<b><u>I.</u></b>	<b><u>BY THE COMMISSION</u></b>	<b>1</b>
A.	Statement:	1
B.	Scope of Issues:	5
C.	Impact of Legal Issues on Policy Formation:	6
D.	Impact of Factual Issues on Policy Formation:	8
E.	Consequences of Various Policy Decisions:	14
F.	Possible Alternatives:	17
<b><u>II.</u></b>	<b><u>ORDER</u></b>	<b>19</b>
A.	The Commission Orders That:	19
B.	ADOPTED IN COMMISSIONERS' WEEKLY MEETING	20

---

**I.** **BY THE COMMISSION**

**A. Statement:**

1. On August 30, 2000, the Colorado Public Utilities Commission ("Commission") opened this docket to investigate Commission practices and policies pertaining to intercarrier

compensation mechanisms applicable to regulated telecommunications providers. See, Decision No. C00-960.

2. The decision opening that docket instructed parties to file written comments by September 22, 2000. Qwest Corporation; ICG Telecom Group, Inc.; AT&T Communications of the Mountain States, Inc.; WorldCom, Inc.; Pac-West Telecomm of Colorado; XO Communications, Inc.; Eschelon Telecom of Colorado, Inc.; McLeod Telecommunications Services, Inc.; Level 3 Communications, LLC; Verizon Wireless, Inc.; and the Colorado Office of Consumer Counsel submitted comments.

3. On October 11, 2000, the Commission held a half-day workshop on the matter.

4. On October 13, 2000, the Commission issued a procedural order seeking comments regarding suggested procedures for further proceedings in this docket. Decision No. C00-1175.

5. The current intercarrier compensation policy was designed before passage of federal and state legislation opening the local telecommunications market to competition. As such, the Commission finds it appropriate to review whether Colorado's current intercarrier compensation regime continues to be the most effective policy. From a broad policy perspective, the Commission tends to support an intercarrier compensation policy that enables competitive markets to flourish, and that allows carriers the flexibility to offer commercially attractive packages to wholesale and retail customers. At the same time,

the Commission is charged by statute to establish minimum standards for basic local service offerings and for levels of service quality.

6. The Commission is attentive to the economic impact on the telecommunications consumer of any proposal to reform intercarrier compensation policy (*i.e.*, potentially higher local rates), as well as the impact on small incumbent local exchange carriers that derive a substantial percentage of their revenues from access charges. The Commission understands that telecommunications providers do not have an incentive to compete in markets if they are not allowed to earn a just and reasonable return on their investment. Likewise, market distortions and arbitrage opportunities that the current intercarrier compensation regime promotes.

7. Any new intercarrier compensation policy must take into account the goal of advancing affordable universal service, as required by Colorado statute and the Telecommunications Act of 1996.

8. To gain a better understanding of the potential financial impacts of reforming the current policy on intercarrier compensation, the Commission directs its Staff to prepare a written report summarizing information that has been filed with the Commission, or with the Federal Communications Commission ("FCC"), concerning revenues derived from intercarrier compensation, and demand by service offering for both incumbents

and new entrant providers. The report shall also include any other information from Commission files that may be responsive to the issues identified in this notice. A bibliography of the research materials relied upon by the Commission and its Staff to date is attached to this Order as Exhibit A.

9. The Commission is considering a number of possible alternatives to make intercarrier compensation policy more effective in Colorado. To evaluate these alternatives, the Commission seeks additional information on factual and policy questions in the form of written testimony. Many of these issues were raised by the parties during the aforementioned workshop on October 11, 2000, or in the subsequent round of comments. In an effort to focus the discussion and to move toward possible solutions, the Commission seeks responses to an extensive array of targeted questions.

10. The questions are broken into five broad categories. The first category seeks to define the scope of the issues before the Commission. The second category relates to the impacts of legal issues on policy formation in this docket. The third category requests company-specific factual information that will assist the Commission in designing an effective intercarrier compensation policy. The fourth category seeks to anticipate the practical consequences of various policy alternatives. The final group of questions asks commenters to respond to possible alternatives that the Commission might consider.

**B. Scope of Issues:**

1. Please identify the key intercarrier compensation policy reform that you believe is necessary, and explain why it is critical to you and your customers or to you and the constituency which you represent. Please identify any other reforms that you believe are necessary, and indicate why such reforms are less critical.

2. Please identify the key intercarrier compensation policy which you believe should be retained and explain why it is critical to you and your customers or to you and the constituency which you represent. Please identify any other policies that you believe should be retained, and indicate why retention of each is less critical.

3. When attempting to evaluate the effectiveness of various intercarrier compensation regimes, what can be learned from the history of the telecommunications industry? What can be learned from other industries? What can be learned from similar recent and ongoing investigations at the FCC and other state jurisdictions?

4. What is the relative regulatory burden of implementing various intercarrier compensation regimes?

5. What practical constraints should the Commission consider as it seeks to effectively reform intercarrier compensation in Colorado?

6. Practically and theoretically, how can rate re-balancing be accomplished without a total service rate review that analyzes whether intrastate and interstate cost allocation factors have changed, and whether service allocation factors have changed? Is a total service rate review, including both retail and wholesale services, necessary if it can be demonstrated that residential and business basic services are not subsidized based on existing allocation methodologies?

7. What impact would it have on carriers if the FCC adopts one intercarrier compensation regime and the Commission endorses a different regime within Colorado? Should the Commission wait until the FCC decides how it is going to reform access charges, or should the Commission proceed independently of the FCC to reform intercarrier compensation arrangements in Colorado?

**C. Impact of Legal Issues on Policy Formation:**

1. Does the Telecommunications Act of 1996 mandate that all intercarrier compensation regimes be uniform? Does the Act imply anything about the permissibility and desirability of various regimes?

2. Are there any legal limits on the Commission's ability to reform intercarrier compensation within the State of Colorado? Is the Commission's ability to reform intercarrier compensation within Colorado constrained by the existing statutory rate cap for residential basic local exchange service?

If so, how? If not, why not? Is the Commission's ability to reform intercarrier compensation within Colorado constrained by the United States Supreme Court's decision in *Smith v. Illinois Bell Telephone Company*, 282 U.S. 133 (1930). If so, how? If not, why not?

3. Must, as a matter of law, or should, as a matter of policy, intercarrier compensation regimes between local exchange carriers ("LECs"), as well as between a LEC and an interexchange carrier ("IXC"), both be re-examined simultaneously? If not, which should be examined first, and why?

4. Must, as a matter of law, or should, as a matter of policy, intercarrier compensation rates be cost-based? If so, why?

5. Must, as a matter of law, or should, as a matter of policy, the Commission make whole the local exchange provider for any loss of revenues as a result of access charge reform? If so, why?

6. Must, as a matter of law, or should, as a matter of policy, intercarrier compensation mechanisms be technology neutral? That is, should the Commission's policy on intercarrier compensation be uniform regardless of the technology used to deliver a call over the network, or should the Commission's policy distinguish between circuit switching and packet switching (e.g., voice over internet protocol)? Please provide arguments to support your position.

**D. Impact of Factual Issues on Policy Formation:**

1. What are the existing structure and scope of intercarrier compensation arrangements today for your company, identifying both federal and state structures? What is the revenue per minute received by your company for each such arrangement? What is the cost per minute incurred by your company for each such arrangement? How was that cost determined?

2. Does the emergence of competition require that intercarrier compensation regimes be uniform? If so, how? Are intercarrier services competitive? Why or why not? Please provide data to support your response. What implications does any emergence of competition in telecommunications in Colorado have for the choice of the best intercarrier compensation regime?

3. When a telephone call is made, who is the cost causer? Who benefits from the call? If more than one party benefits from the call, what are the possible mechanisms by which the costs may be shared? If more than one party benefits, how are the total benefits distributed among the parties? How do your answers to this issue affect your choice of an intercarrier compensation regime?

4. How does the possibility of different networks (*i.e.*, different location, purpose, technology, etc.) having different cost structures affect the choice of an intercarrier compensation regime?



5. Traditionally, total usage (*i.e.*, traffic sensitive) costs on the telephone network were correlated to, and consequently measured by, both call frequency<sup>1</sup> and call duration<sup>2</sup> measures. (Hundred call seconds ("CCS") of demand and peak-period call peg count.) Do those measures remain the key variables to understanding usage costs of the telephone network? If not, what are the key variables (such as trunk connections purchased) that determine usage cost causation on the current networks that provide telephone services?

6. Traditionally, usage costs by service and by customer class varied because the peak-period traffic characteristics,<sup>3</sup> along with the busy-hour to total day ratio, varied by service and by customer class. Do those variations in usage characteristics by service and by customer class continue to exist? If so, how do the usage characteristics for these traditional services compare to the usage characteristics for relatively new service offerings such as cellular, internet services, and voice over internet protocol?

---

<sup>1</sup> Usually measured by busy-season, busy-hour peg count, or alternatively measured by ten-high day busy-hour peg count.

<sup>2</sup> Usually measured by busy-season, busy-hour hundred call seconds ("CCS") or alternatively measured by ten-high day busy-hour CCS.

<sup>3</sup> Usually measured by average monthly calling rates and average customer hold time by time-of-day and day-of-week in subscriber line usage studies.

7. Do network usage characteristics (such as peak period average CCS/trunk or average network holding times) vary based on the type of traffic (*i.e.*, internet, wireless voice, wireline voice, cellular, residential vs. business niche marketing, etc.) carried between networks or between network providers.

8. Do usage costs on the telephone network vary depending on the technology used to deliver the call (e.g., circuit switching vs. packet switching)? If so, how? Please provide quantitative data to support your position.

9. If usage costs on the telephone network are time-sensitive, or continue to be correlated to both call frequency and call duration, and if traffic characteristics continue to vary by service, by customer class, and by time-of-day, how can a one-dimensional wholesale measure for traffic exchange (*i.e.*, minutes of use) be justified as economically efficient and cost-based?

10. If network usage characteristics (such as peak-period average CCS/trunk or average network holding times) vary based on the type of traffic (*i.e.*, internet, wireless voice, wireline voice, cellular, residence vs. business niche marketing, etc.) carried between networks or between network providers, and if network costs are correlated to usage, how can a one-dimensional measure for traffic exchange such as bill-and-keep be

justified as cost-based and economically efficient if traffic characteristics vary significantly between providers?

11. A key premise of many theoretical proposals for bill-and-keep solutions to the intercarrier compensation issue is that the costs of measurement are zero, and therefore economic efficiency is achieved because measurement costs and administration are minimized. What is the cost of call measurement per call, and per minute of use? What percent of that measurement cost is frequency-based, and what percent is duration-based? Does that measurement cost vary by service, by class-of-customer, or by time-of-day? How does the measurement cost per call compare to the total cost per call by service, by class-of-customer, and by time-of-day? How does the measurement cost per minute of use compare to the total cost per minute of use by service, by class-of-customer, and by time-of-day?

12. Are technology improvements decreasing call measurement costs? If yes, on what is that assessment based? If not, why not?

13. What would be the financial impact on various providers of changing intercarrier compensation regimes? What would be the financial impact on consumers?

14. At the time of divestiture, the FCC and states recognized a rate differential between switched access services (*i.e.*, Feature Groups A, B, C, and D) based on how IXCs interconnected to the network. Are there any similar cost or

policy considerations to justify that rate differentials should be established as intercarrier compensation regimes are reviewed?

15. Should traffic-sensitive costs be recovered through traffic-sensitive rates and non-traffic-sensitive costs through non-traffic-sensitive rates? If so, why? If not, why not? How does your position on this issue affect your choice of an intercarrier compensation regime?

16. What implications would adopting various intercarrier compensation regimes have on opportunities for regulatory arbitrage? For example, arbitrage might occur if a regulation results in different charges being assessed for the same facility depending on the specific services provided by that facility.

17. What billing system implementation and change costs should the Commission consider as it reviews alternative intercarrier compensation regimes?

18. Does the joint provision of high capacity loop services, such as digital subscriber line ("DSL"), with traditional voice-grade services such as switched access service, cellular access service, unbundled loops, basic local exchange service, and toll services change the need for revenue recovery from these traditional services? If so, why and how? If not, why not? If the growth of jointly-provided DSL service decreases the need to recover revenues from these traditional services, should, as a matter of policy, or must, as a matter of law, rate

re-balancing occur? If so, can the rate re-balancing be limited to wholesale services, or must a total service rate review occur? If not, why?

19. If cross-subsidization is a concern in any rate adjustments that may be required as a result of this intercarrier compensation review, how does the provision of high capacity loop services along with traditional voice-grade services and the initiation of the Colorado High Cost Support Mechanism impact the traditional cross-subsidization analysis recognized by the Commission in Rule 4 *Code of Colorado Regulations* 723-30, Rules Prescribing Principles for Costing and Pricing of Regulated Services of Telecommunications Service Providers.

20. Are residential local loop rates subsidized in Colorado when all federal and state revenues supporting the loop including local service revenues, actual and imputed access charges, end-user line charges, intercarrier revenues supporting the loop, state and federal high cost funding, and high capacity service revenues are included in the revenue and cost analysis? How does each of the intercarrier compensation regimes impact that cross-subsidization analysis for each Colorado LEC?

21. Since local exchange service is billed primarily on a flat rate while toll service is billed according to usage, does this cause any problems for wholesale or retail billing? Please explain your response.

**E. Consequences of Various Policy Decisions:**

1. What implications would adopting various intercarrier compensation regimes have for the presence or the abuse of monopoly or oligopoly market power?

2. What impact would the choice of an intercarrier compensation regime have on telecommunications service quality? For each regime, who would the end-user contact to rectify a service quality problem (*i.e.*, who bears the responsibility for service quality)?

3. How would adopting various intercarrier compensation regimes affect the patterns and volumes of network usage and the types of customers which a LEC, IXC, or competitive local exchange carrier would wish to attract?

4. How would adopting various intercarrier compensation regimes impact the behavior of the calling party? How would they affect the behavior of the called party?

5. What impact would various intercarrier compensation regimes have on the future overall level of investment in telecommunications networks and on the choice among technologies? Will intercarrier compensation reform result in stranded investment? If so, how?

6. What impact would various intercarrier compensation regimes have on the incumbent LEC's ability to thwart competition by initiating a price squeeze on its competitors?

7. What implications would adopting various intercarrier compensation regimes have for the continued viability of the internet?

8. What cross-subsidies might arise under different intercarrier compensation regimes?

9. What implications would adopting various intercarrier compensation regimes have for the locations of Points of Presence?

10. What implications would adopting various intercarrier compensation regimes have for the emergence of competition in Colorado telecommunications markets?

11. What implications would adopting various intercarrier compensation regimes have on the goal of universal service?

12. What impacts would adopting various intercarrier compensation regimes have on other LEC rates? Which rates would most likely be affected? What would be possible justifications given for these other rates being so affected? Who would benefit from these rate adjustments?

13. What impacts would adopting various intercarrier compensation regimes have on toll rates? In your response, please differentiate between rates and costs.

14. What implications would adopting various intercarrier compensation regimes have on the end-user's ability to readily determine the total cost of initiating or receiving a

call? Is there technology available that would assist the end user in determining or measuring this cost? If any intercarrier compensation regime causes a problem in this regard, how serious is it, and how could it be addressed?

15. How does the balance, or imbalance, in traffic flows affect the choice of the best intercarrier compensation regime?

16. If intercarrier compensation is billed on a usage basis, how should those rates be determined?

17. If intercarrier compensation is billed on a usage basis, should it be symmetrical with respect to origination or termination? Why or why not?

18. What special issues might arise in choosing an intercarrier compensation regime for smaller, rural LECs as opposed to a larger, urban one?

19. What is the expected impact of each intercarrier compensation regime on statewide average toll rates?

20. How will intercarrier compensation reform impact the deployment of advanced services and the provisioning of local exchange services in Colorado?

21. What is the expected impact of each intercarrier compensation regime on the Colorado High Cost Fund?

22. One theoretical solution for intercarrier compensation is to require bill-and-keep as the default arrangement unless carriers negotiate otherwise. If such a



method were adopted, what incentives would a carrier have to negotiate if it economically benefits from traffic imbalances under a bill-and-keep arrangement?

**F. Possible Alternatives:**

1. Would your company or organization support an intercarrier compensation regime based on negotiated contracts for some or for all types of Colorado intrastate traffic, subject to a baseball style of arbitration if agreements were not reached between parties? If yes, what types of traffic should be included in the negotiated contract? What are the practical, legal, and policy merits of such a proposal? Please discuss the steps you believe would be necessary to effectuate such a policy.

2. Would your company or organization support an intercarrier compensation regime based on negotiated contracts for some or all types of Colorado intrastate traffic, subject to a Commission arbitration policy to default to a bill-and-keep arrangement provided traffic balances were within some established bounds? If yes, what types of traffic should be included in the negotiated contract, how should the Commission establish those boundaries, and what criteria should the Commission use to identify traffic imbalances? What are the practical, legal, and policy merits of such a proposal? Please discuss the steps you believe would be necessary to effectuate such a policy.

3. Would your company or organization support an intercarrier compensation regime that reduced Colorado switched access rates toward local interconnection rates as wholesale revenues (including imputed wholesale revenues) for high capacity loop services increase? What are the practical, legal, and policy merits of such a proposal? Please discuss the steps you believe would be necessary to effectuate such a reform policy.

4. Would your company or organization support a Commission initiative to provide state-wide or LATA-wide local calling areas, thereby eliminating the cross-service pricing issues that inevitably result during intercarrier compensation discussions? What are the practical, legal, and policy merits of such a proposal? Please discuss the steps you believe would be necessary to effectuate such a reform policy.

5. Would your company or organization support an intercarrier compensation regime that included an intrastate subscriber line charge, which might offset revenues lost through a reduction in access charges? What are the practical, legal, and policy merits of such a proposal? Please discuss the steps you believe would be necessary to effectuate such a reform policy.

6. Other than the alternatives mentioned here, does your company or organization support any other reforms to the existing policy on intercarrier compensation? If so, please describe your proposed approach in substantial detail. What are

the practical, legal, and policy merits of your proposal? Please discuss the steps you believe would be necessary to effectuate such a reform policy.

## **II. ORDER**

### **A. The Commission Orders That:**

1. Interested persons shall file written testimony in this docket on or before January 15, 2002. Parties shall also file this testimony, including any exhibits, in electronic format (PC compatible). Whenever possible, the Commission requests parties to organize their testimony in the same sequence as the questions were presented in this Order. When that is not feasible, the Commission asks parties to make it very clear which question they are answering in testimony.

2. Staff shall file with the Commission a written report summarizing the results of its preliminary findings on factual issues related to intercarrier compensation, on or before January 15, 2002.

3. Parties shall be permitted to submit reply testimony responding to the testimony of other parties and to the Staff report, on or before February 23, 2002. Discovery will be permitted on the written testimony filed with the Commission.

4. Interested persons shall file proposed draft rules on topics of specific interest to them, on or before February 23, 2002. Proposed draft rules shall also be filed in electronic

format (PC Compatible). The rules need not be an exhaustive proposal, but rather need merely address issues of concern to the particular party. Those draft rules may be incorporated, by administrative notice, into a subsequent docket, such as a Commission Notice of Proposed Rulemaking on intercarrier compensation.

5. A hearing on this matter, in panel discussion format, shall be conducted at the following date, time, and place:

DATE: March 5, 2002

TIME: 9:00 a.m.

PLACE: Colorado Public Utilities Commission  
1580 Logan Street, Office Level 2  
Denver, Colorado

6. Parties filing testimony shall be subject to cross-examination by the various other parties.

7. This Order is effective on its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING  
November 28, 2001.**

( S E A L )

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO



RAYMOND L. GIFFORD

---

POLLY PAGE

---

ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Bruce N. Smith".

---

Bruce N. Smith  
Director

JIM DYER

---

Commissioners