

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

UM 1463

In the Matter of

PUBLIC UTILITY COMMISSION OF  
OREGON

Investigation of the depreciation rate for  
Softswitch switching technology.

ORDER

DISPOSITION: STIPULATION ADOPTED

**I. INTRODUCTION**

On December 21, 2009, Staff for the Public Utility Commission of Oregon (Staff) requested the opening of a small telecommunications utility docket to address the depreciation rate for Softswitch switching technology. The softswitch technology at issue is a relatively new routing technology for which no depreciation rate currently exists. After further proceedings and negotiations, Staff and the active parties to this docket reached agreement on all disputed issues. In this Order, we adopt that Stipulation.

**II. PROCEDURAL HISTORY**

Staff filed a request to open a docket in this matter on December 21, 2009. An Administrative Law Judge conducted a prehearing conference and adopted a procedural schedule on January 25, 2010. On February 22, 2010, Staff notified the Commission that the parties had reached an agreement in principle resolving all issues. GVNW Consulting, Inc., Moss Adams LLP, the Oregon Telecommunications Association and Commission Staff (collectively the "Parties") filed their Stipulation on March 4, 2010. Staff filed testimony and an exhibit in support of the Stipulation on April 5, 2010.

**III. DISCUSSION**

**A. Stipulated Settlement Agreement**

Staff and the parties have agreed to a global settlement. The Parties agreed upon an average service life range of 7-8 years and a depreciation rate range of 11.9-14.3 percent. The agreed-upon rates are limited to the smaller carriers that are part of

the Oregon Exchange Carriers Association pool, listed in Exhibit 2 to the Parties' Stipulation.

The Parties recommend to the Commission that the effective date for the agreed-to service life range shall be January 1, 2010, provided that an individual company may elect to apply the rate effective January 1, 2009.

The Parties' agreement allows companies to develop depreciation rates outside of the established rate range by using the exception process set out in Order No. 95-634, Specific Matters 5-8, as amended by Exhibit 3 to the Parties' Stipulation. Exhibit 3 provides a slight modification to the exception process in Order No. 95-634 due to the lack of historical data for softswitch technology. Staff also amended the date that a company must file an exception, from June 1 to December 31 of the year preceding the access filing year.

#### **IV. CONCLUSION**

The Commission encourages parties to a proceeding to voluntarily resolve issues to the extent that settlement is in the public interest. The active parties to this docket entered into a stipulation that resolves all outstanding issues. No party has filed an objection to the Stipulation.

The Public Utility Commission of Oregon has examined the Stipulation and Staff's supporting testimony. We conclude that the depreciation rates established for softswitch technology are fair, just, and reasonable. We therefore adopt the Stipulation in its entirety.

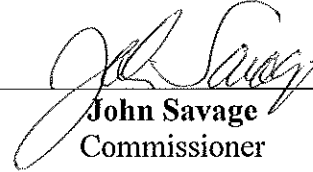
V. ORDER

IT IS ORDERED that the Stipulation executed by GVNW Consulting, Inc., Moss Adams LLP, the Oregon Telecommunications Association, and Staff for the Public Utility Commission of Oregon is adopted.

Made, entered, and effective APR 27 2010.



**Ray Baum**  
Chairman



**John Savage**  
Commissioner



**Susan Ackerman**  
Commissioner



A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order by filing a petition for review with the Court of Appeals in compliance with ORS 183.480-183.484.

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BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON

UM 1463

In the Matter of the Complaint of  
  
PUBLIC UTILITY COMMISSION OF  
OREGON  
  
Investigation of the depreciation rate for  
Softswitch switching technology.

STIPULATION AND REQUEST FOR  
APPROVAL

INTRODUCTION

The parties in this docket consist of GVNW Consulting, Inc. ("GVNW"), Moss Adams LLP ("Moss Adams"), the Oregon Telecommunications Association ("OTA") and Commission Staff, which are collectively referred to as the "Parties." The Parties have reached resolution on the issues in this docket and desire to reflect that resolution in the form of this Stipulation.

BACKGROUND

This docket was initiated by GVNW requesting that the Commission consider a proposed treatment for depreciation rates for softswitching technology. After an initial discussion, Commission Staff issued a proposal to establish a depreciation rate for softswitch switching technology. That proposal is attached hereto as Exhibit 1 and incorporated as though set forth in

STIPULATION AND  
REQUEST FOR APPROVAL- 1

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1 full herein. In that proposal, Commission Staff proposes a service life range of seven to eight years  
 2 for softswitch technology for depreciation purposes. Staff proposes the rates would be retroactive  
 3 to January 1, 2009. Because of potential accounting and cost recovery issues raised by a retroactive  
 4 proposal, GVNW proposes that the January 1, 2009, date be optional and that the depreciation life  
 5 be used by all companies that are subject to this proposal beginning January 1, 2010, unless the  
 6 optional date of January 1, 2009, is elected by an individual company or companies.  
 7

8 Depreciation rates were established for small telecommunications companies last in Order  
 9 95-634. As part of the depreciation rates that were approved in Docket UM 736 under Order 95-  
 10 634, there was an exception process established in Specific Matters 5-8 outlining how companies  
 11 may develop individual depreciation rates outside of the guideline rates. GVNW proposes that this  
 12 exception process, as amended by Exhibit 3, apply to the softswitch depreciation rate in  
 13 Commission Staff's proposal set out in Exhibit 1. Because the Parties have reached agreement on  
 14 the issues set forth in this docket, desire to expedite the resolution of this docket and desire to save  
 15 all Parties the transactional costs of proceeding in a more formal manner in this docket, the Parties  
 16 hereby enter into the following:  
 17

#### 18 STIPULATION

- 19 1. The Parties agree to recommend to the Commission that the Staff proposal set out as  
 20 Exhibit 1 hereto should be approved and adopted as applying to softswitch technology for those  
 21 companies that are set out on Exhibit 2, attached hereto and incorporated herein by this reference.  
 22  
 23 2. The Parties agree to recommend to the Commission that the effective date for the use  
 24 of the service life range of seven to eight years for softswitch technology for depreciation purposes  
 25

26 STIPULATION AND  
 REQUEST FOR APPROVAL- 2

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APPENDIX A  
 PAGE 2 OF 14

1 as set forth in Exhibit 1 shall be January 1, 2010; provided, that, an individual company may elect  
2 to apply the rate effective January 1, 2009.

3 3. The Parties agree to recommend to the Commission that the exception process set  
4 out in Specific Matters 5-8 of Order 95-634, as amended by Exhibit 3, shall apply to the softswitch  
5 depreciation rate set out in Exhibit 1.

6 This Stipulation may be executed by facsimile copy and in counterparts, all of which  
7 counterparts when taken together shall constitute one and the same Stipulation.

8 This Stipulation is entered into this \_\_\_\_ day of March, 2010.

9 GVNW Consulting, Inc.

Oregon Telecommunications Association

10 By: Jeffrey H Smith

11 By: Bob Wolf

12 Its: VP of Division Manager, W. Region

13 Its: EUP

14 Moss Adams LLP

Oregon Public Utility Commission Staff

15 By: \_\_\_\_\_

16 By: \_\_\_\_\_

17 Its: \_\_\_\_\_

18 Its: \_\_\_\_\_

19  
20  
21 REQUEST FOR APPROVAL

22 Based upon the foregoing, the Parties hereby respectfully request that the Commission  
23 expeditiously consider the Stipulation set forth above and issue an Order approving the Stipulation,  
24 the proposed service life of seven to eight years for softswitch technology for depreciation purposes  
25

26 STIPULATION AND  
REQUEST FOR APPROVAL- 3

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9  
10 GVNW Consulting, Inc.

Oregon Telecommunications Association

11  
12 By: *Jeffrey H. Smith*

By: \_\_\_\_\_

13 Its: *VP of Division Manager, W. Oregon*

Its: \_\_\_\_\_

14 Moss Adams LLP

Oregon Public Utility Commission Staff

15  
16 By: *[Signature]*

By: \_\_\_\_\_

17  
18 Its: *Principal*

Its: \_\_\_\_\_

19  
20  
21 REQUEST FOR APPROVAL

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26 STIPULATION AND  
REQUEST FOR APPROVAL- 3

Law Office of  
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9 GVNW Consulting, Inc. Oregon Telecommunications Association

10 By: Jeffrey H Smith By: \_\_\_\_\_

11 Its: VP4 Division Manager, W. Region Its: \_\_\_\_\_

12 Moss Adams LLP Oregon Public Utility Commission Staff

13 By: [Signature] By: Michael [Signature]

14 Its: Principal Its: Attorney

15 REQUEST FOR APPROVAL

16 Based upon the foregoing, the Parties hereby respectfully request that the Commission  
17 expeditiously consider the Stipulation set forth above and issue an Order approving the Stipulation,  
18 the proposed service life of seven to eight years for softswitch technology for depreciation purposes  
19

20 STIPULATION AND  
21 REQUEST FOR APPROVAL- 3

22 Law Office of  
23 Richard A. Finnigan  
24 2112 Black Lake Blvd. SW  
25 Olympia, WA 98512  
26 (360) 956-7001

1 as set forth in Exhibit 1 and adopting the conditions as set forth in Paragraphs 2 and 3 of the  
2 Stipulation,  
3 above.

4 Respectfully submitted this \_\_\_\_ day of March, 2010.

5 GVNW Consulting, Inc.

Oregon Telecommunications Association

6  
7 By: Jeffrey H. Smith

By: BA Wolf

8  
9 Its: VP & Division Manager - W. Region

Its: EVP

10 Moss Adams LLP

Oregon Public Utility Commission Staff

11  
12 By: \_\_\_\_\_

By: \_\_\_\_\_

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14 Its: \_\_\_\_\_

Its: \_\_\_\_\_

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26 STIPULATION AND  
REQUEST FOR APPROVAL- 4

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5 GVNW Consulting, Inc.

Oregon Telecommunications Association

7 By: Jeffrey H. Smith

By: \_\_\_\_\_

9 Its: VP & Division Manager - W. Region

Its: \_\_\_\_\_

10 Moss Adams LLP

Oregon Public Utility Commission Staff

12 By: [Signature]

By: \_\_\_\_\_

13 Its: Principal

Its: \_\_\_\_\_

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7 By: Jeffrey H. Smith

By: \_\_\_\_\_

8  
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Its: \_\_\_\_\_

10 Moss Adams LLP

Oregon Public Utility Commission Staff

11 By: [Signature]

By: [Signature]

12  
13 Its: Principal

Its: Attorney

26 STIPULATION AND  
REQUEST FOR APPROVAL- 4

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## UM 1463

**Staff Proposal for depreciation rate for soft switch switching technology****Overview**

Softswitches are a relatively new technology developed in the mid 1990's. A soft switch is a device or computer that controls the setup and teardown of calls in media gateways. With its open application program interface (API) software, it can bridge the public switched telephone network (PSTN) and Voice over Internet Protocol (VoIP) by separating the call control functions of a phone call from the media gateway (transport layer). Basically, it connects calls from one telephone to another entirely through a computer's software. This software programmability allows it to support existing as well as future IP telephony protocols. Softswitches have many attributes that are appealing to today's telcos including:

- Less expensive than traditional central office circuit switches
- Occupy substantially less physical space than traditional switches
- Supports multiple protocols (i.e., ATM) and can act as gateway between the circuit-switched PSTN and the provider's packet-switched network.
- Easily scalable
- Shorter preparation and cutover time

There are several makers of softswitches including, Metaswitch, Taqua, Nortel and Unisource to name a few, Due to the increasing popularity of this newer technology, softswitches are seeing an accelerated rate of deployment and appear to be the trend of the future. This development, as well as inquiries from GVNW, Moss Adams, OTA and the companies, has prompted Staff to open this docket to address the depreciation issue of this new technology.

**Basis for Staff Recommendation**

As part of its evaluation, Staff sought feedback from companies that are utilizing this newer technology. Currently at least four Oregon telecoms (St. Paul Co-Op, Midvale, Clear Creek and Eagle) have soft switches in operation and Staff obtained detailed feedback from three of the companies on a variety of topics relating to their softswitches.

**St Paul**

In November 2009, Staff toured the St Paul Co-Op Telephone Assoc.'s main office specifically to view and obtain information about the Metaswitch the company has in operation. St Paul installed the switch approximately 5 years ago. In that time, the only incident the company reported was a defective alarm

card that was promptly replaced. The switch has been reliable and has capacity to add additional customers as well as new services as needed.

### Clear Creek

Clear Creek installed a Metaswitch in 2005. It has been highly reliable and the Company has no intention of replacing the switch in the near future. Per discussions with company personnel, a service life of 5-7 years is anticipated and it is most likely that functionality will drive any upgrade or replacement of the current switch.

### Eagle

Eagle installed a Taqua in 2009 and the company is pleased with how the switch is operating thus far. Staff inquired as to the cutover from the current switch to the new Taqua went and the company responded that the cutover went smoothly.

In its analysis, Staff also reviewed a depreciation order from the Nebraska Public Service Commission. The Commission received an application from Embarq to review its depreciation rates. The company is required to submit a depreciation review every three years pursuant to the order of April 14, 1987 in Docket C-66. The new rates took effect January 1, 2009. The Commission adopted 6.4 and 5.6 years for the 2213.3 – Packet Switching- trunk gateway and 2213.4 – Packet Switching-line gateway, respectively. The Nebraska staff analysis determined that the softswitches have a longer life than originally estimated and a reasonable average life would be 11.5 years. Oregon Staff doesn't believe that this would be an appropriate figure.

Staff did contact some of the soft switch vendors and received some information that was helpful to its investigation. Bob Harvey of Metaswitch indicated that the service life of the soft switch would be 5-10 years with 5-6 being typical.

## **Proposal**

Staff proposes a service life range of 7-8 years (see Appendix A) for soft switch technology for depreciation purposes. Staff proposes that the rates would be effective retroactive to January 1, 2009. Several of the switches have already passed the 3-4 year mark in production mode without any issues and no plans by the companies for replacement. Staff is open to a re-evaluation of the proposed rates at a future date should it be necessary.

## Appendix A

SOFTSWITCH  
 CALCULATION OF AVERAGE REMAINING LIFE  
 RANGE  
 ACCOUNT 2212.22

Depreciation Rate Range 11.9 – 14.3%

Average Remaining Life Range 7-8 years

Average Service Life Range 7-8 years

[1]	[2]	[4]	[6]	[7]	[8]
YEAR	INTERIM RETMTS \$	TERMINAL RETMTS. \$	INTERIM ADDITION \$	ENDING BALANCE \$	AVERAGE BALANCE \$
2008				400,000	
2009	8,000		-	392,000	396,000
2010	8,000		-	384,000	388,000
2011	8,000		-	376,000	380,000
2012	8,000		32,000	400,000	388,000
2013	8,000		-	392,000	396,000
2014	8,000		-	384,000	388,000
2015	8,000		-	376,000	380,000
2016	8,000		-	-	188,000
TOTALS	64,000	-	32,000		2,904,000

SOFTWARE: 4 YEAR  
 HARDWARE: 8 YEAR  
 (Staff assumes a shorter software life)

Note: The \$400,000 is an arbitrary amount chosen for comparison purposes only. What is relevant is the percentage of the cost of the software compared to the overall cost of the soft switch. Staff allowed for interim software replacement. The chart shows this comparison and how Staff arrived at its proposed depreciation rate and service life.

Recommended  
Small Communications Utility Companies  
Depreciation Guidelines

ACCOUNT DESCRIPTION	ACCOUNT NUMBER	Depreciation Study Parameter Guidelines				Depreciation Rate Guidelines				
		Proj. Curve (A)	Projection Life Years (B) Low High (C)	Future Net Sal. % (D) Low High (E)	Ave. Age Years (F) Low High (G)	Probable Life yrs. @ Ave. Age (H) Low High (I)	(100%-High FNS)/LOW Prob. Life (100%-Low FNS)/High Prob. Life Depreciation Rate Range (J) Low High			
Buildings	2110.2 2121.00									
Furniture and Office Equipment	2110.3 2122.00 2123.10									
Vehicles and Work Equipment	2110.4 2112.00 2114.00 2115.00 2116.00									
Other Communication Equip.	2110.5 2123.20									
General Purpose Computer Eq	2110.6 2124.00									
COE Switching										
Analog	2111.0 2210.00									
Digital	2112.0 2212.00									
<b>Softswitch</b>	<b>2112.0 2212.22</b>									
Operator Service	2220.0 2220.00									
COE Transmission	2230.0 2231.00 2232.00									
Paystations	2351.00									
PL Station Equipment										
Mobil Station Equipment										
Inside Wire (IW)	2310.4 2426.00									
Other Station Equipment	2310.5 2362.00									
Poles	2410.1 2411.00									
Aerial Cable Metallic	2410.2 2421.10									
Aerial Cable Non-Metallic	2421.20									
Underground Cable Metallic	2410.3 2422.10									
Underground Cable Non-Metallic	2422.20									
Buried Cable Metallic	2410.4 2423.10									
Buried Cable Non-Metallic	2423.20									
Submarine Cable	2410.5 2424.00									
Aerial Wire	2410.6 2431.00									
Conduit Systems	2410.7 2441.00									

Lifespan

14.3

11.9

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**EXHIBIT 2**

Asotin Telephone Company d/b/a TDS Telecom  
Beaver Creek Cooperative Telephone Company  
Canby Telephone Association d/b/a Canby Telcom  
Cascade Utilities, Inc.  
Clear Creek Telephone & Television  
Colton Telephone Company  
Eagle Telephone System, Inc.  
Gervais Telephone Company  
Helix Telephone Company  
Home Telephone Company d/b/a TDS Telecom  
Midvale Telephone Exchange  
Molalla Communications, Inc. d/b/a Molalla Communications  
Monitor Cooperative Telephone Company  
Monroe Telephone Company  
Mt. Angel Telephone Company  
Nehalem Telecommunications, Inc.  
North-State Telephone Co.  
Oregon-Idaho Utilities, Inc.  
Oregon Telephone Corporation  
People's Telephone Co.  
Pine Telephone System, Inc.  
Pioneer Telephone Cooperative  
Roome Telecommunications Inc.  
St. Paul Cooperative Telephone Association  
Scio Mutual Telephone Association  
Stayton Cooperative Telephone Company  
Trans-Cascades Telephone Company

**EXHIBIT 3**

5. A Company may use a depreciation rate within the Guideline "Rate Ranges" or develop a new rate using the Life Span methodology with supporting engineering documentation. If a Company has developed a new rate, it will be allowed to return to the "Rate Range" option upon request to Staff; this request to return to the rate range can be submitted with the annual Access Charge filing. Full depreciation studies and exception filings may be made under the Commission Access Rules.

6. The calculated rate may or may not fall within the Guideline "Rate Ranges." If the calculated rate falls within the range, the Company does not have to file a study. If the calculated rate falls outside the range, the Company must file with Staff a Life Span study with supporting engineering documentation by December 31 of year proceeding the year in which the new rate will be used.

7. The new rate must be approved through the exceptions process outlined herein. Companies may develop individual depreciation rates outside of the guideline rates by December 31 of the year PRECEDING the Access filing Year. For example - you must file for an exception by December 31, 2010 for the 2011 Access Filing. Details of the process are in Staff Exhibit 1 in UM 736, the Direct Testimony of Sterling Sawyer.

8. If a rate was developed outside the Guidelines, but no exception was filed or was not filed on time, the company must use the rate range provided in the Guidelines.