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**Test Report:  
ECOTEL VoIP, ISDN2-2 und ISDN2-1**

Date: 30.  
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2007

**Realisation Date**

<b>Date</b>	<b>Test Location</b>	<b>Test Personnel</b>
Dec 10, 2007	Aastra DeTeWe, Berlin, Zeughofstrasse 1	Vierling Communication GmbH: Bernhard Emmert bernhard.emmert@vierling.de +49 9194-97243  Aastra DeTeWe: Jan-Tilo Kirchhoff; Michael Köhler

## Overview

Test Objects	Description	Software Version
PABX	Aastra- TeDeWe OpenCom 510 SW-Version: R1.289.13.3.1 Release: 8.09/	
ECOTEL® ISDN2-1 ECOTEL® ISDN2-2 ECOTEL® VoIP	<p>ECOTEL® ISDN provides reliable, cost-effective connections between GSM and ISDN networks.</p> <p>ECOTEL® VoIP provides reliable, cost-effective connections between IP, GSM and ISDN networks.</p> <p>The number of GSM channels is scalable in steps of two up to a total of eight, and the GSM modules are compatible with all types of GSM networks (GSM 850/900/1800/1900/R).</p> <p>ECOTEL® ISDN/VoIP offers a built-in antenna splitter which ensures easy installation with a maximum of two antennas.</p> <p>The gateway can simultaneously route up to four ISDN calls to GSM or IP and vice versa.</p> <p>The gateway can simultaneously route up to eight IP calls to GSM and vice versa.</p> <p>Potential applications range from integration into an existing VoIP infrastructure and connecting of mobile offices all the way to distributed installations with multiple gateways and common configuration software.</p> <p>Manufacturer: Vierling Communications GmbH Pretzfelderstraße 21 D-91320 Ebermannstadt</p>	V4.7.13

## Test Strategy

<b>Issue</b>	<b>Description</b>	
Test Goal	The main goal of this testing is to test - the external interfaces - the system failure/recovery behavior - the main functionality of this component within the system as a whole	
Test intensity	Scope of the tests are: - Verification of the correct behavior - Restart behavior - Reaction in critical situations	

## Configuration

<b>Issue</b>	<b>Description</b>	
ECOTEL® VoIP	Configuration of ECOTEL was done by Vierling Communications GmbH staff. Vierling Communications GmbH staff attended the certification test.	
PABX	Aastra- TeDeWe OpenCom 510 (OpenCom 105/110/120/130/131/150/ X320/510) Tested with OpenCom 510 SW-Version: R1.289.13.3.1 Release: 8.09	

## Test Results Summary

<b>Device</b>	<b>Description</b>	
	ECOTEL® VoIP is ready for link to OpenCom	
Problems	None	
Restictions	None	

## Test Results in Detail

### Ecotel connected to external S0 trunk

Test Procedure	Description	Test Result
	Ecotel is set up in NT-PtP mode	
Pull the connection cable and put it back again	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
System phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok
Analog phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok
ISDN phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
VoIP phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
CLIR	Calling party number may be suppressed	ok
PABX subscriber redirected	Call between a PABX user and a GSM callee via Ecotel is established	ok
PABX subscriber makes an enquiry towards a PABX subscriber	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
PABX subscriber makes an enquiry towards an external callee	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
DTMF detection at Ecotel	Call between a PABX user and Ecotel is established; post-dialing is used	na
Release timeout without DTMF-suffix dialing	Call between a PABX user and Ecotel is established but without post-dialing	na
3 party conference (2 internal PBX; 1 external Ecotel)	Using conferencing facility of PABX	ok
3 party conference (1 internal PBX; 2 external Ecotel)	Using conferencing facility of PABX	ok
PABX clock from public network	Connections have to be free from any distortions; Ecotel L1/L2/L3:NT/NT/NT	ok; no synchronisation to PABX necessary
PABX clock from public network	Connections have to be free from any distortions; Ecotel is synchronized to PABX Ecotel L1/L2/L3:TE/NT/NT	ok
System phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
Analog phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
ISDN phone	GSM caller via Ecotel towards PABX subscriber	na

incoming call		
VoIP phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
CLIP	Calling party number available	ok
DTMF sending of Ecotel	DTMF signalling transparent towards PABX; DTMF signalling transparent towards Ecotel	ok
External caller makes an enquiry using PABX feature set	using PABX features the GSM caller via Ecotel is able to call a second PABX subscriber	PABX has no mobile extension features
External caller makes an enquiry using Ecotel feature set	Ecotel is sending hold information towards PBX	PABX has no mobile extension features

## Ecotel connected to internal S0-Bus

Test Procedure	Description	Test Result
	Ecotel is set up in Te-PtMP mode	
Pull the connection cable and put it back again	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of Ecotel	The whole system returns to normal operating mode without manual interferences	ok
Soft restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
Hard restart of PABX	The whole system returns to normal operating mode without manual interferences	ok
System phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok
Analog phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok
ISDN phone outgoing call	PABX subscriber towards GSM callee via Ecotel	ok
VoIP phone outgoing call	PABX subscriber towards GSM callee via Ecotel	na
CLIR	Calling party number may be suppressed	ok
PABX subscriber redirected	Call between a PABX user and a GSM callee via Ecotel is established	PABX send only specified MSN; GSM number is not transferred towards Ecotel
PABX subscriber makes an enquiry towards a PABX subscriber	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
PABX subscriber makes an enquiry towards an external callee	Call between a PABX user and a GSM callee via Ecotel is established; using PABX features the GSM callee via Ecotel is receiving hold information	ok
DTMF detection at Ecotel	Call between a PABX user and Ecotel is established; post-dialing is used	ok
Release timeout without DTMF-suffix dialing	Call between a PABX user and Ecotel is established but without post-dialing	ok
3 party conference (2 internal PBX; 1 external Ecotel)	Using conferencing facility of PABX	ok
3 party conference (1 internal PBX; 2 external Ecotel)	Using conferencing facility of PABX	ok
CLIP	Calling party number available	MSN from Ecotel is displayed
System phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
Analog phone incoming call	GSM caller via Ecotel towards PABX subscriber	ok
ISDN phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
VoIP phone incoming call	GSM caller via Ecotel towards PABX subscriber	na
DTMF sending of Ecotel	DTMF signalling transparent towards PABX; DTMF signalling transparent towards Ecotel	ok

External caller makes an enquiry using PABX feature set	using PABX features the GSM caller via Ecotel is able to call a second PABX subscriber	PABX has no mobile extension features
External caller makes an enquiry using Ecotel feature set	Ecotel is sending hold information towards PBX	PABX has no mobile extension features