

HATS/ITUインターオペラビリティ・ワークショップ

APT/ITU Conformance &
Interoperability Event概要と
NGN testing & showcasing

2013年9月24日

沖電気工業株式会社

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22nd
APT Standardization Program Forum



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APTとASTAP

- APT (Asia Pacific Telecommunity)
 - アジア・太平洋電気通信共同体
 - 1979年5月にアジア・太平洋地域の電気通信の開発促進および地域通信網の整備・拡充を目的として設立。38ヶ国が加盟。
- ASTAP (APT Standardization Program Forum)
 - APTの中で電気通信分野の標準化を検討する組織



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APT/ITU Conformance & Interoperability Event

- 第22回ASTAP会合と同日程、会場にて開催
- 目的と概要 アジア・太平洋地域における相互接続性の向上に向けた相互接続試験と展示、講演会
- 日程 2013年9月9日～12日
- 場所 タイ・バンコク
- 主なイベント内容
 - NGN、IPTV、光アクセス等に関する相互接続試験と展示、講演会



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主なイベント内容と参加企業

■ 相互接続試験と展示会への参加企業

区分	相互接続試験	展示
NGN	NTT、NEIX、NEC、OKI(日本)、Teluu PJSIP(UK)	NTT、NEIX、NEC、OKI
IPTV	三菱電機、OKI	三菱電機、OKI、チュラロンコン大学(タイ)
光アクセス	-	富士通、三菱電機、OKI

ワークショップ1

09 September 2013 (Monday)

Registration Starts at 08:30 – 14:00

09:00 - 12:00	12:00 - 14:00	14:00 – 15:40	15:40 - 16:00	16:00 – 17:00
<p align="center">Conformance and Interoperability Testing</p> <ul style="list-style-type: none"> • NGN Testing • IPTV Testing <p>Please be informed that Testing part is closed door event for participating companies. Others are not allowed to visit. Testing will be conducted in World Ballroom C.</p>	<p align="center">LUNCH BREAK at World Restaurant, 24th Floor</p>	<p align="center">Conformance and Interoperability Workshop</p> <p>Opening:</p> <ul style="list-style-type: none"> • Welcome Remarks by Mr. Toshiyuki Tamada, Secretary General, Asia-Pacific Telecommunity • Remarks by Mr. Denis Andreev, C&I Program Coordinator, Telecommunication Standardization Bureau, International Telecommunication Union • Remarks by Mr. Kaoru Kenyoshi, Chairman, C&I Coordination Committee <p>Session 1: Conformance and Interoperability Initiatives</p> <p>Chairman: Mr. Yushi Naito, Chairman, ITU-T SG16, Mitsubishi Electric Corp., Japan</p> <ul style="list-style-type: none"> □ Presentation from APT Member Countries <ul style="list-style-type: none"> ○ Conformity Assessment in Mongolia by Mr. Tsendasuren Chuluunbat, CRC, Mongolia (Doc. C&I/INP-04) ○ NGN Interoperability Issues by Mr. Nguyen Thi Hang Nga, VNPT, Socialist Rep. of Vietnam (Doc. C&I/INP-05) ○ Brief Introduction of C&I Related Issues in China by Mr. Zhiyong Liu, Senior Engineer, China Academy of Telecommunication, MIIT, People's Republic of China (Doc. C&I/INP-06) <p>□ Q & A</p>	<p align="center">COFFEE BREAK</p>	<p align="center">Conformance and Interoperability Workshop</p> <p>Session 2: Conformance and Interoperability Initiatives (Contd.)</p> <p>Chairman: Mr. Zhiyong Liu, Senior Engineer, China Academy of Telecommunication, MIIT, People's Republic of China</p> <p>□ Presentations from SDO:</p> <ul style="list-style-type: none"> ○ Overview of HATS by Mr. Yasubumi Chimura, Oki Electric Industry Ltd., Japan (Doc. C&I/INP-07) ○ The ITU Conformity and Interoperability Program Beyond WTS-12 by Mr. Denis Andreev, C&I Program Coordinator, Telecommunication Standardization Bureau, ITU (Doc. C&I/INP-08, INP-09) ○ ITU-T SG11: Signaling Requirements, Protocol and Test Specifications by Mr. Kaoru Kenyoshi, Vice Chairman ITU-T SG11, NEC Corporation, Japan (Doc. C&I/INP-10) ○ C&I Activities in ITU-T SG16 by Mr. Yushi Naito, Chairman, ITU-T SG16, Mitsubishi Electric Corp., Japan (Doc. C&I/INP-11) ○ HomeGrid Forum's C&I Program by Mr. John Egan, President, HomeGrid Forum (Doc. C&I/INP-12)



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ワークショップ2

10 September 2013 (Tuesday)

09:00 - 12:00	12:00 - 14:00	14:00 - 15:20	15:20 - 15:40	15:40 - 17:00
<p>Conformance and Interoperability Showcasing</p> <ul style="list-style-type: none"> • NGN Showcasing • IPTV Showcasing • Optical Access Showcasing <p>Please be informed that Showcasing part is open for all delegates. Showcasing will continue until 5 p.m. of 12th September 2013.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">LUNCH BREAK at Delegate's Bar, 22nd Floor</p>	<p>Conformance and Interoperability Workshop</p> <p>Session 3: Testing Reports and Panel Discussion</p> <p>Chairman: Mr. Denis Andreev, C&I Program Coordinator, Telecommunication Standardization Bureau, International Telecommunication Union</p> <ul style="list-style-type: none"> □ Report of NGN interoperability testing and showcasing on APT/ITU C&I event 2013 by Mr. Hideo Himeno, NEC Corporation, Japan (Doc. C&I/INP-13) □ Report of IPTV Testing and Showcasing by Dr. Hideki Yamamoto, Oki Electric Industry Ltd., Japan (Doc. C&I/INP-14) □ Introduction of optical access showcase for G.epon/SIEPON: Activities for Related Standardization and Interoperability Test by Dr. Ken-Ichi Suzuki, NTT Corporation, Japan (Doc. C&I/INP-15) 	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">COFFEE BREAK</p>	<p>Conformance and Interoperability Workshop</p> <p>Session 4: Testing Reports and Panel Discussion (Cont....)</p> <p>Chairman: Mr. Kaoru Kenyoshi, Chairman, C&I Coordination Committee</p> <p>Panel Discussion:</p> <ul style="list-style-type: none"> □ Panelists (TBC) <ul style="list-style-type: none"> ◦ Mr. Zhiyong Liu, CATR, MIIT, People's Republic of China ◦ Mr. Tsendsuren Chuluunbat, CRC, Mongolia ◦ Ms. Nguyen Thi Hang Nga, VNPT, Vietnam ◦ Mr. Yasubumi Chimura, Oki Electric Industry Ltd., Japan ◦ Dr. Hideki Yamamoto, Oki Electric Industry Ltd., Japan ◦ Dr. Kenichi Suzuki, NTT Corporation, Japan ◦ Mr. Hideo Himeno, NEC Corporation, Japan ◦ Mr. Yushi Naito, Mitsubishi Electric Corp., Japan ◦ Mr. Andreev Denis, C&I Program Coordinator, ITU-T <p>Closing</p>



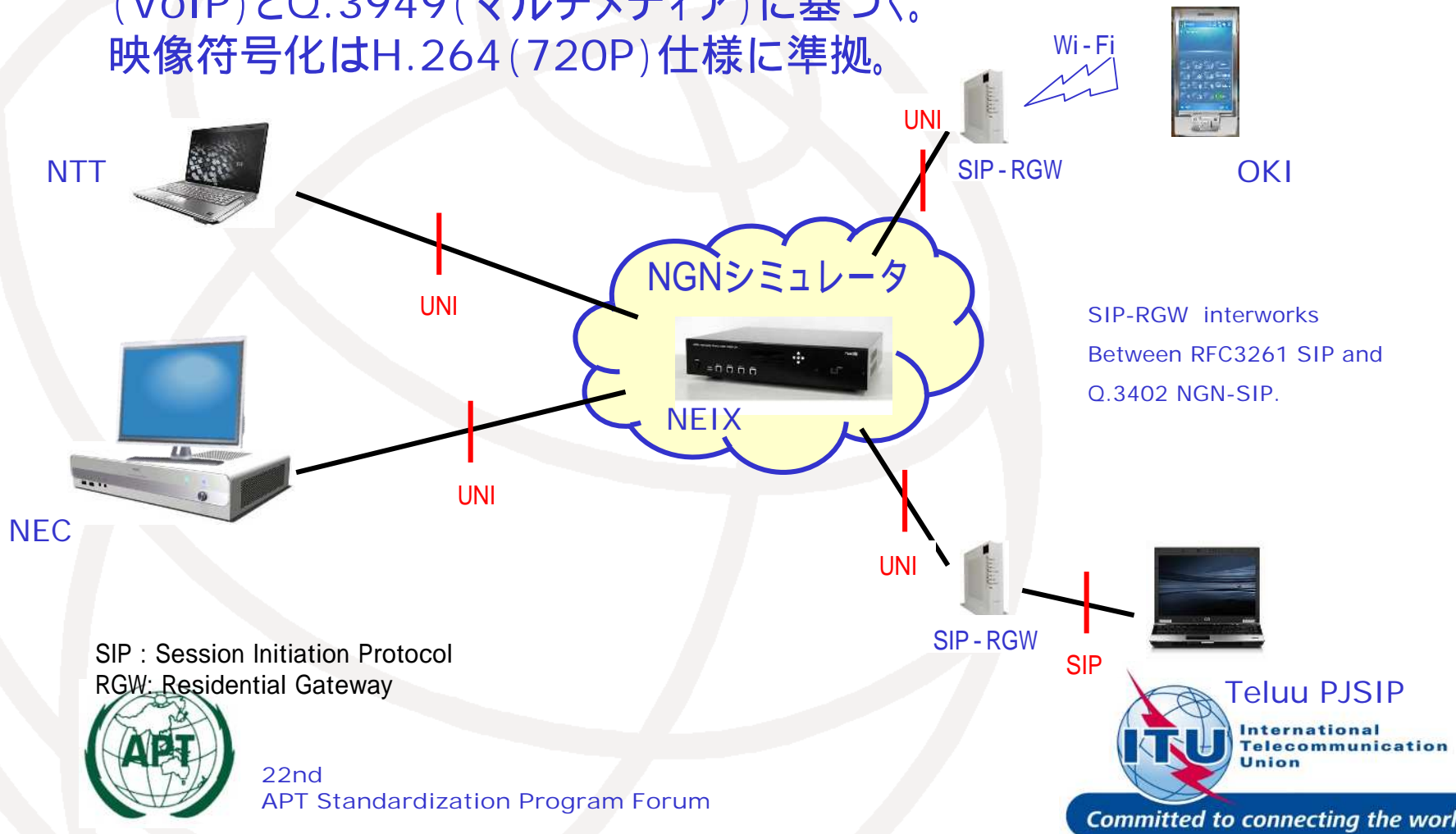
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NGN 相互接続試験の構成

HATSでのNGN端末相互接続試験の経験を基に、ITU-T勧告Q.3402 (UNI)仕様に基づく端末間相互接続試験を実施。試験仕様は、Q.3948 (VoIP)とQ.3949(マルチメディア)に基づく。映像符号化はH.264(720P)仕様に準拠。



Testing Scene



Bangkok, Thailand, 9 - 10 September 2013



NGN 相互接続試験結果

結果 (VoIP)		%	結果 (マルチメディア)		%
音声			音声	映像	
OK	40%	OK	OK	13%	
One way	60%	OK	One way/NG	37%	
		One way/NG	One way/NG	50%	

➤ 考察

➤ 音声のOneWay (片方向のみ通話可能) について

- VoIP、TV電話端末はデフォルトコーデックがG.711、ビデオ会議はG.722となっており、設定により通話不可が発生。TTC標準のフォールバック手順の国際標準化が必要。

➤ 映像のOneWayおよびNGについて

- HDビデオのプロファイル指定の不整合 *
- SIP端末、GWにおける帯域制御パラメータ指定エラー *
- NGNにおけるポート番号変更時の不整合 *

* 上記の事項については、解析の上、TTC/HATSで連携し、標準化提案を検討する。

NGN 展示

企業名	出展品	概要
NEIX	NGNシミュレータ	NGN擬似網装置
NTT	「声見る」 音声認識ソフト	教育目的の音声認識 ソフトウェア
NEC	Smart Visual Station	高品質映像コミュニケー ション端末
OKI	IP Video Phone + SIP-RGW(CrossWay(NTT ソフト))	スマートフォン、タブレット などのスマートデバイス 向けビデオコミュニケーシ ョン環境



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NGN Network Simulator

-- For telecom testing for NGN Terminals --

■ Feature

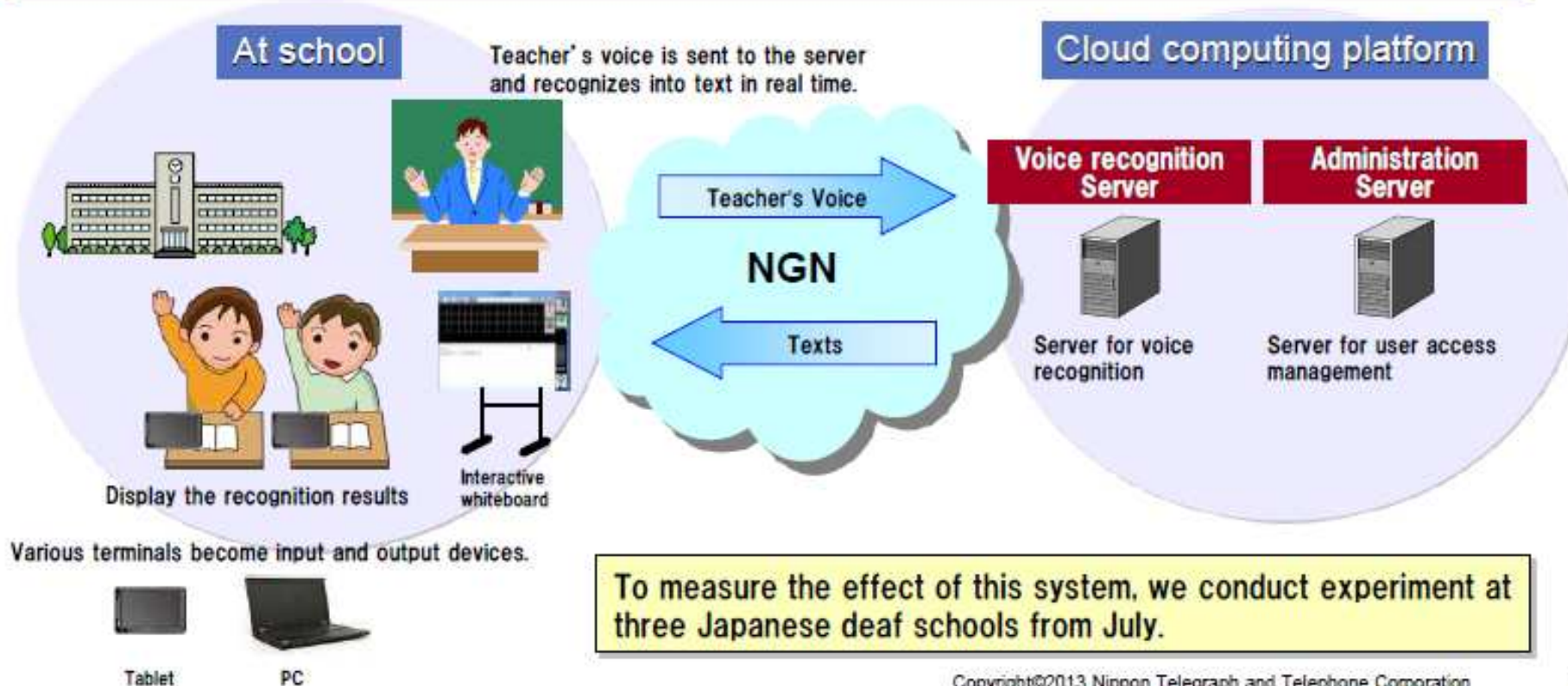
- NGN Exchange Simulation
 - Supports 4 NGN line ports.
 - Provides NGN-UNI interface on each line.
 - SIP based on ITU-T Q.3402 NGN-UNI.
 - Supports regional terminal registration procedure.
 - Supports extra network services on regional NGN.
- SIP Scenario Testing
 - Provides Scenario function for ITU-T Q.3402 NGN-SIP.
 - Customizing various SIP sequences.
- Regulation Testing
 - Conformance testing for regional IP terminal regulation.



neix  NEIX Inc.

“Koemiru”, which literally means “see the voice” in Japanese, is voice recognition system to support education for hard-of-hearing students at Japanese deaf school. In addition, Koemiru is also helpful for Non-Japanese people who learn Japanese language.

Koemiru recognizes speaker’s voice and translates it into texts in real time, and displays them on an interactive whiteboard and tablet PC, to support students communication with their teacher.



Smart Visual Station (NC1000-MV)

High-Quality Video

- H.264/AVC true HD/Full HD video quality
- Packet-shaping and FEC for preventing packet-loss

High-Quality Audio

- MP4-AAC (high quality audio) for accurate voice communication

Proven over multiple Access Network

- ADSL optimized features for customers to utilize existing access
- Proven over new access networks such as WiMAX and LTE

Flexible Network Support

- Internet, SIP, IP-VPN all supported
- RACF based QoS over NGN/IMS network



OKI

IP Video Phone for Smart-Devices on NGN

- IP Video Phone are multimedia communication tool for smart devices on NGN
- Automatically recognition for current access network and adapt the optimized profiles



■ Specification

- ◆ Protocol: RFC3261(SIP)
- ◆ Media Codec:
 - Audio: G.711/G.722
 - Video: H.264(SD/HD), MPEG-4
- ◆ OS: Android 4.x

ご清聴、ありがとうございました。



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