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August 11, 2005

VIA ELECTRONIC SUBMISSION

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW – Lobby Level
Washington, D.C. 20554

Re: **Notice of Ex Parte**
Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92

Dear Ms. Dortch:

On behalf of SBC Communications, Inc., David Hostetter, Philip Bowie, John Nolan, Michelle Sclater, and I met with Tamara Priess, Steve Morris, Jay Atkinson, Christopher Barnekov and Randy Clarke of the Pricing Policy Division, Wireline Competition Bureau, and Ian Dillner of the Wireline Competition Bureau Front Office on August 10, 2005. Consistent with the attached presentation, we discussed SBC's position on phantom traffic and a proposed solution to the problem pending broader Intercarrier compensation reform.

Pursuant to section 1.1206(b)(2) of the Commission's Rules, this letter being filed electronically with the Commission.

Sincerely,

/s/ Eric N. Einhorn

Eric N. Einhorn

CC: Tamara Priess
Steve Morris
Jay Atkinson
Christopher Barnekov
Randy Clarke
Ian Dillner



Phantom Traffic

August 10, 2005

Ex parte meeting with the FCC Wireline
Competition Bureau

Overview



- Some carriers deliver calls without the correct signaling information (intentionally and unintentionally) to other carriers
- Current intercarrier compensation regime creates bad incentives and opportunities for mischief exist
- Phantom traffic affects all carriers, including SBC
- Pending reform of the intercarrier compensation system to address the root causes of the problem, the FCC should:
 - Establish rules requiring adequate and appropriate call signaling
 - Establish a process for distinguishing intentional and unintentional unidentifiable traffic
 - Establish a process for challenging traffic received with intentionally altered signaling information and remedies to address

Phantom Traffic



What is phantom traffic?

- When a carrier is unable to determine via call signaling information or call detail records:
 - The carrier responsible for payment of functions performed, and/or
 - The appropriate jurisdiction of the call

What phantom traffic is not?

- Traffic containing correct signaling information yet carriers dispute appropriate rate based on differing interpretations of existing FCC rules
- Traffic without correct signaling information due to technical limitation

Phantom Traffic Impacts SBC



- SBC receives phantom traffic which results in:
 - Revenue shortfall of switched access
 - Transport facilities
 - Usage-based charges
 - Increased expenses caused by:
 - Investigating traffic
 - Pursuing recovery

- What is SBC doing about it?
 - SBC formed revenue assurance and fraud detection team
 - Collaborates with other carriers in identifying phantom traffic and responsible carriers
 - Participates in industry billing forums, e.g., OBF
 - State arbitrations
 - Litigation
 - Advocates appropriate state legislation, e.g., Arkansas

Carrier Billing Background



- Carriers require call detail information to bill *usage-based charges* to other carriers
- Accurate call detail information is needed to bill the:
 - Correct carrier – requires identification of the carrier responsible for payment
 - Correct rate – requires determination of call jurisdiction
 - Correct charge – requires call duration
- Billing systems extract information from automatic message accounting (AMA) recordings, derive additional information from these recordings and format the *finished* call detail information onto call detail records
 - AMA recordings can be made by tandem switches and end office switches
 - AMA recordings contain data known to the switch and capture SS7 and MF signaling information

Identifying the Correct Carrier



- To bill the correct carrier, a carrier must know whether the traffic is local, intraLATA toll (non-IXC) or IXC access so the applicable carrier compensation regime can be determined
- The originating carrier identified by the Operating Company Number (OCN) is the responsible carrier for local or intraLATA toll traffic and can be determined from information on AMA recordings
 - Incoming trunk group number when directly interconnected
 - SS7 calling party number (CPN) field or charge number (CN) fields
 - MF automatic number identification (ANI) parameter
 - OCN is derived from either the trunk group number or the CPN or CN information contained in the AMA recording
- The IXC is the responsible carrier for IXC access traffic and can be derived from information on AMA recordings
 - For terminating IXC traffic, the Carrier Identification Code (CIC) is contained on AMA recordings when directly interconnected with the IXC and is derived from the trunk group between the LEC and the IXC
 - For originating IXC traffic, the CIC is contained in AMA recordings and is derived from switch memory
 - The responsible carrier *cannot* be identified from the SS7 signaling information that is contained in AMA recordings

Billing the Correct Rate



- To bill the correct rate, a carrier must know the jurisdiction of the call and derives it from:
 - the calling and called telephone numbers
 - negotiated factors for wireless traffic delivered over local interconnection
- The calling telephone number is transmitted in the SS7 calling party number (CPN) or charge number (CN) fields, or the MF automatic number identification (ANI) parameter
- Jurisdictional Information Parameter (JIP) is not useful since it provides the NPA/NXX of the originating switch which may serve end users located in multiple rate centers, LATAs, MTAs, and states

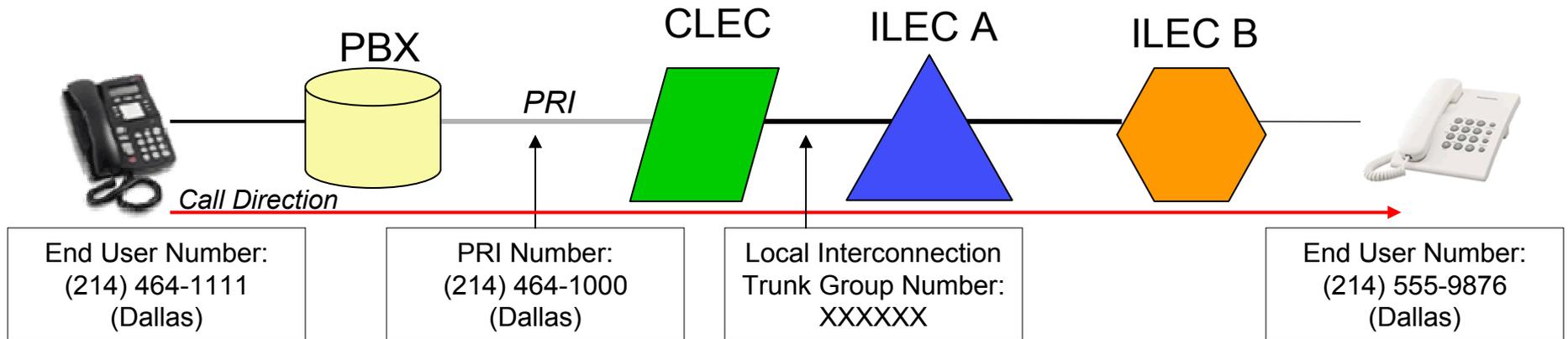
Billing the Correct Charge



- To bill the correct charge, a carrier must know the duration of a call which is captured on AMA recordings
- The switch performing the AMA recording calculates call duration based on customer connect and disconnect signaling information
- Call duration and rate are used by the billing system to calculate the charge that appears on the bill

Carrier Billing Example: Not Phantom Traffic

Local call billed as a local call:



Incoming SS7 Signal from CLEC Contains:

- CPN: (214) 464-1111
- CN: (214) 464-1000
- Called Number: (214) 555-9876

ILEC A AMA Contains:

- CPN, CN and Called Number from SS7 Signal
- Trunk Group Number
- Call Duration

ILEC B AMA Contains:

- CPN, CN and Called Number from SS7 Signal
- Call Duration

Carrier Billing:

-Correct Carrier

ILEC A - OCN derived by Trunk Group Number or CN

ILEC B - OCN derived by CN table look-up

-Correct Rate - Reciprocal Compensation

Comparison of CN and Called Number contained in AMA (CN is used when both CPN and CN are populated in the SS7 Signal)

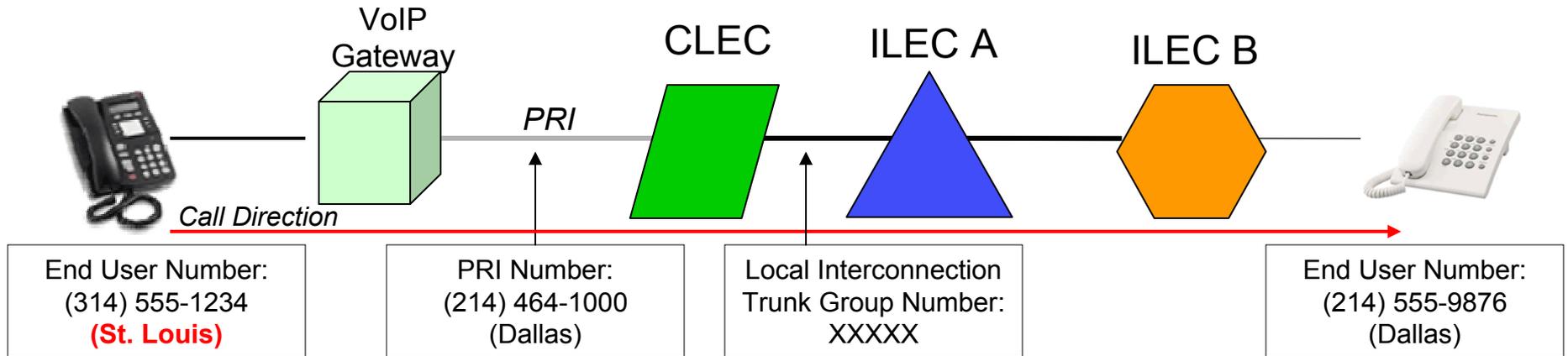
-Correct Charge

Call Duration contained in AMA

Correct Result: SS7 signal information was correctly populated and call was billed as local subject to transiting (ILEC A) and reciprocal compensation (ILEC B) rates

Carrier Billing Example: Phantom Traffic

Interstate call billed as a local call:



Incoming SS7 Signal from CLEC Contains:

- CPN: (214) 464-1000 (PRI Number)
- CN: Blank
- Called Number: (214) 555-9876

ILEC A AMA Contains:

- CPN and Called Number from SS7 Signal
- Trunk Group Number
- Call Duration

ILEC B AMA Contains:

- CPN and Called Number from SS7 Signal
- Call Duration

Carrier Billing:

-Correct Carrier

ILEC A - OCN derived by Trunk Group Number or CN

ILEC B - OCN derived by CPN table look-up

-Rate in dispute—signaling information incorrect

Comparison of CPN and Called Number contained in AMA

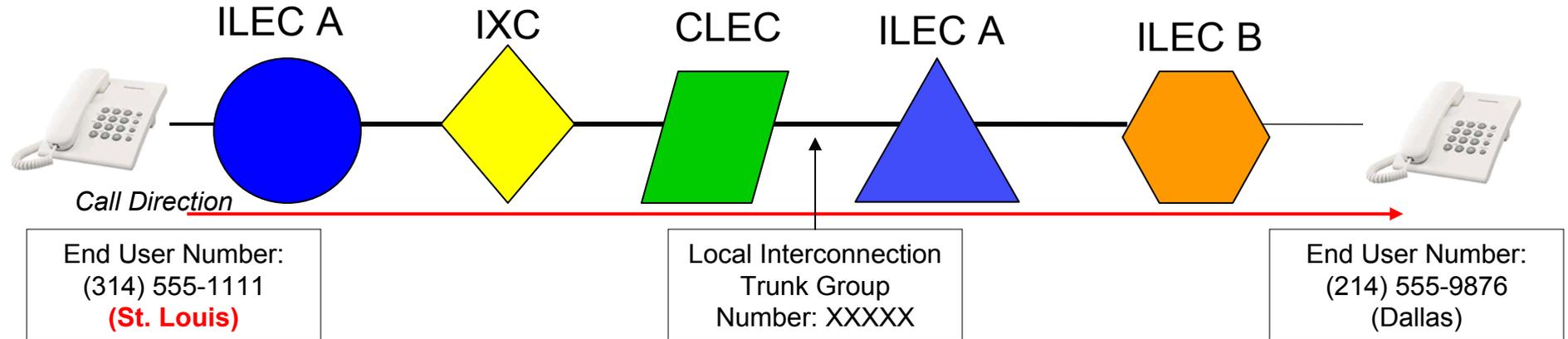
-Correct Charge

Call Duration contained in AMA

Incorrect Result: The CLEC did not populate CPN of calling party's number, rather the CLEC populated CPN with PRI Number

Carrier Billing Example: Phantom Traffic

Interstate call billed as a local call:



Incoming SS7 Signal from CLEC Contains:

- CPN: **(214) 444-3333 (assigned to CLEC)**
- CN: Blank
- Called Number: (214) 555-9876

ILEC A AMA Contains:

- CPN** and Called Number from SS7 Signal
- Trunk Group Number
- Call Duration

ILEC B AMA Contains:

- CPN** and Called Number from SS7 Signal
- Call Duration

Carrier Billing:

-Correct Carrier

ILEC A - OCN derived by Trunk Group Number or CPN table look-up

ILEC B - OCN derived by CPN table look-up

-Incorrect Rate - Reciprocal Compensation

Comparison of CPN and Called Number contained in AMA (CN is used only when both CPN and CN are populated in the SS7 Signal)

-Correct Charge

Call Duration contained in AMA

Incorrect Result: SS7 signal information contained manipulated CPN which caused call to appear to be local and billed at transit (ILEC A) and reciprocal compensation (ILEC B) rates instead of jointly provided interstate switched access

Solution



“With respect to intercarrier compensation, the Commission must adopt a rational and unified approach that replaces the current patchwork of rules. Any new framework must remove the opportunities for regulatory arbitrage and provide incentives for efficient investment decisions.” — *Chairman Kevin Martin, July 26, 2005 NARUC Summer Meeting, Austin, TX*

Inter-carrier compensation reform is necessary to address the root cause of phantom traffic – bad incentives for carriers to manipulate call signaling information – and to foreclose opportunities for mischief.

Solution



Pending intercarrier compensation reform, the FCC should establish signaling rules that apply to all carriers for all types of traffic utilizing the PSTN

Proposed rule:

- Where technically feasible, originating carriers shall transmit calling party telephone number on all calls originated by their end users or the end users of information service providers they serve and shall not alter this information
 - For SS7 trunk groups, calling party telephone number should be transmitted in the: (1) CPN field; *or* (2) CN field when it is not the same number as the caller ID telephone number or CPN is not required under 47 C.F.R. § 64.1601
 - For MF trunk groups, calling party telephone number should be sent in the ANI field
- Where technically feasible, intermediate carriers (neither the originating nor terminating carrier) shall transmit calling party telephone phone number information as received

Solution



Process and remedy:

- Establish a process for carriers to demonstrate technical infeasibility
- Establish a process with specific timeframes for challenging suspect traffic
- Establish remedies applicable to repeat offenders of call signaling rules

Potential Alternatives

- Non-compliant carrier shall establish direct interconnection with the billing carrier
- Non-compliant traffic billed at highest rate for functions performed
- Transit provider could terminate its transit arrangement with non-compliant carrier