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VIA ELECTRONIC FILING

Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

Re: Docket No. WC 04-36, IP-Enabled Services

Dear Ms. Dortch:

It has recently come to my attention that Mr. Richard A. Finnigan, on behalf of the Washington Independent Telephone Association ("WITA"), has filed reply comments in the above-referenced docket in which he makes a number of significant misstatements about the services provided by LocalDial Corporation ("LocalDial") and its decision to cease business following the Washington Utilities and Transportation Commission ("WUTC")'s decision in *Washington Exchange Carrier Assn v. LocalDial Corp.*, Docket No.UT-031472, Order No. 8 (2004), WL1372952 (Wash. U.T.C. June 11, 2004). I represented LocalDial in that case and am writing to correct these misstatements.

In its comments, WITA asserts that LocalDial is not a true provider of Voice over Internet Protocol (VoIP) services. It then claims that with LocalDial's service calls were packetized only "for purposes of call routing" and "[t]hat was the only involvement of IP technology" involved. WITA further asserts that after a call was packetized for routing it was then "immediately converted back to TDM (time division multiplexing) for call completion." None of these statements is accurate. WITA also asserts that "LocalDial's service involved less use of IP technology than the similar service offered by AT&T that this Commission determined was a telecommunications service," citing *Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges*, WC Docket No. 02-361, Order FCC 04-97 (April 21, 2004)("*AT&T VoIP Order*"). Finally, WITA asserts that the WUTC did not force LocalDial out of business, rather LocalDial "voluntarily chose to cease doing business rather than comply with state law." These statements are untrue as well.

OVERVIEW OF LOCALDIAL'S SERVICE

LocalDial provided a phone-to-phone VoIP service. Once a customer established an account with LocalDial, the company provided the customer with a local access number. The local number was provided by a carrier in the form of a "foreign exchange" type of service - the

WECA members did not provide the local numbers used by LocalDial's customers; the numbers were provided by CLECs. From that initial point, LocalDial used "backbone" circuits to carry the local call to the appropriate LocalDial service hub or node. When the customer called the local access number, LocalDial matched the customer's telephone number with its billing database. If the account was authorized, LocalDial's equipment prompted the customer to input the number of its called party. The second number was not used to route the call on an interexchange basis. Instead, the second number was converted by LocalDial into Internet address using the domain name system of Uniform Resource Location (URL) numbers.

The signal associated with the second number was converted into Internet Protocol (IP) packet switching using computer processing equipment, a VoIP gateway, especially designed for voice traffic, and routed to its destination over Internet backbone circuits that carry all types of Internet traffic. There, a reverse conversion took place, and the signal was sent to the called party. As described in more detail below, the VoIP gateway acted on the content and format of the customer's voice signal, and inherently involved generating, storing, retrieving and converting information that was not part of the original voice signal.

LocalDial's customers could call anywhere in the contiguous United States, but international calling was not offered. Calls to areas where LocalDial did not have a node or hub were routed to a long distance telecommunications carrier for completion and were subject to traditional intercarrier compensation for such calls, including payments to support universal service and social goals.

LocalDial offered its service only to residential customers. The service was priced at $20.00 per month, with a discount for customers who committed to three months' service.

LocalDial's customers were able to use their telephones for all other traditional uses. They could call 911 in an emergency and receive the normally available automatic number and location identification associated with E-911 service. If they were unfortunate enough to attract the attention of law enforcement, their normal phone lines could be subjected to court-ordered intercepts.

LocalDial's equipment configuration broadly speaking consisted of two types of facilities arrangements: (1) the hub or node configuration essential to VoIP service; and (2) the facilities used for carrying and completing the transmissions between LocalDial's users. The hub configuration (1) consisted of two parts: (a) VoIP gateway devices that included software and firmware functions (software designed into specialized chip sets) that clearly provided information service functions; and (b) other hardware and software systems. This other equipment included routers to channelize the transmission facilities LocalDial acquired from telecommunications carriers and integrated access devices (IADs) that provided interface functions to create transmission paths of different capacities and bandwidths, as well as multiplexing/demultiplexing and network management functions, such as managing and redirecting traffic flows.

LOCALDIAL'S TECHNOLOGY PERFORMED THE FUNCTIONS OF AN INFORMATION SERVICE

A focus on LocalDial's technology and its functions confirms that LocalDial offered an information service. LocalDial used gateway technology that incorporates the ITU G 723.1 standard. That technology operated to satisfy all three clauses of the existing enhanced services rule, 47 CFR §64.702(a).

Clause 1 of the rule states that the enhanced service may "*employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information.*" In LocalDial's case, the transmitted information was the human voices of the called and calling parties once the call was in process. The G.723.1 technology sampled the digitized voice signals (the content) and mathematically created several types of filters in real time. The technology measured the pitch of the human voices and adapted the filters to the pitch. The technology also measured the "excitation" of the digitized sound, *i.e.*, the random signals or waveforms that could not be mathematically measured in terms of the pitch of the sound, and used two additional mathematical processes to make computations based on the excitation.

The technology used a number of different computing processes to act on each unique voice signal to construct information components that modelled the voice of the speaking party, created a series of filters that responded to the unique voice, recomputed the variables by repeated sampling of the information, and performed other computing processes. All of these computations were designed to affect the perception of a speaker's individual voice. Thus, LocalDial's service employed computer processing applications to act on the transmitted information and met the first clause of the definition of information service.

Clause 2 provides that the enhanced service may "*provide the subscriber additional, different, or restructured information.*" The additional, restructured information provided by the G.723.1 technology was part of what made the human voice signal intelligible to the listener. Neither the speaker nor the listener may have been cognizant of these computer processes, but they perceived what was in fact a synthetic manipulation of voice sounds as more intelligible and natural-sounding human voices. The process involved mathematical algorithms to detect voice activity, an algorithm to create "comfort noise" and a process to insert a reduced bit stream during periods of silence. This means the technology constantly provided each speaker with new and restructured information and stored the information for reference purposes as part of the voice activity detection and comfort noise generation, thus meeting both Clauses 2 and 3 (discussed below) of the FCC criteria.[1]

[1] LocalDial discouraged its customers from attempting to send faxes over the service. This is because the changes to the content of the customers' calls performed by LocalDial's VoIP equipment would often result in errors in the fax as received and a very unsatisfactory experience for the customers.

Clause 3 covers enhanced services that *"involve subscriber interaction with stored information."* The G.723.1 technology used by LocalDial stored and retrieved the most recent adaptation of several variables created under Clauses 1 or 2, including the encoded pitch information, data stored in the excitation buffer, signal quantization from both the high-rate and low-rate excitation processing, the computations from the impulse response calculations, and (possibly) the combined LPC synthesis, perceptual weighting and harmonic noise shaping filters. This storage allowed the technology to update the information it was using to configure the real-time voice signal with the best currently available data (*i.e.*, if the real-time data being used was better than the data stored in memory at that point in time the memory swapped its stored information for the better real-time data, in order to maintain or improve the quality of the synthetic voice signal.) If the technology operated as specified, the parties to the voice conversation would not be aware of any change in the data being transmitted, because, to their ears, the quality of the signal would be as good or better than it was (nanoseconds or milliseconds) earlier. LocalDial's service involved interaction with stored information and thus met Clause 3 of the FCC rule.

The foregoing discussion shows not only that LocalDial's service met each of the three criteria for information services, but also that LocalDial did not simply manage telephone calls as do other telecommunications providers. For this reason, it is incorrect to say that LocalDial was not providing a true VoIP service or that its service calls were packetized only "for purposes of call routing" and "[t]hat was the only involvement of IP technology" involved.

LOCALDIAL'S SERVICE DIFFERED IN A NUMBER OF RESPECTS FROM THE PHONE-TO-PHONE SERVICE DESCRIBED IN THE *AT&T VOIP ORDER.*

With respect to WITA's assertion that LocalDial's service involved less use of IP technology than the similar service offered by AT&T that this Commission determined was a telecommunications service in the *AT&T VoIP Order,* it is important to recognize that the characteristics of AT&T's service ***as described*** in the *AT&T VoIP Order* differ in several respects from LocalDial's service.

In the *AT&T VoIP Order*, the FCC clearly stated that its decision applied to AT&T's specific service as "described by AT&T in this proceeding"[2] and was "based on the record compiled in this proceeding."[3] The FCC also stated that its order "in no way precludes the Commission from adopting a fundamentally different approach when it resolves the IP services rulemaking, or when it resolves the Intercarrier Compensation proceeding."[4]

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[2] *AT&T VoIP Order*, at 1, ¶ 1.

[3] *Id.,* at 7, ¶ 10.

[4] *Id.*, at 7-8, ¶ 10.

The *AT&T VoIP Order* further stated that with AT&T's service "[e]nd-user customers do not order a different service, pay different rates, or place and receive calls any differently than they do through AT&T's traditional circuit-switched long distance service; the decision to use its Internet backbone to route certain calls is made internally by AT&T."[5] The FCC found that "[e]nd users place calls using the same method, 1+ dialing, that they use for calls on AT&T's circuit-switched long-distance network. Customers of AT&T's specific service receive no enhanced functionality by using the service."[6] The FCC also noted that "based on the record before us, end users have received no benefit in terms of additional functionality or reduced prices."[7]

LocalDial's service differed from AT&T's service in each of the respects cited by the FCC. LocalDial's customers:

(a) Ordered a different service from the company in order to access its VoIP network. That network was used to transmit all traffic not just "certain calls;"

(b) Made two separate calls in order to use the service: one call to a local access number and a second dialed call in order to reach another party. The second call did not require the LocalDial customer to dial 1+; and

(c) Paid different rates from those charged by their actual long distance carrier, whose service was not displaced by LocalDial's secondary service. LocalDial's customers could and did receive substantially reduced long distance prices based upon LocalDial's $20.00 per month flat-rate price.

The conclusion of the *AT&T VoIP Order* that AT&T's service in question was not an information service, likewise does not apply to LocalDial's service. In its petition, AT&T did not discuss the functioning of the VoIP technology it used and described its service as not involving a net protocol conversion.[8] Not surprisingly, then, the FCC did not discuss the nature of the technology used by AT&T's service or whether any type of computer processing was involved with the technology. The FCC noted:

> This order, however, addresses only AT&T's ***specific*** service, and that service does not involve a net protocol conversion and does not meet the statutory definition of an information service. If the service evolves such that it meets the definition of an

[5] *Id.*, at ¶ 12.

[6] Id., at ¶ 15.

[7] Id., at ¶17.

[8] AT&T Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges (filed October 18, 2002)("*AT&T Petition*"), at 11.

> information service, the Commission could revisit its decision in this order.[9] (Emphasis added).

In contrast, LocalDial's technology offered multiple capabilities "for ... acquiring, storing, transforming, processing, retrieving, [and] utilizing ... information via telecommunications," which in relevant part is the statutory definition of an information service.[10] Because of these capabilities, prior FCC rulings require a conclusion that ***there was a net protocol conversion*** between LocalDial's customer and the computing facility operated by LocalDial in the form of its VoIP gateway computers. In its *Computer III Phase II Order*, ¶ 69, the FCC stated unambiguously:

> We wish to clarify that for those subscriber-to-network communications in which the carrier itself is providing ***second and third clause enhanced services***, the carrier's information system computing facilities being used to provide those services ***are treated as the equivalent of an end user for the purpose of [interpreting] this exemption. Thus, if a net protocol conversion between the user and the carrier's information facilities were to take place, that particular conversion would be treated as an enhanced service***. (Emphasis added).

Because a protocol conversion occurred between LocalDial's customers and its own facilities, there was a net protocol conversion under the FCC test. Accordingly, LocalDial's service did not qualify as the type of "phone-to-phone" IP Telephony that the FCC determined to be a telecommunications service in the *AT&T VoIP Order*.

LOCALDIAL WAS FORCED OUT OF BUSINESS BY THE WUTC'S ORDER

By its very nature, LocalDial service combined both interstate and intrastate service. There was no "intrastate" component of LocalDial's service that could be split off from the interstate calls of LocalDial's customers. Accordingly, LocalDial advised the WUTC that any attempt to apply state regulations (*i.e.,* WECA's switched access tariffs) only to an "intrastate" component of LocalDial's service would likely end LocalDial's ability to do business because it would be economically inefficient and unduly burdensome to try to separate those components. The WUTC refused to address whether an alternative compensation arrangement could be developed, but simply ordered LocalDial to become a customer of WECA members' switched access services and pay their intrastate switched access charges. The effect of that order was to require LocalDial to change the way it did business by deploying different equipment (i.e., TDM/circuit switched equipment) and essentially become a traditional telecommunications provider. Because Washington (both interstate and intrastate) was a key part of LocalDial's operations, the WUTC's decision had the effect of putting LocalDial out of business in all states

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[9] AT&T VoIP Order at ¶ 13.

[10] 47 U.S.C. §153(20).

in which it operated, including its provision of interstate business. Thus, it is misleading of WITA to claim that the WUTC did not force LocalDial out of business.

In contrast to WITA, LocalDial submits that the decision of the WUTC provides a good example of why it is imperative that the FCC act to preempt state regulation of VoIP services – to gain some uniformity of treatment across the country. It is also imperative that the FCC in its IP-Enabled Services docket adopt a rational and consistent set of rules governing the regulatory treatment of all forms of VoIP services that will encourage, not inhibit, the development of innovative services that can bring real benefits to consumers.

Very truly yours,

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