

September 14, 2016

VIA ELECTRONIC FILING (ECFS)

Marlene H. Dortch, Esq., Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

RE: **EX PARTE PRESENTATION**
Transition from TTY to Real-Time Text Technology
CG Docket No. 16-145

*Petition for Rulemaking to Update the Commission's Rules for Access to Support
the Transition from TTY to Real-Time Text Technology, and Petition for Waiver
of Rules Requiring Support of TTY Technology*
GN Docket No. 15-178

Dear Ms. Dortch:

On September 12, 2016, Jeff Knighton of Hamilton Relay, Inc. ("Hamilton") participated in a panel discussion that included Karen Peltz Strauss of the Commission's Consumer and Governmental Affairs Bureau ("Bureau"), at a conference of the National Association for State Relay Administration ("NASRA") in Annapolis, Maryland.¹ In addition to panel participants, numerous NASRA conference registrants attended the panel.

Mr. Knighton played a slide show of the attached PDF regarding critical elements of the Commission's proposed transition from traditional TTY services for the deaf and the hard of hearing to Real-Time Text ("RTT") technology.

This filing is made in accordance with Section 1.1206(b)(2) of the Commission's rules, 47 C.F.R. § 1.1206(b)(2). In the event that there are any questions concerning this matter, please contact the undersigned.

¹ The other panel participants were (i) Linda Vandeloop of AT&T and (ii) Mark Tauscher of Sprint.

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Respectfully submitted,
WILKINSON BARKER KNAUER, LLP

/s/ David A. O'Connor
Counsel for Hamilton Relay, Inc.

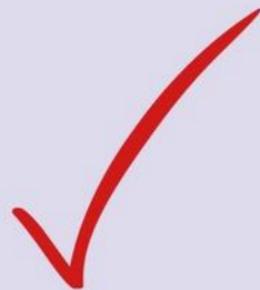
Enclosure
cc (via e-mail): Karen Peltz Strauss

That's what I'm talking about



Since 2003, wireless carriers have supported TTY compatible phone calls on their mobile networks.

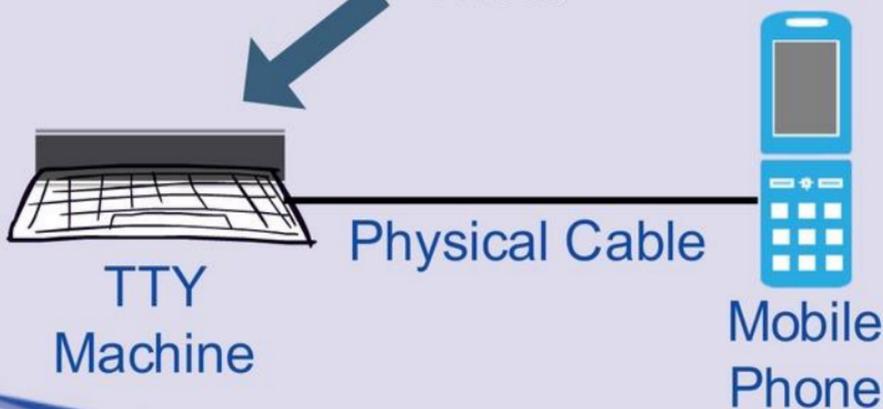
COMPLIANCE
Achieved!



The solution involves a TTY machine attached to a mobile phone.

Type/Read Here!

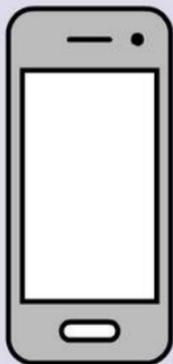
Dial Here!



That's what I'm talking about

HAMILTON
relay

It is time for an improved solution
that works on a single device.



A smartphone on a
wireless IP network

Why don't I just
text you
instead?



This is potentially great news for consumers because very few people actually use a TTY machine with a mobile phone today.

People started writing standards documents to determine HOW to make this happen.

**ITU
T.140**

**ITU
V.18**

**RE
41**

Pay
Text
Conversation

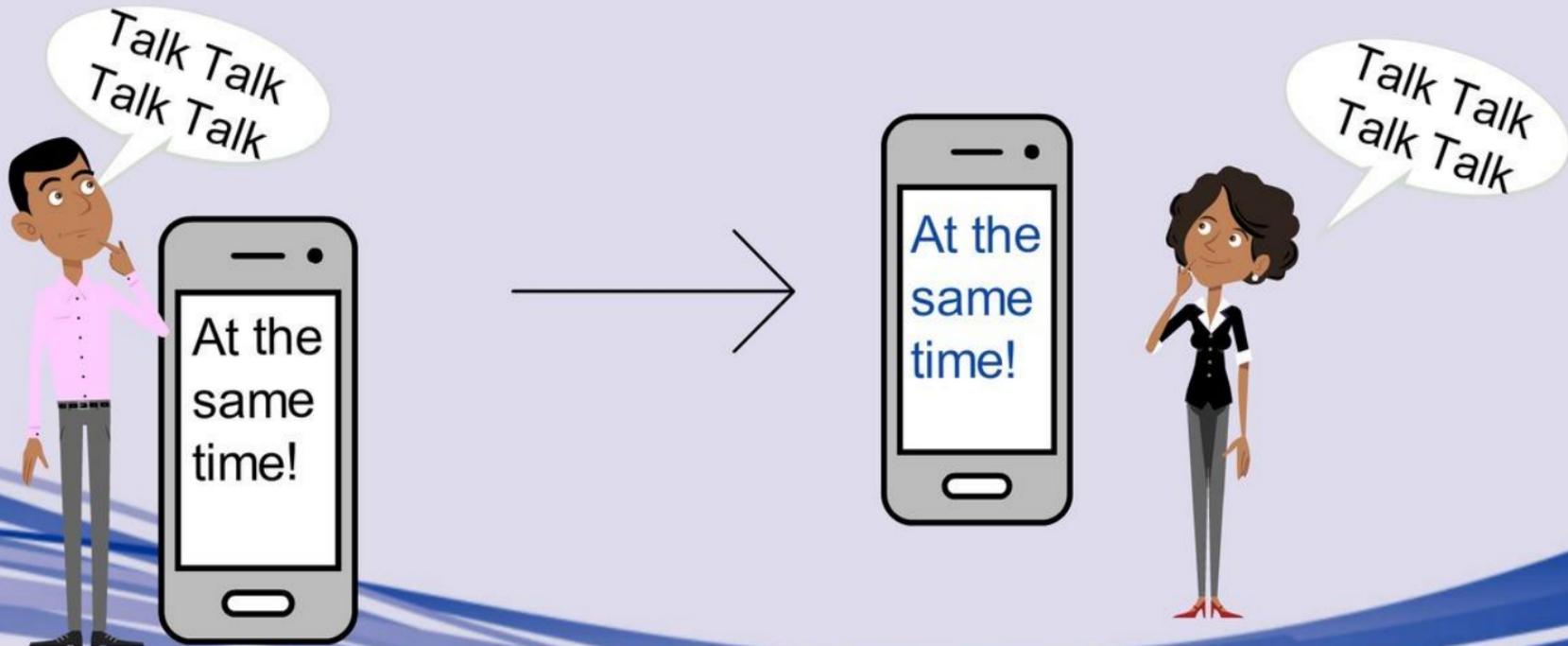
**REAL
TIME
TEXT**

0068

3GPP

REAL TIME TEXT (RTT)

Allows you to talk and type on a phone call.



REAL TIME TEXT (RTT)

But it only works on an IP Network, so it can't work on the PSTN for calls with...



911



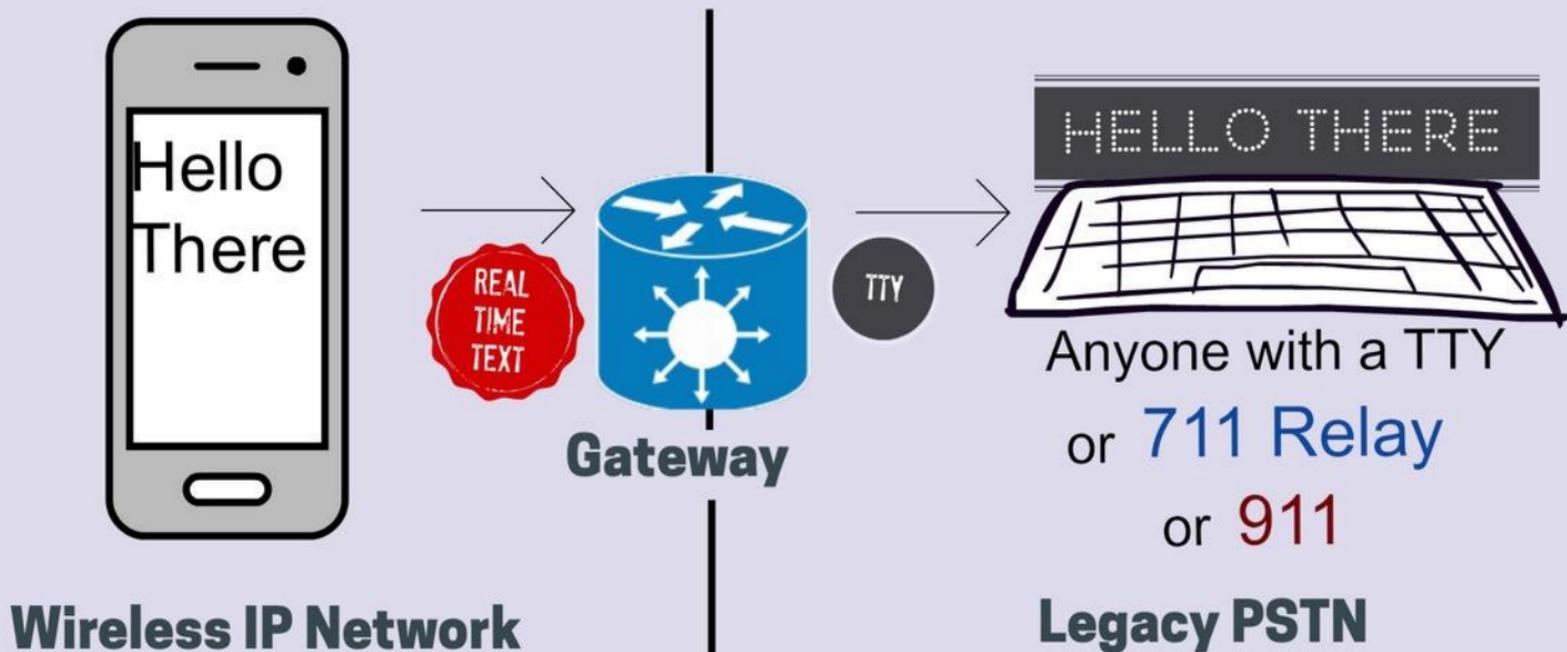
711 Relay



Anyone with a
TTY

REAL TIME TEXT (RTT)

Proposals call for a RTT to TTY gateway to convert text from an IP Network to the PSTN.



Building and operating gateways is expensive, so the proposed standards recommend that Real Time Text be "turned off" by default, and require a user to manually turn it on.



See:

*ATIS 100068

*3GPP 29.163 Annex I

"Default off" protects the carriers from having to use a gateway on calls that don't need it, like most voice calls.



Wireless IP Network

Legacy PSTN

But "default off" is more difficult for phone calls where a gateway IS needed because you have to manually turn RTT on.

I hear TTY tones.
What button do I
press to turn on
RTT?



Wireless IP Network



Legacy PSTN

Additionally, there are a number of limitations with TTYs that make using RTT to TTY gateways potentially confusing for consumers.



That's what I'm talking about



Real Time Text is Super Fast

AND TTY TEXT IS SLOW



Real Time Text habla Español

AND TTY HABLA ESPAÑOL

Characters
like ñ's turn into
apostrophes!



ATIS/3GPP Gateway Proposal

Pros:

1. Gateways allow RTT devices and TTYs to 'talk.'
2. Gateways enable direct dialing.

Cons:

1. RTT is "default off" which impacts consumers.
2. TTY and RTT have differences, so gateways can be confusing for consumers not familiar with TTY.

Hamilton Relay doesn't like words like "default off" and "confusing for consumers" so we have a recommendation.

The FCC should require TRS Providers to support RTT and the wireless carriers to deliver and accept calls to/from 711 via an IP interconnection with RTT as "default on."



711 calls via an ATIS/3GPP gateway would be slower, more expensive, and less functionally equivalent than Relay should be for "RTT to Voice" relay calls.

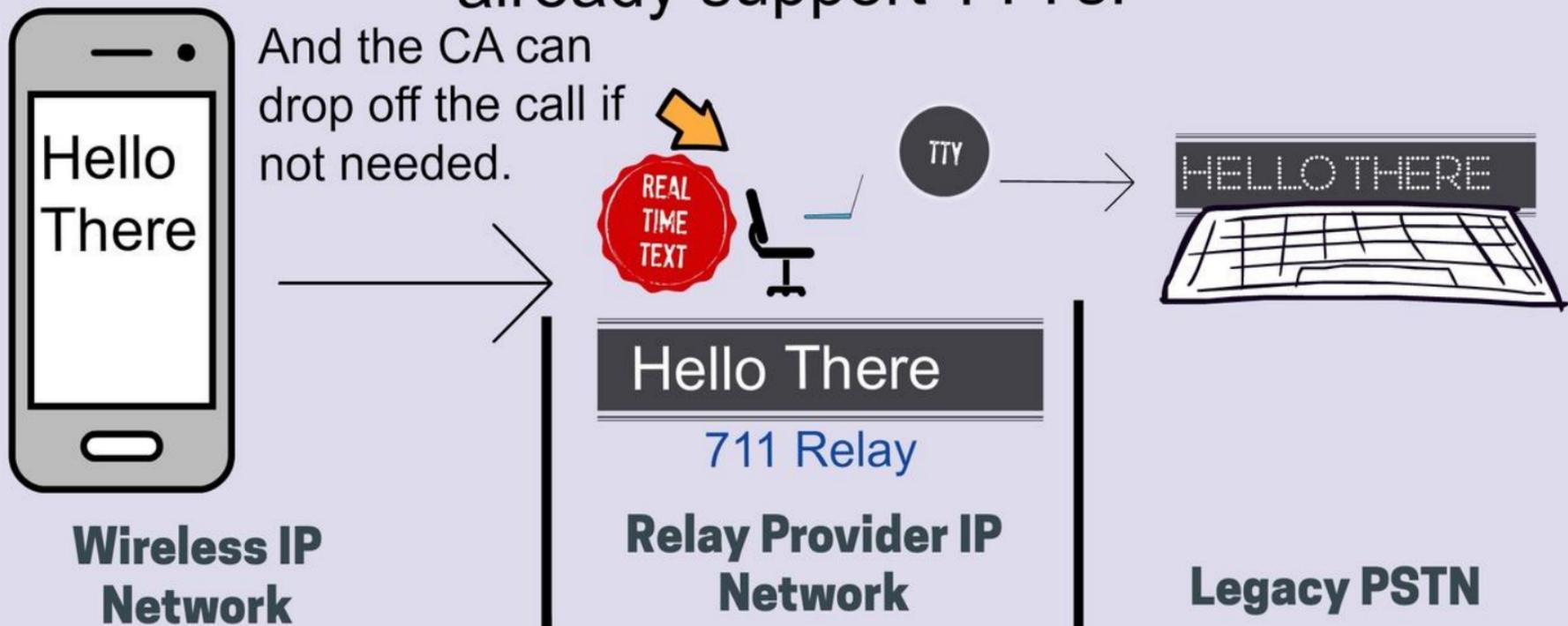


Consumers deserve a faster experience for "RTT to Voice" relay calls.



If TRS Providers support RTT, they can provide an 'attended' gateway to TTYs, since they already support TTYs.

And the CA can drop off the call if not needed.



In addition to supporting TTYs, TRS Providers already support other faster text protocols and could connect RTT to these as well.



TRS Providers can provide an attended gateway that includes a communications assistant (CA).

CAs can help consumers with the RTT to TTY differences so they aren't confused.

And then drop off the call if not needed.

NPRM Commenters have differing positions on implementing gateways.



Gateway limited to 911 and 711 Calls!



TRS is the Gateway



Carriers build ATIS/3GPP Gateways

Hamilton opposes solutions that do not support all call types.



TRS is the Gateway

Pros:

1. Improved speed for "RTT to Voice" Relay calls.
2. Gateway to TTY with optional assistance of a CA.
3. Encourages RTT devices to be "default on".
4. Enables carriers to not need their own gateway.
5. Consumers already familiar with 711 for TTY calls.

Since Relay Providers can gateway to everyone, they can gateway to 911.

And if someone calls 711 first, we'll route it to the right PSAP if geolocation is provided.

Ideally RTT 911 calls would route directly to PSAPs, possibly through a Text Control Center.

To ensure functional equivalency, at a minimum the FCC should require TRS providers and wireless carriers to communicate in RTT.

In addition, the FCC could require that TRS Providers become the gateway, thus removing this burden from wireless carriers.