FCC Relay Research Workshop
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The FCC's goal of creating a platform or ecosystem that not only supports improvements in current relay services but also allows relay services to take advantage of new technologies to improve future relay services is laudable - and critical to the future of effective and affordable relay services, given our aging population.

I would like to highlight three key things that need to be part of that platform; interoperability,
ubiquitous multi-modal communication, and compatibility with mainstream systems. These are needed to allow competition, innovation, addressing the needs of people who need mixed communication modes, and the ability to take advantage of mainstream technology scale and advances.

A couple of sentences on each of these.

Interoperability is one of the most important things that the FCC can do. In order to ensure reliable end-to-end calls, and for people to build on each other's work, competing or cooperating with each other, there needs to be an underlying framework consisting of specific technologies and standards that are to be used for interoperability today – and a path for maintaining interoperability as technology and standards change. This is what industry does for its mainstream technologies, but this hasn't happened for access technologies. So it falls to the FCC to do this. This is an essential first step to creating a relay service platform that can both adapt to changing technology and take advantage of advances in the technology market.

The second key is ubiquitous multi-modal communication. By this I mean that users should be able to use any combination voice, real-time text, and video on any voice call, including any relay call. '

For some groups, like people who are deaf-blind and sign, the need to mix text in one direction – to support braille – but signing in the other on a relay call is easy to see. But it is also very helpful to have real-time text on a VRS call to clarify unknown words, credit card numbers, addresses etc. It can reduce errors, avoid misunderstanding and confusion and speed up communication. This is critical in emergency calls but also important in daily communication.

A second example would be adding video to a voice call which can increase intelligibility, -- and with a text backup – can also allow some people to communication directly – using relay only when this voice/video/real-time text method fails. A Try-Harder/Try-Different feature can allow such direct communication to be used without risk to the user since the relay can instantly be drawn in if or when direct communication fails, while at the same time reducing the use of the relay services where they are not needed.

Automatic Speech Recognition (ASR) is another place where the power of supporting multi-modal communication and strategies can be seen. Although it may be 15 to 30 years before ASR
is better than humans at recognizing speech under different conditions, if ASR is combined with ***speaker-text-correction*** and ***Try-Harder/Try-Different,*** ASR could be a viable solution that is effective enough to be an option in the next 5 years – for some users would choose it due to it's capability for instant answer, faster speed, and inherent privacy --

again knowing that they can instantly call in a human interpreter if it doesn't work for any call.

Finally and simply; building the relay services off of mainstream technologies, without modification
can both a) lower costs for relay services –and b) provide a path for users to opt for direct communication with others, including the public, and only fall back on relay when direct communication fails.