Challenges to Near-Term Access to Accessible Content via Onboard WiFi

Background

Members of the Committee have asked why the airline offer regarding inflight entertainment's alternative suggestion of WiFi access does not provide this option in the near term. As a starting point, the carrier offer is centered on a timeframe that prioritizes ensuring that installed seatback IFES are capable of supporting bitmap closed captions, or any higher standard in the future, and audio tracks. A WiFi or other alternative for passengers booked on flights with IFES that do not meet those standards after a date to be determined is meant as a backstop, addressing the desire that, despite the long timeframe for IFES projects as with other elements of aircraft and the significant investment in IFES to date, there will be a date after which access will be guaranteed on flights that offer inaccessible inflight entertainment.

Some airlines that provide IFE on certain flights through inaccessible systems may have the infrastructure to offer WiFi in the near term. The industry is large and diverse, and other airlines that provide IFE via legacy seatback IFES are not able to offer access via WiFi as a near-term solution. This reality makes a near-term industry-wide offer that might cover the scores of carriers that would be covered by a DOT rule unfeasible, for several reasons. Differences in carriers' technologies and even technology on different aircraft in their fleets; their contracts with WiFi and IFE providers; their spectrum and bandwidth limitations; and their business models leave them in varying situations. While a WiFi-based program may be an attractive alternative for one or more carriers even in the near term, and those that are able to do so may opt to take this alternative path at any time, mandated near-term WiFi access cannot be part of an industry offer.

In-Flight WiFi Relies on Dedicated Spectrum with Bandwidth Limitations

Airlines that offer WiFi connectivity aboard airborne aircraft rely on a network of satellite and/or ground-based antennas that operate within FCC-designated broadband spectra to provide this service. While promising advancements continue to be made, the bandwidth available to these systems and allocated for this purpose by the FCC is currently limited, and varies among carriers, aircraft and service providers. Because of the currently high costs involved with operating or contracting for these systems, and as many carriers do not have access to enough bandwidth to meet the demand that would be required if access were offered for free, many carriers today must charge customers for access to onboard WiFi.

This charge not only allows them to cover their costs – including the costs of investing in capacity increases such as additional, dedicated satellites to meet future needs – it also ensures that demand does not swamp their systems' limited bandwidth supplies. Excess demand would result in an unusable WiFi product for everyone or the inability for all passengers onboard who want to use the product to do so. Although some airlines with smaller customer bases and relatively-greater access to airborne broadband or alternatives have been able to make the commercial decision to offer inflight WiFi access at no cost to passengers, inflight WiFi is, at least currently, an expensive product to provide and supply is limited. In order to prevent excessive use that would degrade service quality for all users, angering

passengers who make travel decisions based on WiFi availability and squandering carrier investment in these systems, charges for inflight WiFi access often reflect the cost and value to customers of this access. Access is priced between $1 to $12.50 per hour or $3.99 to $29.95 per flight for one major carrier.

In other cases, depending on the aircraft and carrier's previous investment, content is streamed locally from the onboard server. Content is stored locally on the server and streamed via the aircraft wireless access point to customer PEDs. Some carriers and some aircraft, but not all, may be able to take advantage of this this path to enhance accessibility of IFE in a shorter timeframe, illustrating again that there is no single best way to achieve accessibility in this complex area.

A WiFi-Based IFE Accessibility Solution Would, for Many Airlines, Require Fraud Safeguards and Time to Develop

The potential for fraud/abuse by passengers who are not qualified individuals with a disability is a meaningful barrier to carriers that today charge passengers for WiFi connectivity and that may be considering adoption of a WiFi-based IFE accessibility solution. Air carriers have decades of experience administering a number of programs intended for qualified individuals with disabilities. Extensive data shows that when even a small share of the public engages in fraud to secure benefits intended exclusively for individuals with disabilities, the costs of providing services to those not entitled to them, and of policing fraud, are very high. Given high demand for WiFi and its cost, carriers would need time to build a solution to address fraud while ensuring access to qualified individuals with disabilities with minimal inconvenience. Unchecked, the unfortunate prevalence of fraud would also threaten availability of services for the passengers with disabilities for whom such a program is intended, since the demand for free WiFi access could overload the limited bandwith available to the satellite-fed inflight environment.

Contractual Obligations Likely Prevent WiFi Access to Content in the Near Term for Some Airlines

Streaming content wirelessly to a PED, whether that content is cached aboard the aircraft or comes from an external source via broadband transmission, may not be an option for some carriers and aboard certain aircraft. Carriers' contracts with service providers can be long in duration. Current contractual obligations with the providers of other content aboard those aircraft limit carriers' ability to display potentially-competing products. For instance, one carrier's provider of paid television services requires that the carrier prevent the streaming of content (whether cached or streamed from a ground-based source) that could compete with live television as a passenger-entertainment selection. These contracts have fixed, frequently long durations that inhibit the introduction of WiFi-based IFE accessibility solutions in the near term on at least certain aircraft. In the longer term, however, carriers can renegotiate contracts with a view to ensuring solutions for accessibility.