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U.S. Department of Transportation ACCESS Committee
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December 9, 2016

Department of Transportation
Office of the Secretary
Attn: Ms. Blane Workie
1200 New Jersey Ave., SE
Washington, DC 20590

SUBJECT: Transmission of ACCESS Committee Final Resolution

Dear Ms. Workie:

I am pleased to report that the U.S. Department of Transportation's Accessible Air Transportation Advisory Committee ("ACCESS Committee") has reached consensus on terms of a proposed new rule to enhance the accessibility of In-Flight Entertainment (IFE) and of certain lavatories on commercial aircraft. The ACCESS Committee also reached consensus on recommended plans for further work on (a) enhanced designs for on-board wheelchairs, (b) more accessible IFE interfaces; and (c) more accessible cabin announcements. The ACCESS Committee did not reach consensus on a new definition of service animals and accordingly offers no recommendation with regard to service animals.

The ACCESS Committee was convened to consider three issues:

- (1) Whether to require an accessible lavatory on new single-aisle aircraft over a certain size;
- (2) Whether to (a) require accessible inflight entertainment (IFE) and (b) strengthen accessibility requirements for other in-flight communications; and
- (3) Whether to amend the definition of "service animals" that may accompany passengers with a disability on a flight.

The enclosed Resolution of the US Department of Transportation ACCESS Committee, dated November 22, 2016 (hereafter, "the Resolution"), contains the recommendations of the ACCESS Committee on the three sets of issues it was charged with considering. The Committee's agreed Rules of Procedure also define "consensus" on any recommendation as "no more than 2 negative votes [by the members of each Voting Committee] in each issue area. Abstention shall not be construed as a negative vote."

Annex A of the Resolution sets forth the ACCESS Committee's recommended term sheet for a proposed new rule on accessible lavatories in single-aisle aircraft over a certain size -- along with a proposed plan for developing an enhanced design for on-board wheelchairs. The Committee's recommendation on single-aisle aircraft lavatories was adopted on October 14, 2016, by a vote of 15-1, with 3 abstentions.

Annex B of the Resolution sets forth the ACCESS Committee's recommended Term Sheet for a proposed new rule on accessible In-Flight Entertainment (IFE), along with a proposed plan for establishing a multi-stakeholder "Accessible Interface Task Force" to develop and submit to the Department any consensus recommendations on proposed specifications for an accessible user interface for new IFE systems and, if feasible, existing IFE systems. Any consensus recommendations will be considered for possible inclusion in a new rulemaking. The Committee's recommendation on accessible IFE and IFE interfaces was adopted on November 22, 2016, by a vote of 21-0, with 3 abstentions.

Annex C of the Resolution sets forth the ACCESS Committee's proposed plan for considering enhancements to the accessibility of onboard cabin announcements, which are typically delivered through inflight communications systems that may be distinct from IFE. The Committee's recommendation on cabin announcements was adopted on November 22, 2016, by a vote of 21-0, with three abstentions.

The ACCESS Committee met 7 times in Washington, D.C. over the period May 17 – November 2: two days each session for the first four meetings, three days per session for the next two meetings, and one day for the final meeting. The Committee also formed Working Groups in each topic area to investigate and deliberate on the issues between plenary meetings, explore options, and offer recommendations to the ACCESS Committee. The Working Groups included all Committee Members and non-Committee members who wished to participate in the deliberations of that group. Each Working Group was led by a group of interest group leaders (chosen by the airlines, advocacy groups, original equipment manufacturers, suppliers and government) who were charged with liaising with and representing their respective interest groups in the Working Group and plenary meeting deliberations. The Committee's deliberations were assisted by over 30 Working Group member/leadership calls which typically lasted 1.5 hours each.

In its first meeting, the Committee reached unanimous agreement on its Rules of Procedure (attached hereto). Because the Committee was charged with developing recommendations in three disparate issue areas the full Committee included stakeholder representatives with expertise and interest in each of these areas. While the airline and government representatives generally had interest and expertise in all three areas, certain other committee members brought expertise and interest in only one or two of the three areas of interest. Accordingly, the Committee agreed in its Rules of Procedure to form three Voting Committees – on lavatories, IFE/IFComs, and service animals, respectively – with each ACCESS Committee member agreeing to cast ye or nay votes only in those topic areas in which such member had expertise and interest. The ACCESS Voting Committees for lavatories, IFE/IFComs and service animals are set forth as Annex A to the Rules of Procedure.

The positions and supporting rationales of those stakeholders who wished to file statements on this issue are set forth in an Appendix to the enclosed Resolution.

It has been my pleasure working with you on this negotiated rulemaking exercise. Please let me know if I can be of further assistance.

Best wishes,

Richard Parker
Facilitator

RESOLUTION OF THE U.S. DEPARTMENT OF TRANSPORTATION ACCESS COMMITTEE

November 22, 2016

The U.S. Department of Transportation (“Department”) ACCESS Committee was convened to consider three issues:

1. Whether to require an accessible lavatory on new single-aisle aircraft over a certain size;
2. Whether to (a) require accessible inflight entertainment (IFE) and (b) strengthen accessibility requirements for other in-flight communications; and
3. Whether to amend the definition of “service animals” that may accompany passengers with a disability on a flight.

The ACCESS Committee, meeting by telephone conference on November 22, 2016 hereby adopts the following resolution:

1. Having reached consensus on the issue of accessible lavatories, the ACCESS Committee recommends that the Department propose a rule consistent with the term sheet attached hereto as Annex A.
2. Having reached consensus on the issue of In-flight Entertainment (IFE), the ACCESS Committee recommends that the Department propose a rule consistent with the term sheet attached hereto as Annex B. Having reached consensus on an approach for considering enhancements to the accessibility of other on-board communications, the ACCESS Committee hereby submits the recommendation set forth in Annex C.
3. The ACCESS Committee did not reach consensus on whether or how to amend the definition of service animals and accordingly makes no recommendation on that issue.

The Vote Tally Sheets reflecting the final vote on each of these issues is attached hereto as Annex D.

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ANNEX A

ACCESS Committee Agreed Term Sheet: Aircraft Lavatories October 14, 2016

Definitions

“Tier 1” aircraft are all new aircraft delivered 3 years after the Effective Date of the final rule that are not Tier 3 aircraft.

“Tier 3” aircraft are aircraft that:

- (a) are ordered 18 years after and delivered 20 or more years after the effective date of the final rule; or
- (b) are a new type design for which application is filed with the FAA or a foreign carrier civil aviation authority more than 1 year after the effective date of the final rule.

1. The requirements of this section shall apply 3 years after the Effective Date of the final rule to all carriers operating aircraft that have a FAA-certified maximum passenger capacity of 60 or more seats:

- a. *Flight attendant training*

Carriers must train flight attendants to proficiency on an annual basis to provide assistance in transporting qualified individuals with disabilities to and from the lavatory from the aircraft seat, including hands-on training on the use of any new DOT required on-board wheelchair as referenced below, and with respect to any assembly or modifications to the accessibility features of the lavatory or on-board wheelchair.

- b. *Publication of accessibility information*

Carriers must provide information, on request, to qualified individuals with a disability or persons making inquiries on their behalf concerning the accessibility of aircraft lavatories. This information must also be available on the carrier’s website, and in printed or electronic form on the aircraft, including picture diagrams of accessibility features in the lavatory and the location and usage of all controls and dispensers.

- c. *International Symbol of Accessibility.*

Carriers shall remove or conceal ISA from new and in-service aircraft equipped with lavatories that are not capable of facilitating seated independent transfer.

2. All Tier 1 aircraft have an FAA certified maximum passenger capacity of 125 or more seats shall feature at least one onboard lavatory that meets the following specifications:

- a. *Toilet seat height.*

The toilet seat height shall be 17-19 inches high.

- b. *Assist handles.* Pull-up assist handles shall be provided and positioned as required to meet the needs of individuals with disabilities and shall support a minimum of 250 lbs.

- c. *Faucets.* Carriers shall ensure that either (i) lavatory faucets offer controls with tactile information concerning temperature or (ii) water temperature for all passengers is adjusted to eliminate the risk of scalding for any passenger.

Automatic or hand-operated faucets shall dispense water for a minimum of approximately 5 seconds for each application or while the hand is below the faucet.

d. *Flush control*

For Tier 1, there shall be no requirement to modify the location of flush controls, but location information shall be made available to passengers through informational cards upon request, and online [if applicable].

For Tier 3, flush controls shall be accessible to a qualified individual with a disability by a 5 percentile female from a seated position.

e. *Attendant call buttons.* Attendant call buttons shall be provided in the lavatory [and accessible to an individual seated on the toilet].

f. *Lavatory controls and dispensers.*

Lavatory controls and dispensers, if any, shall be tactilely discernible when reasonably available. Information regarding location and use of all other lavatory controls and dispensers shall be made available through informational cards on request, verbally through flight attendants, online, or by phone and TTY where those services are ordinarily provided.

g. *Door sill.* The lavatory door sill shall provide minimum obstruction to the passage of the on-board wheelchair across the sill while preventing the leakage of fluids from the lavatory floor and trip hazards during an emergency evacuation.

h. *Sharps/bio-waste.* Carriers shall develop and, upon request, inform passengers of trash disposal procedures/processes for sharps/bio-waste.

i. *Door locks.* The door lock must be accessible by a 5th percentile female seated on the OBW, if any, within the lavatory compartment.

j. *Toe clearance:*

Tier 1: Toe clearance shall not be reduced from current measurements [explain/discuss in preamble]

Tier 3: Toe space not specified per se but determined by performance specification for Tier 3 accessibility re 95th percentile male (see footnote)¹

k. *Visual barrier:* Covered aircraft shall include a visual barrier that shall be provided upon request of a passenger with a disability. Such barrier shall provide passengers with disabilities using the lavatory (with the lavatory door possibly open) a level of privacy substantially equivalent to that provided to ambulatory users. For retrofit lavatories, there shall be no requirement to install a visual barrier if doing so will obstruct the visibility of exit signs.

l. Where reasonably available in the supplier catalog, and if such parts are certified for the applicable aircraft type, operable parts installed in a lavatory covered by this rule shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.

3. Retrofit of aircraft

You are not required to retrofit cabin interiors of existing aircraft to comply with the requirements of this section. However, if you replace a lavatory on a single aircraft, you must replace it with an

¹ The referenced section reads as follows: “the accessible lavatory must permit a qualified individual with a disability equivalent in size to a 95 percentile male to approach, enter, maneuver within as necessary to use all lavatory facilities, and leave, by means of the aircraft's on-board wheelchair.”

accessible lavatory as defined in section 382.xx (tier I section). Replacement does not cover removing the lavatory for specified maintenance (e.g., corrosion), safety checks, or any other action that results in returning the same lavatory into service. For retrofit lavatories, there shall be no requirement to install a visual barrier if doing so will obstruct the visibility of exit signs.

4. Onboard Wheelchair (OBW)

- A. New covered single aisle aircraft with 125 FAA maximum certified passenger seats entering service 3 years after the effective date of the Final Rule shall include an onboard wheelchair that meets DOT's standards.
- B. DOT will consult with advocates, airlines, aircraft manufacturers, manufacturers of OBW, flight attendant association(s) and other stakeholders in developing these standards.
- C. The purpose of the onboard wheelchair standards that will be developed by DOT is to improve the safety of traditional models of OBW, and to establish, if feasible, the specifications for an over-the-toilet OBW design.
- D. Any new DOT standards for OBW must: (1) permit passage in the aircraft aisle; (2) fit within at least one of the available certified OBW storage spaces (e.g., ceiling, closets) consistent with weight and space limits applicable to each carrier's aircraft models; and (3) shall accomplish its intended functions without requiring modification to interior arrangement, including lavatories.
- E. If airlines replace an onboard wheelchair on covered aircraft with 125 FAA maximum certified passenger seats 3 years after the effective date of the final rule, then airlines must replace it with an on-board wheelchair that meets the new DOT standards if: (1) it fits within the existing OBW storage spaces consistent with weight and space limits applicable to each carrier's aircraft models; (2) permits passage in the aircraft aisle; and (3) can accomplish its intended functions without requiring modification to interior arrangement, including lavatories.
- F. DOT will not take action against airlines for the failure by third parties to develop and deliver compliant OBWs so long as airlines demonstrate efforts to obtain OBWs that meet new DOT standards subject to the conditions identified above.
- G. DOT will include the proposed new standards for an OBW and replacement of OBW on existing aircraft as described above in its notice of proposed rulemaking.
- H. The target date for completing the standards for the onboard wheelchair is February 2017. Airbus will share OTW-type draft specification for OEM/airline/user group review. Aircraft manufacturers will provide DOT for a nominal collapsed envelope of the OBW in October 2016.

Tier 3 [Used existing requirement for twin aisle aircraft in 382.63 as a starting base]

(a) As a carrier, you must ensure that single aisle aircraft with more than 125 FAA maximum certified passenger seats in which lavatories are provided, shall include at least one lavatory of sufficient size to permit a qualified individual with disability to perform a seated independent and dependent transfer from the on-board wheelchair to and from the toilet within a closed space that affords to persons using the on-board wheelchair privacy equivalent to that afforded ambulatory users.

(b) The accessible lavatory referenced in para. (a) must:

(1) permit a qualified individual with a disability equivalent in size to a 95 percentile male to approach, enter, maneuver within as necessary to use all lavatory facilities, and leave, by means of the aircraft's on-board wheelchair.

(2) allow an individual equivalent in size to a 95 percentile male to assist a qualified individual with a disability.

(3) provide door locks, accessible call buttons, assist handles, faucets and other controls (if any), and dispensers (if any) that are usable by qualified individuals with a disability equivalent in size to a 95 percentile male and 5 percentile female, including wheelchair users and persons with manual impairments as specified in section 382.xx (tier 1).

(4) include the capability of safety cabin announcements that are visually and audibly available in the lavatory (subject to subsequent DOT rulemaking in consultation with the Cabin Announcement Task Force).

(c) You are not required to retrofit cabin interiors of existing aircraft to comply with the requirements of this section. However, if you replace a lavatory on a single aisle aircraft, you must replace it with an accessible lavatory as defined in section 382.xx (tier I section).

(d) As a covered carrier, you must comply with the requirements of paragraph (a) of this section with respect to new aircraft you operate that were initially ordered after 18 years or which are delivered after 20 years or are in a new type design filed with FAA or foreign carrier's aviation safety authority after 1 year from final rule.

Annex B

Term Sheet Reflecting the Agreement of the ACCESS Committee Regarding In-Flight Entertainment November 22, 2016

1. Definitions:

- a. *IFE System*: a system provided by an airline that provides entertainment and information to its passengers. In this document, if no distinction is made, *IFE System* refers to all types of IFE systems. Note that multiple systems could be used on the same aircraft.
- b. *Seatback IFE System*: an IFE system in which screens are installed in every seatback either in the entire aircraft or in a particular class of service.
- c. *Wireless IFE System*: an IFE system in which content is wirelessly transmitted to Personal Electronic Devices (PEDs), either owned by the airline or by the passenger.
- d. *Linear (“Live”) television*: an IFE system that receives television signals from a satellite or ground station that are also being simultaneously transmitted to the general public, as opposed to a cached-content IFE system on which content is stored onboard the aircraft for distribution within the aircraft.
- e. *Preloaded PEDs*: Similar to a wireless IFE system in that it uses PEDs, but has no wireless component and all content is preloaded to the PED.
- f. *Communal IFE*: an IFE system which displays a common movie or set of channels distributed to overhead or individual displays at a fixed time to all screen.
 - i. *Overhead*: an IFE system with only shared overhead screens.
 - ii. *Distributed IFE*: an IFE system with individual passenger screens. These may offer more than one channel of communal programming which are typically showing looped content.
- g. *Audio/video on-demand (AVOD) systems*: a seatback IFE system where the user selects the movie or channels to view and controls the viewing time.
- h. *Accessible IFE interface*: In this document an *accessible* IFE interface is one that is usable by individuals with hearing and/or visual disabilities. For details, see Section 5.
- i. *Covered carrier*: U.S. carriers regardless of where their operations take place. Foreign air carriers for flights that operate to or from the United States.
- j. *Theatrical movie* (for the purposes of this rulemaking) means a full length motion picture that has been made commercially available for screening for paid admission in a commercial motion picture theatre by the content provider or an affiliate.
- k. *Video programming* (for the purposes of this rulemaking) means programming provided in the United States by a television network via broadcast, cable, or satellite. This does not include interstitial (short-form programming/ content usually shown between regular programming) and promotional materials.

2. IFE Hardware/Software

- a. As a covered carrier, you must ensure that any IFE system installed on a newly delivered aircraft and any newly-installed IFE system on an existing aircraft is capable of supporting closed captions in either fixed image (e.g., bitmap format) or as user-customizable text after the effective date of the final rule. As a covered carrier, you must also ensure the IFE system installed on a newly delivered aircraft and any newly-installed IFE system on an existing aircraft is capable of conveying audio description for content that are audio-described.
- b. As a covered carrier, you must ensure that, any IFE system installed on a newly delivered aircraft and any newly-installed IFE system on an existing aircraft, is capable of supporting closed captions in user-customizable text meeting as many as possible of the specifications set forth in Annex1, provided that UCC capability can be achieved through airline customer software upgrades to current hardware systems from the airline's existing supplier(s) for each particular aircraft without requiring other changes to the IFE system hardware, seat(s) and/or layout of passenger areas ("LOPA") of the relevant aircraft. This requirement applies to all aircraft that are ordered three or more years after the effective date of the final rule and delivered five or more years after effective date of the final rule, in the case of single-aisle aircraft, and delivered six or more years after the effective date of the final rule in the case of twin-aisle aircraft. This timeline also applies to any newly-installed IFE system on existing aircraft.
- c. If you are a covered carrier with aircraft that provides a user interface to connect to the Internet (e.g., a user interface for an Internet service provider (ISP) such as Gogo), on supported devices beginning 120 days from the effective date of the final rule, you must, whenever an aircraft undergoes a WiFi system software upgrade in the normal course of business, install any software upgrade needed to ensure that the user interface to connect to the Internet on that aircraft is accessible. You must ensure that user interfaces to connect to the Internet on all aircraft in your fleet are accessible no later than 2 years after the effective date of the final rule. An accessible user interface is an interface that is perceivable, operable, and understandable to users who are blind or visually impaired or who have hearing disabilities. The WiFi system must comply with applicable criteria established by the Web Content Accessibility Guidelines 2.0, level AA.
- d. As a covered carrier offering audio/video on demand (AVOD) seatback in-flight entertainment (not including distributed IFE) on a flight and in a particular cabin or class of service through a system that does not support closed-captioning in either fixed image or user-customizable format, you must, three years after the effective date of the final rule, at your choice, either: (a) provide carrier-supplied PEDs offering comparable content (the number of PEDs should be in sufficient numbers to satisfy reasonably foreseeable demand by qualified individuals with disabilities), (b) offer comparable content streamed wirelessly from an airline server to passenger-supplied PEDs; or (c) offer access to WiFi streaming via passenger supplied PEDs of internet entertainment content on the same terms offered to other passengers on passenger-supplied PEDs. Content for carrier-supplied PEDs may be either pre-loaded or streamed wirelessly from an airline server. The content that a carrier streams to passenger-supplied PEDs as described in option (b) shall be comparable to content displayed through the inaccessible IFE system. Comparable content does not mean equivalent content and new releases may not be available on PEDs at the same time as they are available on seatback displays. IFE content or WiFi streaming access that is accessible to

passengers with a visual and/or hearing-related disability must be offered at a price no more than that charged to passengers seated in the same class of service on the same flight.

- i. Airlines may require a blind or deaf or hard-of-hearing passenger to provide up to 48 hours advance notice in order to receive any carrier-supplied PED and/or instructions on how to access the wireless IFE solution. A Special Service Request is one way to receive such requests (which, unless contrary to EU, US or other privacy law, may be filled in once and then saved in the passenger's profile with that airline). If a passenger does not meet advance notice requirements, covered carriers still should provide the accommodation if they can do so by making reasonable efforts, without delaying the flight. In the case of carrier-provided PEDs, an advance credit card authorization to support a charge in the event of a damaged or non-returned PED may be required.
- e. Covered carriers shall not be responsible for the original quality of the closed captions and audio descriptions of the licensed content. Covered carriers shall be responsible for quality issues unique to the IFE environment, including but not limited to malfunctions or failures of IFE hardware and/or software onboard the aircraft. Passengers shall have recourse by filing a complaint with the airline in an accessible manner, through existing passenger complaint channels and processes, and the airlines shall take steps to remedy such issues. Ordinary service-delivery failures (e.g., temporarily inoperable IFE systems, broken display monitors, corrupted content files, or other failures that would impact the delivery of IFE generally for any passenger) shall not constitute a violation of DOT disabilities regulation.
- f. A covered carrier may apply for an exemption from the requirements in this section by submitting to DoT a written demonstration that compliance is not "achievable." [47 C.F.R. § 79.103\(b\)](#) may be used as guidance for demonstrating what is not achievable for closed captions. A carrier may also petition the DoT for an extension of time to comply with the foregoing requirements by filing a petition which demonstrates that timely compliance with the rule is not feasible due to factors outside the carriers control (e.g., due to bottlenecks in the supply chain). DoT shall review and respond to petitions for waiver/extension in a timely manner.
- g. Nothing in this rule shall require a carrier to offer IFE to its passengers. Carriers shall not be required to display closed captions/audio descriptions on overhead screens or distributed IFE displays, nor to provide PED-based IFE content on flights and in classes of service where overhead screens or distributed IFE displays are the primary IFE system.
- h. With respect to fee for service arrangements, IFE offered by marketing carriers on flights operated under the brand of the marketing carrier(s) by its codeshare partners is solely the responsibility of the marketing carrier(s); such codeshare partners shall not be responsible for IFE regulatory compliance.²

3. IFE Content

- a. "Covered content" means English-language theatrical movies and cached or stored English-language (for programs where the original soundtrack language is English) and Spanish-language (for programs where the original soundtrack language is Spanish) video

² In the fee-for-service code-share arrangement, the sole marketing carrier contracts with the operating carrier to purchase all seats on the flights, sets the flight number with its own airline designator code, and brands the flight with the marketing carrier's brand name, often with the suffix of "Express" or "Connection" to identify that it is a regional-carrier flight.

programming licensed by the content owner that have been produced more than 9 months after the effective date of the final rule, and displayed with closed-captions and/or audio description in theaters in the United States or on television in the United States via a broadcast station or pay TV provider (e.g., cable, satellite). Content owner means a U.S. entity with copyright and applicable distribution rights over the contents.

- i. The Department will monitor the progress in the volume of accessible programming, including but not limited to previously produced content, displayed on covered flights' IFE systems and may, on its own motion or upon petition from private parties, re-visit this provision and, in consultation with disability rights advocates, airlines, and content providers, undertake a new rulemaking to revise it if there has not been a significant increase in the accessibility of movies and video programming (captioned and audio described) displayed on aircraft five years after the effective date of the rule.

b. Obtaining and Displaying IFE Content With Closed Caption and Audio Descriptions

Beginning 9 months after the effective date of the rule, for covered content that the carriers license for display on aircraft seatback IFE and cache on an onboard server, covered carriers shall request that their content provider(s) supply 100 percent of covered IFE content in closed-caption and audio-described versions, and shall obtain such covered IFE content with closed captions and audio-descriptions if available in a format that is suitable, based on widely accepted industry standards, for display on the carrier's particular IFE systems for the carrier's particular aircraft. Carriers may display content that is not closed captioned or audio-described only if captioned or described versions are NOT available from the carrier's content provider.

When licensing linear ("live") television programming, the feed of the carrier's content provider must be licensed to include closed captions and audio descriptions in the feed to the extent they exist and are transmitted with the feed. Carriers are permitted to display content for which a closed captioned and/or audio described version is unavailable from its provider.

c. Edited Version of Movies or Video Programming

If a covered carrier or its agent procures a movie or video programming that has been edited for display on aircraft and the unedited movie or video programming was made available by the content provider with closed-captions and/or audio-description, the carrier shall procure for display on aircraft either: (1) a closed-captioned and/or audio-described version of the edited movie or video programming; or (2) a closed-captioned and/or audio-described version of the unedited movie or video programming.

If a carrier has a consistent policy of only displaying certain content in an edited version, and an edited version containing audio descriptions is not available by the carrier's content provider, then this paragraph shall not require that carrier to display the edited version with audio description. The carrier shall retain documentation demonstrating that the edited version containing audio description has not been made available despite request.

d. Information Collection Requirement

Each carrier shall prepare a list each month of all the movies and video programming it licensed in the preceding month. Such lists shall indicate for each IFE content item whether the content is available to airline passengers in closed-captioned and/or audio described

format. To the extent that a movie or video programming is not available in captioned and/or audio described format to airline passengers, the carrier must state the reason that one is not available (e.g., work cycle, audio-described version not available from the content provider, content not produced more than 9 months after effective date). Each monthly list must contain the following certification signed by the carrier's authorized representative: "Airline confirms that it has ordered closed-captioned and/or audio-described content in all cases where it is available from its content provider in IFE format. This list is true, correct and complete to the best of my knowledge and belief." The carrier shall retain the lists with certification for a period of two years and make them available to the Department of Transportation on request.

e. Retention and Reporting Requirement.

By the last Monday in January of each year, the carrier shall submit an annual report to the Department of Transportation summarizing its accessible IFE content during the prior calendar year using the specified form (see attachment). See Annex 2 for the format and content of that report. Each annual report must contain the following certification signed by the carrier's authorized representative: "I, the undersigned, confirm that this report has been prepared under my direction. To the best of my knowledge and belief, that this is true, correct, and complete report." Electronic signatures will be accepted.

- f. The information and reports described in sections (d) and (e) above will not be required on or after 7 years after the effective date of the rule.

4. Accessibility Disclosure

Covered carriers shall disclose on their websites, and upon request through call centers, clear information on their accessible IFE options to passengers in advance of travel. This includes, limitations, if any, on content entailed by use of passenger-supplied PEDs to the extent that those limitations differ from any that may apply to the IFE that the carrier generally offers. Covered carriers shall also provide clear information about the availability of captioned and audio described content, such as through the provision of a search filter and identifying icons on accessible systems and PEDs where IFE systems provide such functionalities.

Airlines generally do not provide, in advance of travel, information on individual titles, type or quantity of content that may be available on any specific flight. To the extent this information is not provided to passengers generally it is not required to be provided to passengers with disabilities. Any aircraft or flight specific information provided is subject to change based on operational necessities such as unplanned aircraft swaps.

5. Accessible Interface Task Force

On or before November 15, 2017, the Airline Passenger Experience Association (APEX) will develop and submit any consensus recommendations on proposed specifications for an accessible user interface for new IFE systems (as opposed to newly manufactured parts of existing designs) offered on newly delivered aircraft and any newly-installed IFE system on an existing aircraft. APEX will also study and if feasible develop consensus recommendations on proposed specifications for an accessible user interface for existing IFE systems on aircraft for consideration during rulemaking.

APEX will consult with disability rights organizations including the National Federation of the Blind and the American Council of the Blind, airlines, aircraft manufacturers, suppliers (Thales, Panasonic and

Zodiac), and other stakeholders such as the National Center for Accessible Media in developing these recommendations and proposed specifications. For a user interface to be accessible, it must be perceivable, operable, and understandable to users who are blind or visually impaired, have hearing disabilities, and/or have dexterity impairments.

APEX will, to the extent possible, establish consensus recommendations and proposed specifications that would only necessitate airline customer software changes and would not require changes to the IFE system hardware, seat(s) and/or layout of passenger areas (“LOPA”) of the relevant aircraft.

To the extent consensus is not reached on any of the aforementioned matters, APEX will provide DOT a report containing the different views of the stakeholders.

DOT will review any proposed specifications that are developed, consensus recommendations provided, or report prepared for possible inclusion in a new rulemaking.

Annex 1 of IFE Term Sheet

Specifications of User-Customizable Captions

[Note: These standards are drawn from the FCC requirements set forth in detail in [47 C.F.R. § 79.103\(c\)](#). The topic headings are listed here for ease of reference. Item 1 defines the presentation modes that should be supported. Items 2-10 represent the customizable characteristics of the text. Item 11 (not listed below but found in the linked documents above) does not apply here.]

“User-customizable captions” (UCC) means captions that adhere to the decoder requirements set forth, as of the date of this agreement, by [47 C.F.R. § 79.103](#).

(c) Specific technical capabilities. All apparatus subject to this section shall implement the following captioning functionality to the extent feasible within the IFE environment:

- (1) Presentation
- (2) Character color
- (3) Character opacity
- (4) Character size
- (5) Fonts
- (6) Caption background color and opacity
- (7) Character edge attributes
- (8) Caption window color
- (9) Language (switching between languages or caption tracks when available)
- (10) Preview and setting retention

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Annex 2 of IFE Term Sheet
Format and Content of Carrier Annual Reports

Name of Carrier: _____

Submission Date: _____

Contact Person: _____

Email Address: _____

Telephone Number: _____

Mailing Address: _____

Calendar Year of Data Collection: _____

Total number of IFE content licensed in calendar year: _____

Table 1. MOVIES/FILMS

	Total	Covered content theatrical movies	Non-covered English content theatrical movies produced before [effective date +9 months]	Other non- covered theatrical movies
Number of theatrical movies licensed				
Number of theatrical movies licensed that have closed captions				
Number of theatrical movies licensed that have audio descriptions				

“Covered content” means English-language theatrical movies and cached or stored English-language (for programs where the original soundtrack language is English) and Spanish-language (for programs where the original soundtrack language is Spanish) video programming licensed by the content owner that have been produced more than 9 months after the effective date of the final rule, and displayed with closed-captions and/or audio description in theaters in the United States or on television in the United States via a broadcast station or pay TV provider (e.g., cable, satellite). Content owner means a U.S. entity with copyright and applicable distribution rights over the contents.

For purposes of this rulemaking, a **theatrical movie** means a full length motion picture that has been made commercially available for screening for paid admission in a commercial motion picture theatre by the content provider or an affiliate.

Table 2. PROGRAMS

	Total	Covered English - language content video programming	Non-covered English language content video programming produced before [effective date +9 months]	Covered Spanish-language content video programming	Non-covered Spanish-language content video programming produced before [effective date +9 months]	Other non-covered content (e.g., Netflix, Hulu)
Number of programs licensed						
Number of programs licensed that have closed captions						
Number of programs licensed that have audio descriptions						

“Covered content” means English-language theatrical movies and cached or stored English-language (for programs where the original soundtrack language is English) and Spanish-language (for programs where the original soundtrack language is Spanish) video programming licensed by the content owner that have been produced more than 9 months after the effective date of the final rule, and displayed with closed-captions and/or audio description in theaters in the United States or on television in the United States via a broadcast station or pay TV provider (e.g., cable, satellite). Content owner means a U.S. entity with copyright and applicable distribution rights over the contents.

For purposes of this rulemaking, **video programming** means programming provided in the United States on television via broadcast, cable or satellite. This does not include interstitial (short-form programming/content usually shown between regular programming) and promotional materials.

This form is not intended to capture information about **linear television** – i.e., an IFE system that receives television signals from a satellite or ground station that are also being simultaneously transmitted to the general public, as opposed to a cached-content IFE system on which content is stored onboard the aircraft for distribution within the aircraft

Certification Statement: I, the undersigned, confirm that this report has been prepared under my direction. To the best of my knowledge and belief, that this is true, correct, and complete report.

Signature: _____

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ANNEX C

ACCESS Rulemaking: Cabin Announcements Revised Proposal November 22, 2016

Cabin Announcement Task Force

A task force will be formed as an independent entity, with representatives from airlines, other industry stakeholders and disability rights organizations, including National Association of the Deaf, to advance the cause of accessible cabin announcements.³ The task force will be led by WaiFind.org (Peter Lemme).

On or before November 15, 2017, the task force will develop and submit any consensus recommendations regarding opportunities and challenges for innovations that would enhance the accessibility of cabin announcements on board commercial aircraft. Options to be explored include, but are not limited to,

- (1) text display of pre-recorded announcements on existing aircraft that uses an audio and video pre-recorded announcement machine (PRAM) with a connection to overhead or seatback monitors to convey pre-recorded cabin announcements;
- (2) text display of pre-recorded announcements on a newly delivered aircraft and existing aircraft in order to sunset the use of audio-only PRAMs;
- (3) text display of pre-recorded announcements on passenger-owned devices;
- (4) text display of uplink announcements via ACARS/IP on seatback displays and passenger-owned devices; and
- (5) text display of PA announcements (such as speech-to-text recognition) on seatback displays and passenger-owned devices.

The task force will also identify opportunities and challenges in establishing a standard interface between aircraft network and passenger-owned devices to enable interactive capability such as calling or messaging with a flight attendant. It will evaluate trials and demonstrations to address these problems on or before November 15, 2017.

When establishing consensus recommendations and proposed specifications, the task force will take into account costs to industry and take advantage of any cost-effective options that may be available. To the extent consensus is not reached on any of the aforementioned matters, WaiFind.org will provide DOT a report containing the different views of the stakeholders.

If the task force is making progress but needs to continue its work after November 15, 2017, it shall submit a report of its progress to DOT on or before November 15, 2017 and indicate a revised target date for completion of its work.

DOT will review any performance criteria that are developed, consensus recommendations provided, or report prepared by this task force for possible inclusion in a new rulemaking.

³ An announcement is defined as a message that is conveyed by the airline to passengers in order to convey information (not entertainment) relating to safety or otherwise.

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ANNEX D

Final vote of the Service and Support Animal (SSA) Voting Committee to discontinue discussions			
Proposal: To discontinue further discussions of the ACCESS Service Animal Voting Committee on service animals issues (October 12, 2016)		Response:	
Interest Sector/Name	Organization	YES	NO
Barnicle, Mary	United Airlines	X	
Buckland, Kelly	National Council on Independent Living (NCIL)	X	
Decker, Curt	Nat'l Disability Rights Network	X	
Diggs, Parnell	National Federation of the Blind (NFB)	X	
Doell, Paul	National Air Carrier Association	X	
Friedman, Brian	Jet Blue	X	
Kolander, Candace	Association of Flight Attendants-CWA	Abstain	
Lavin, Douglas	Intl Air Transport Association	X	
Mackenzie, Lorne	West Jet	X	
Martin, David	Delta Air Lines	X	
Morris, Bradley	Psychiatric Service Dog Partners (PSDS)	X	
Mullins, Larry	Lufthansa	X	
Page, Lee	Paralyzed Veterans of America	X	
Price, Deborah Lynn	Frontier Airlines		
Smith, Alicia	Nat'l Alliance on Mental Illness (NAMI)		
Stanley, Jenine	Guide Dog Foundation for the Blind	X	
Stephens, Anthony	American Council of the Blind (ACB)	X	
Sunderman, Jennifer	Regional Airline Association	X	
Workie, Blane	DOT	X	

ACCESS Lavatories Voting Committee – Final Vote Tally Sheet			
Proposal: To adopt the term sheet on Aircraft Lavatories dated October 14, 2016 (See Annex A)		Response:	
Interest Sector/Name	Organization	YES	NO
Albert, Michelle	Boeing	Abstain	
Barnicle, Mary	United Airlines	X	
Buckland, Kelly	National Council on Independent Living		X
Decker, Curt	Nat'l Disability Rights Network	X	
Diggs, Parnell	National Federation of the Blind (NFB)	Abstain	
Doell, Paul	National Air Carrier Association	X	
Friedman, Brian	Jet Blue	X	
Hunter-Zaworksi, Katharine	National Center for Accessible Transportation (NCAT)	X	
Kolander, Candace	Association of Flight Attendants-CWA	X	
Lavin, Douglas	Intl Air Transport Association	X	
Mackenzie, Lorne	West Jet	X	
Martin, David	Delta Air Lines	X	
Mullins, Larry	Lufthansa	Abstain	
Page, Lee	Paralyzed Veterans of America	X	
Price, Deborah Lynn	Frontier Airlines	X	
Roca-Toha, Roser	Airbus	X	
Stephens, Anthony	American Council of the Blind (ACB)	X	
Sunderman, Jennifer	Regional Airline Association	X	
Workie, Blane	DOT	X	

IFE/IFComs Voting Committee - Final Vote on IFE Tally Sheet			
Proposal: To adopt the Term Sheet Reflecting the Agreement of the ACCESS Committee Regarding In-Flight Entertainment dated November 22, 2016 (See Annex B)		Response:	
Interest Sector/Name	Organization	YES	NO
Albert, Michelle	Boeing	X	
Alkebsi, Zainab	National Association for the Deaf (NAD)	X	
Barnicle, Mary	United Airlines	X	
Buckland, Kelly	NCIL	Absent	
Childers, Michael	APEX	X	
Decker, Curt	Nat'l Disability Rights Network	X	
Diggs, Parnell	National Federation of the Blind (NFB)	X	
Doell, Paul	National Air Carrier Association	X	
Freed, Geoff	NCAM/WBGH	X	
Friedman, Brian	Jet Blue	X	
Hamlin, Lise/Barbara Kelley	Hearing Loss Association of America (HLAA)	X	
Hunter-Zaworski, Katherine	National Center for Accessible Transportation (NCAT)	X	
Kolander, Candace	Association of Flight Attendants-CWA	X	
Lavin, Douglas	Intl Air Transport Association	Abstain	
Mackenzie, Lorne	West Jet	X	
Martin, David	Delta Air Lines	X	
Michiel, Orit	MPAA	Abstain	
Mullins, Larry	Lufthansa (Robin MacDougald voting)	X	
Page, Lee	Paralyzed Veterans of America (Heather Page voting)	X	
Price, Deborah Lynn	Frontier Airlines	Abstain	
Roca-Toha, Roser	Airbus	X	
Stanley, Jenine	Guide Dog Foundation for the Blind	X	
Stephens, Anthony	American Council of the Blind (ACB)	X	
Sunderman, Jennifer	Regional Airline Association	X	
Workie, Blane	Department of Transportation	X	

IFE/IFComs Voting Committee - Final Vote on Cabin Announcement Task Force - Tally Sheet			
Proposal: To adopt the Term Sheet reflecting the Agreement of the ACCESS Committee Regarding Cabin Announcements, dated November 22, 2016 (see Annex C)		Response:	
Interest Sector/Name	Organization	YES	NO
Albert, Michelle	Boeing	X	
Alkebsi, Zainab	National Association for the Deaf (NAD)	X	
Barnicle, Mary	United Airlines	X	
Buckland, Kelly	NCIL	Absent	
Childers, Michael	APEX	X	
Decker, Curt	Nat'l Disability Rights Network	X	
Diggs, Parnell	National Federation of the Blind (NFB)	X	
Doell, Paul	National Air Carrier Association	X	
Freed, Geoff	NCAM/WBGH	X	
Friedman, Brian	Jet Blue	X	
Hamlin, Lise/Barbara Kelley	Hearing Loss Association of America (HLAA)	X	
Hunter-Zaworski, Katherine	National Center for Accessible Transportation (NCAT)	X	
Kolander, Candace	Association of Flight Attendants-CWA	X	
Lavin, Douglas	Intl Air Transport Association	X	
Mackenzie, Lorne	West Jet	X	
Martin, David	Delta Air Lines	X	
Michiel, Orit	MPAA	Abstain	
Mullins, Larry	Lufthansa (Robin MacDougald voting)	X	
Page, Lee	Paralyzed Veterans of America (Heather Page voting)	X	
Price, Deborah Lynn	Frontier Airlines	Abstain	
Roca-Toha, Roser	Airbus	Abstain	
Stanley, Jenine	Guide Dog Foundation for the Blind	X	
Stephens, Anthony	American Council of the Blind (ACB)	X	
Sunderman, Jennifer	Regional Airline Association	X	
Workie, Blane	Department of Transportation	X	

FINAL VOTE OF THE ACCESS COMMITTEE – TALLY SHEET

ACCESS Committee - Vote on Resolution of ACCESS Committee - Tally Sheet			
Proposal: To adopt the Final Resolution of the U.S. Dep't. of Transportation ACCESS Committee, dated November 22, 2016.		Response:	
Interest Sector/Name	Organization	YES	NO
Albert, Michelle	Boeing	X	
Alkebsi, Zainab	National Association for the Deaf (NAD)	X	
Barnicle, Mary	United Airlines	X	
Buckland, Kelly	NCIL	Absent	
Childers, Michael	APEX	X	
Decker, Curt	Nat'l Disability Rights Network	X	
Diggs, Parnell	National Federation of the Blind (NFB)	X	
Doell, Paul	National Air Carrier Association	X	
Freed, Geoff	NCAM/WBGH	X	
Friedman, Brian	Jet Blue	X	
Hamlin, Lise/Barbara Kelley	Hearing Loss Association of America (HLAA)	X	
Hunter-Zaworski, Katherine	National Center for Accessible Transportation (NCAT)	X	
Kolander, Candace	Association of Flight Attendants-CWA	X	
Lavin, Douglas	Intl Air Transport Association	X	
Mackenzie, Lorne	West Jet	X	
Martin, David	Delta Air Lines	X	
Michiel, Orit	MPAA	X	
Morris, Bradley	Psychiatric Dog Service Partners (PDSP)	X	
Mullins, Larry	Lufthansa (Robin MacDougald voting)	X	
Page, Lee	Paralyzed Veterans of America	X	
Price, Deborah Lynn	Frontier Airlines	X	
Roca-Toha, Roser	Airbus	X	
Smith, Alicia	National Assoc. of Mental Illness (NAMI)	X	
Stanley, Jenine	Guide Dog Foundation for the Blind	X	
Stephens, Anthony	American Council of the Blind (ACB)	X	
Sunderman, Jennifer	Regional Airline Association	X	
Workie, Blane	Department of Transportation	X	



The Boeing Company
P.O. Box 3707
Seattle, WA 98124-2207

DEC 05 2016

RA-16-04509

Ms. Blane Workie, Esq.
Assistant General Counsel for Aviation Enforcement and Proceedings
United States Department of Transportation
Office of the Secretary of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

Dear Ms. Workie,

Subject: Department of Transportation Advisory Committee on
Accessible Air Transportation - Accessible Lavatories

Boeing is committed to providing lavatories that meet the needs of the broadest community of those with disabilities. Boeing airplanes are designed, as good design practice, to meet human stature dimensions outlined in guidance materials associated with the aviation industry and is committed to continuing that practice as we move forward with accessible lavatory designs. Boeing abstained in the voting of the lavatory term sheet developed as part of the regulatory negotiations process as the term sheet included proposed rule language with human stature sizes required for design, rather than including those human stature sizes as guidance material, which is standard industry practice. That said, it does not change Boeing's commitment to providing accessible lavatories on single aisle airplanes.

Sincerely,

A handwritten signature in black ink that reads 'Douglas M. Lane'.

Digitally signed by 129340
DN: c=us, o=boeing, ou=people,
cn=129340
Date: 2016.12.05 12:33:26 -08'00'

Douglas M. Lane
Director, Commercial Airplanes
(425) 237-1383, MC 03-56
FAX: (425) 294-9340

mda