

**Term Sheet Reflecting the Agreement of the ACCESS Committee
Regarding In-Flight Entertainment
November 21, 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 offered 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 Annex A, 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.¹

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 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

¹ 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.

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 non-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 C 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 A

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

Annex C

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: _____

