



Revised Transition Implementation Process

NOVEMBER 2019

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I. Introduction

The C-Band Alliance (“CBA”) submits this updated Transition Implementation Plan to describe its approach to clearing up to 300 MHz of spectrum in the 3.7-4.2 GHz band (the “C-band”) should its market-based proposal be adopted by the Federal Communications Commission (“FCC”) and the CBA be designated as the Transition Facilitator.¹ The task of clearing existing services from this much spectrum to allow the introduction of terrestrial mobile use while protecting the broadcasting and video distribution industry that delivers service to nearly 120 million American households is a complex one that requires in-depth knowledge of the satellite content delivery ecosystem. More specifically, it involves (1) implementing cutting-edge technology upgrades and compression solutions to maximize efficient use of spectrum; (2) repacking customer services into higher frequency bands on satellites without service interruption; (3) launching new satellites to maintain sufficient on-orbit capacity; (4) designing and installing approximately 100,000 filters on an estimated 35,000 antennas in the continental United States (“CONUS”); and (5) ensuring those antennas are tuned and pointed correctly to receive the same content after the clearing is completed. The CBA-members companies, with their knowledge of the entire satellite ecosystem, are best suited to undertake this complex effort and have proposed to fully implement it within 36 months of a successful auction if its proposal is adopted.

Also contained herein as Attachment A is an updated stipend/cost reimbursement proposal, which incorporates (1) the CBA’s original commitment to cover the cost of new filters and equipment for earth stations operating receive antennas in CONUS (“End Users”) to continue receiving Fixed Satellite Service signals after the transition, and (2) a commitment to pay stipends and cover costs for those customers and their associated End Users that will need technology upgrades to reduce their current level of transponder usage. Only customers identified by Intelsat, SES, and Telesat (collectively, the “CBA Operators”) or by non-CBA satellite operators as needing to reduce their transponder usage via technology upgrades (and those customers’ End Users) will be eligible for reimbursement of any expenses reasonably related to implementing the upgrades. End Users will be eligible for stipends and/or cost reimbursements regardless of whether the C-band satellite operator who is providing their service is a member of the CBA.

II. Technology Upgrades

Throughout this proceeding, the CBA Operators have had ongoing discussions with their customers about the viability, reliability and adoption of technologies to reduce capacity needs.

¹ On April 9, 2019, the CBA submitted on the record a Transition Implementation Plan (the “April Transition Implementation Plan”) that reflected its approach to clearing up to 200 MHz of spectrum.

Over the past three months, the CBA Operators conducted customer services analyses to estimate the potential bandwidth and cost savings that video compression technologies, including High Efficiency Video Coding (“HEVC”), might be able to achieve for customers. When presented with the results of those analyses and with the prospect of the CBA funding the technology upgrades, customers expressed an interest in further exploring the path to upgraded video compression.

Once customers confirmed their willingness to consider redesigning their services to make them more bandwidth-efficient, the CBA Operators engaged internally to identify target services that would have the greatest impact on reducing bandwidth usage using technology upgrades. They then met with the identified customers to discuss the feasibility and anticipated gains of implementing technology upgrades. From those discussions, the CBA built a migration plan, timeline and budget to clear 300 MHz.

There is no one technology upgrade that will effectuate the clearing of 300 MHz of spectrum. Instead, a variety of upgrades, including video compression, modulation/coding, and HD to SD down-conversion at downlink locations, will be used. These upgrades will be customized for each affected customer’s needs at both uplink and downlink locations, including affected End Users as necessary. As a result of this customization, a standard cost reimbursement schedule is not available. However, the CBA has committed to pay all costs necessary to implement the reallocation of 300 MHz of spectrum for those customers identified by the CBA for such upgrades. Accordingly, the CBA will cover all costs identified in the specific plan designed for each affected customer and affected End Users.

As described in the April Transition Implementation Plan, all C-band receive antennas operating within CONUS will, at a minimum, require a filter to block emissions from terrestrial 5G transmitters operating in the cleared portion of the C-band. The CBA has committed to provide filters to all known C-band receive antennas operating in CONUS and to install filters in all C-band receive antennas operating in CONUS and registered with the FCC. End Users operating an FCC-registered receive antenna who prefer to do their own installation will receive a stipend to offset or fully reimburse their costs.

The CBA has met with vendors that specialize in installation of technology upgrades for both uplink and downlink locations, as well as filters and other receive antenna equipment. These discussions focused on the impact on video quality, implementation quality and timeliness. Based on these discussions, the CBA is confident that it can implement solutions for both the uplink and downlink portion of affected signals, but success will be closely tied to the cooperation that will be required from both customers and those End Users affected by the upgrades. Unlike the April Transition Implementation Plan that relied primarily on repacking existing services in their current format, the introduction of technology upgrades requires

customers and affected End Users to provide the CBA with substantially more information and cooperation to achieve a successful result.

Adding technology upgrades to the scope of the CBA's proposal without adding time to the schedule does increase exposure for the CBA Operators and poses a risk to the timeline. In order to mitigate that risk, the CBA has increased internal resources to design and roll out the technology upgrades at the customer uplink sites and to gather End User location and service data. In addition, the CBA has identified additional vendors that have extensive experience racking, stacking, and shipping video equipment. Those vendors have indicated that the volume contemplated by the CBA is supportable within the timeframe.

III. Satellite Transition Process

As previously described in the April Transition Implementation Plan, up to eight new satellites will be required to clear spectrum for 5G operations while protecting incumbent users. The need for eight new satellites to clear the spectrum is confirmed in this updated plan, and those satellites will be procured from U.S. satellite manufacturers. In the April Transition Implementation Plan, six out of the eight new satellites were to be launched and two satellites were to be used as ground spares in case of launch failure. In this updated plan, the CBA Operators will launch and use all eight satellites to provide customer services. The CBA Operators have devised a new launch failure contingency plan that does not rely on satellite ground spares but rather relies on assets already in orbit and the acceleration of the procurement of a ninth satellite that initially was not contemplated in the April Transition Implementation Plan.

IV. Ground Transition Process

A. Implementation of Technology Upgrades

Under the CBA's revised proposal, customers identified for technology upgrades will need to install new equipment at their uplink locations, and the affected End Users will need to install new equipment at their receive locations to receive, transcode and deliver the customers' services to their viewers.

The first few months of the implementation period as revised will focus on designing and testing technology upgrade solutions with specified customers. This design phase will run in parallel with satellite frequency and polarization changes, satellite migrations, and filter installations for customers and End Users that do not require technology upgrades.

Once the technology upgrade design phase is completed, the CBA will work with the impacted customers and End Users to install and test the technology upgrade equipment. Installation in

both the uplink and downlink locations can be done in parallel and is expected to be completed in a timely fashion to ensure implementation is completed on time.

B. Antenna Retuning and Repointing

Whether or not a technology upgrade is required, a large number of current customer transmissions will likely need to be moved to a new frequency in the upper portion of the C-band. In some cases, customer services may be moved to a new satellite at a different orbital location. For any move, the transmissions will need to be simultaneously uplinked over the original frequency or satellite and over the new frequency or satellite while End Users receiving the transmissions retune or repoint their antennas (this is referred to as the “dual illumination period”). The CBA Operators have already committed to providing dual illumination for affected customers for up to 90 days at no charge and to assist End Users operating FCC-registered antennas, as needed, to ensure those antennas are properly retuned or repointed during the dual illumination period either through the provision of technical assistance or a stipend (see Attachment A).

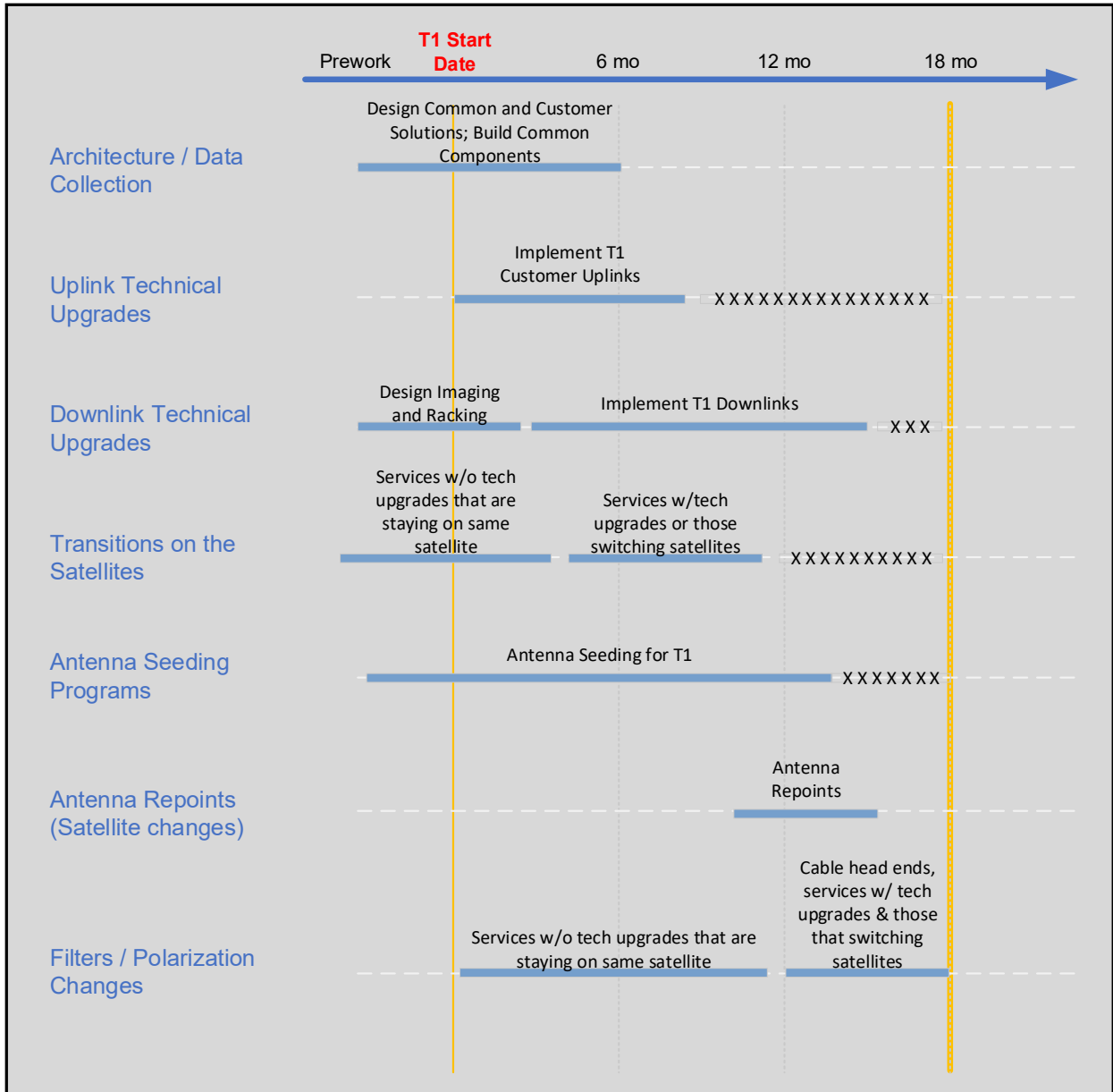
For transmissions utilizing technology upgrades, the steps described in section IV.A. above will need to be completed before the dual illumination period can begin.

C. Filter Distribution

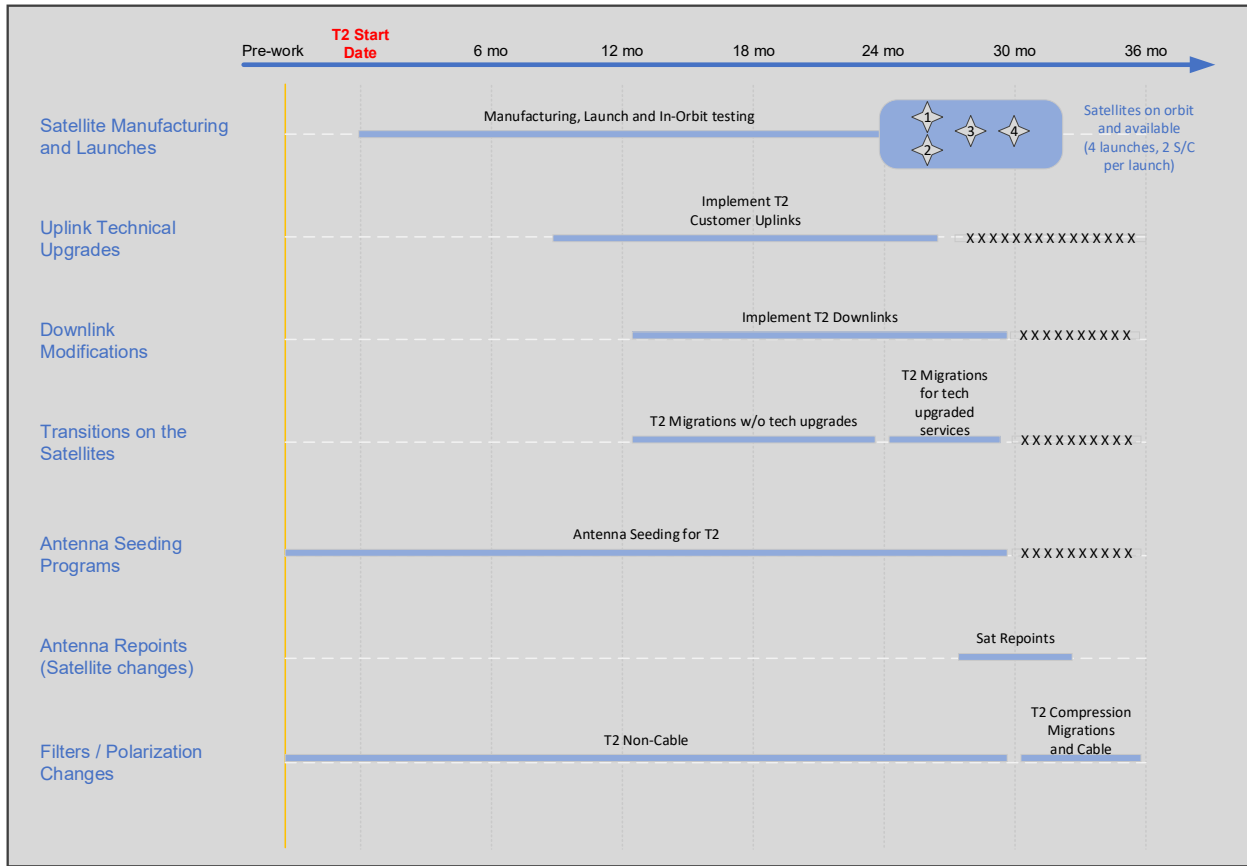
Only after all C-band receive antennas are retuned or repointed can filters be installed in each antenna. The CBA has identified filter vendors capable of manufacturing a sufficient number of filters within the CBA’s timeframe and local installers capable of working with End Users operating an FCC-registered receive antenna to install the filters efficiently. All such End Users will have the option of requesting a CBA-led filter installation or installing the filter and receiving a stipend.

D. Timeline for Implementation

Pursuant to the CBA’s proposal, 120 MHz of spectrum will be cleared in 46 of the top 50 PEAs within 18 months of an FCC Order adopting the CBA’s proposal and designating the CBA as Transition Facilitator. Below is the sequence of, and timeframe for, activities required to clear the spectrum. T1 represents the date of the FCC Order.



In addition, the CBA proposes to clear 300 MHz across CONUS within 36 months of a completed, successful CBA-led auction. The diagram below depicts the sequence and timing of activities required to clear the additional 180 MHz of spectrum. T2 represents the date a successful CBA-led auction is concluded.



In order for these aggressive timelines to be achieved, all customers requiring technology upgrades or whose services will be moved to a satellite at a new orbital location must actively work with the CBA to provide details of their associated End Users, as well as feedback on the design and implementation plan. Both customers and affected End Users will need to allow the CBA to efficiently install the necessary equipment in the uplink and downlink sites.

E. Telemetry, Tracking, and Command (“TT&C”)/Gateway sites

The CBA will identify—in advance of the commencement of any market-based auction process—no more than four TT&C/Gateway locations in CONUS where all 500 MHz will remain in use for Fixed Satellite Service. These sites will be specifically selected to have minimal impact on terrestrial mobile operators’ ability to serve high population areas.

V. Costs for Unregistered Earth Station Operators

The CBA will provide a filter to any End User, even if the receive antenna was not registered with the FCC, as long as the CBA can verify that the antenna is operational. Any unregistered earth station that is identified as an End User of a service affected by technology upgrades to reduce transponder utilization will be eligible for the necessary equipment upgrades at their receive antenna location(s) to continue to receive that service.

VI. Reporting

The CBA will provide reports to the FCC every six months after an FCC Order in which it will identify the steps it has taken to ensure the clearing schedule is being met.

ATTACHMENT A
Cost Reimbursement/Stipend Proposal

I. Introduction

This attachment sets forth the expenses the CBA is committed to reimbursing, and the stipends it is committed to paying, to ensure that satellite customers continue to receive the same high-quality, reliable satellite service they enjoy today. While the CBA believes all items described in this document are accurate on the date hereof, the CBA may need to issue updates; each CBA Operator shall inform its customers upon doing so. Additionally, the CBA will file biannual progress reports with the FCC.

II. Potential Impacts to Customers and End Users

The CBA has identified five categories of potential impact resulting from its proposal:

Technology Upgrade Implementation: A number of CBA-identified customers will require technology upgrades, which will require the CBA to work with the customers and affected End Users to properly design the solution and install and test required equipment.

Filter Installation: All End User receive antennas will require a filter to be installed on each polarization in use by each feed on every antenna.

Frequency Change: Some customers will remain on the same satellite but will require a change in frequency to move their transmission out of the lower 300 MHz or as part of a repacking effort. This will require the End Users who receive that customer's signal to change frequency on their satellite receiver to lock onto the new signal frequency.

Polarization Change: Some customers will remain on the same satellite but will be moved to transponders on a different polarization than they use today. This will require some End Users who receive this signal to rotate their feed to lock into the new frequency range and polarization. If the antenna already has a 2-port feed downlinking feeds from this satellite, they likely can already receive both polarizations. In this case, a feed rotation is not necessary. Usually, a polarization change will also require a frequency change.

Satellite Change: Some End Users will be required to change the satellites from which they currently receive their feed. This will require the End Users to re-point their antenna to an entirely new orbital position.

Each of these changes requires labor, and in some cases, equipment expenses on the part of the customer and its End Users. Under the CBA's proposal, all reasonable costs resulting from

the need to clear spectrum (including mitigation expenses to prevent 5G interference) will be reimbursed by the CBA.

III. Installation Options

There are two programs planned for the remediation of potential impacts to customers and End Users:

CBA-led program: Professional technicians will be hired by the CBA to remediate any of the five impacts noted in Section II above. The CBA will work with each End User operating an FCC-registered antenna to schedule a time for the technician to complete a job. It is anticipated that most End Users will use this service, in particular those with a single antenna per site.

End User-led program: For those End Users who have skilled resources on site and would prefer to perform the remediation activities themselves, the CBA will compensate reasonable expenses incurred as outlined below. The CBA anticipates that more complex, regularly staffed sites, such as cable sites, will fall under this program.

Each CBA Operator has agreed that the CBA will provide program management services to organize and implement portions of the spectrum clearing activity.

IV. CBA-Led Implementation

A. CBA-Led Technology Upgrade Implementation

The CBA will work closely with all customers identified for technology upgrades as well as their affected End Users to implement the clearing proposal. The CBA intends to cover all relevant expenses for those customers who are asked and agree to upgrade their equipment to clear more spectrum. Broadly, this will include encoder equipment and software upgrades, power or modulation equipment changes, and IRD swaps at the affected End User receive sites. The solution for each customer and its associated End Users is likely to be customized; therefore, the CBA is unable to provide an estimate of the costs currently. As the design discussions continue, the CBA will be better able to assess the costs, which will be part of the funds withheld from the proceeds received by the CBA Operators as part of the C-band proceeding.

B. CBA-Led Filter Implementations

All C-band receive antennas in CONUS should install one filter for every port/polarization on every feed on an existing antenna. The purpose of this filter is to suppress signals being transmitted in the 3700-4000 MHz frequency range. 5G terrestrial signals will operate in this

range and, given the strength of the 5G signal as proposed by the FCC in the C-band NPRM², the filter will help to protect End Users from interference caused by 5G transmitters in range of the receive antenna.

To ensure consistency and reliability of the filters, the CBA plans to provide filters to all known End Users whether or not the antennas are registered with the FCC. The CBA will also install the filters on FCC-registered antennas for End Users that request installation. All other End Users operating FCC-registered antennas can install the filters and receive a stipend to offset or cover the cost. End Users operating unregistered antennas will receive a filter after the CBA confirms that the antenna is operational. In every case, one filter will be provided for each receive feed polarity on each antenna free of charge to the owner of the receive antenna.

All installations will be scheduled with End Users operating FCC-registered antennas by the CBA scheduling group. The following labor will be provided, and tasks performed, free of charge during the installation of a filter:

Item	Description
1	Benchmark test of antenna performance
2	Labor to remove the low-noise block downconverters (“LNBS”) and altimeter radar rejection filters (if installed) without removing the coax cable, to install the filter, and to return the antenna to working condition
3	Installation of 1 or 2 filters (2 filters per single feed antenna, one for each polarization if needed)
4	Reinstalling old LNBS (replacing the existing LNB with a new one in cases where required) ³
5	Post installation test to verify link margin is within threshold
6	Provide nuts, bolts, and miscellaneous hardware required to secure the filter to the feed and re-secure it to the antenna
7	Documentation of the installation (including sign-off from the End User that work has been completed) and submission of the evidence of installation to the CBA
8	Travel to and from the site

Any labor or equipment above and beyond what is specified above must be submitted and approved through the CBA Review Process (discussed below) in order to be eligible for reimbursement. Equipment and labor items related to repairing an antenna that does not function properly when the installer arrives or replacing functional antennas or cables at the

² *Expanding Flexible Use of the 3.7 to 4.2 GHz Band*, Order and Notice of Proposed Rulemaking, GN Docket No. 18-122 (rel. July 2018).

³ The filters installed by the CBA will perform the functionality of existing altimeter radar rejection filters.

request of the End User or site personnel will not be reimbursed unless reimbursement is approved through the CBA Review Process. Antennas that cannot feasibly support a filter installation will be replaced and the costs associated with such replacement will be reimbursed if approved through the CBA Review Process.

C. CBA-Led Frequency Changes

Frequency changes are a standard part of earth station operations and generally require little effort or technical expertise. In many cases a change in frequency can be initiated at the uplink and the satellite receivers associated with the receive antennas will change frequency automatically. In cases where an End User’s satellite receivers cannot implement an automatic frequency change, a manual intervention will be needed. In those cases, installers will perform the frequency change whether it occurs at the time of filter installation or needs to be performed on a separate visit. Any circumstances that may necessitate additional cost reimbursement should be submitted through the CBA Review Process.

Item	Description
1	Benchmark test of antenna performance
2	Change the frequency on the satellite receiver for a given service and verify that lock on the new signal occurs
3	Obtain sign-off from end user that work has been completed

D. CBA-Led Polarity Changes

In many cases, receive antennas can receive both polarizations, and in such cases, the changes will be limited to ensuring that the satellite receiver is connected to the correct polarization and tuned to the correct frequency. As such, any costs related to polarization changes for antennas already equipped to receive both polarizations will not be reimbursed.

In cases where an antenna is only equipped with a single polarization feed, a change in the orientation of the feedhorn may be necessary. In such cases, the CBA will send an installer to make the necessary changes. In some cases, the CBA may retrofit the antenna with 2-port feedhorns to make them capable of receiving both polarizations simultaneously. All activities to support a polarization change will be scheduled with the End User by the CBA scheduling group. The scheduling group will determine if a filter can be installed at the same time.

Item	Description
1	Benchmark test of antenna performance
2	Labor to reposition feed or remove and replace it with a new feed suited to the new polarization and to return the antenna to working condition

3	Post installation test of antenna performance to ensure service is functioning to specification
4	Documentation of the installation (including sign-off from the End User that work has been completed) and submission of the evidence of installation to the CBA
5	Travel to and from the site

E. CBA-Led Satellite Changes

To move transmissions that are currently on one satellite to a different satellite at a different orbital location, End Users may need to re-point their antenna to a new orbital position to lock onto the signal of the alternate satellite. In cases where the End User operating an FCC-registered receive antenna does not have the ability to re-point receive antenna to the new satellite, the CBA will provide contractors to re-point it free of charge.

V. End User-Led Implementation

A. End User-Led Filter Implementations

For those End Users operating FCC-registered receive antennas who have the knowledge and willingness to install filters themselves, the CBA will provide a CBA-approved filter for each polarization on each antenna to be filtered and reimburse the End User for filter installation. To begin the self-installation program, the End User will need to provide the CBA with antenna and site information via a CBA-designated portal. The information required will include, but will not be limited to, the number of FCC-registered antennas at the earth station site and the specific signal reception details for each antenna. This information will allow the CBA to identify the correct filter and, if necessary, other equipment required for each antenna and site. Once the information is received and complete in the CBA portal, the CBA will ship the filter kits to the End User in advance of the installation windows defined by the CBA Operators.

In addition to equipment, End Users choosing to self-install will be provided details about the timing of service migrations to new frequencies (where applicable) and the timing of required filter installations. The End User is responsible for completing the filter installation within the window provided for each customer.

End Users operating FCC-registered antennas will receive a \$600 stipend for their installation of CBA-approved filters. The stipend will be paid after evidence of the installation is uploaded to the CBA portal. An additional stipend of up to \$200 total will be available for incidental expenses such as excess labor costs. To receive the additional stipend, evidence of the incidental expenses must be submitted through the CBA Review Process.

Item	Description	Amount
DUAL-FEED ANTENNA FILTER IMPLEMENTATION (Dual RX port feed)		
1	Benchmark test of antenna performance	\$600.00
2	Labor to remove the LNB without removing the coax cable, to install the filter, and to return the antenna to working condition	
3	Labor to install filters (2 filters per single feed antenna, one for each polarization). Filters will be provided free of charge by the CBA	
4	Reinstalling old LNBs (or replacing the LNB if it is no longer functional or cannot be feasibly restored to full functionality)	
5	Post installation test of antenna performance to ensure link performance is within threshold	
6	Nuts, bolts, and miscellaneous hardware and tools required to secure the filter to the feed and re-secure it to the antenna	
7	Documentation of installation and submission to the CBA customer portal	
8	Travel to and from the site	
9	Contingency – intended to cover incidental expenses, such as excess labor to replace a cable or the cost of rental equipment, lifts, etc. as reasonably required	\$200.00
	Total Self-Install Reimbursement per Dual-Feed Antenna (2 filters installed)	\$800.00
SINGLE-FEED ANTENNA FILTER IMPLEMENTATION (Single RX Port Feed)		
1	Benchmark test of antenna performance	\$400.00
2	Labor to remove the LNB without removing the coax cable, to install the filter, and to return the antenna to working condition	
3	Labor to install filters (2 filters per single feed antenna, one for each polarization). Filters will be provided free of charge by the CBA	
4	Reinstalling old LNBs (or replacing the LNB if it is no longer functional or cannot be feasibly restored to full functionality)	

5	Post installation test of antenna performance to ensure link performance is within threshold	
6	Nuts, bolts, and miscellaneous hardware and tools required to secure the filter to the feed and re-secure it to the antenna	
7	Documentation of installation and submission to the CBA customer portal	
8	Travel to and from the site	
9	Contingency – intended to cover incidental expenses, such as excess labor to replace a cable or the cost of rental equipment, lifts, etc. as required	\$200.00
	Total Self-Install Reimbursement per Single-Feed Antenna (1 filter installed)	\$600.00

For circumstances where the reimbursement amount defined above would not cover the reasonable expenses incurred by an End User for installing a set of filters, the End User should contact the CBA to request approval of the increased costs in advance of the work being performed.

B. End User-Led Frequency Changes

For End User-led frequency changes, labor required to adjust the equipment settings and verify that the equipment locks onto the new signal will be required, whether it occurs at the time of filter installation or at a different time due to programming migration timelines. End Users performing their own frequency changes will receive a stipend of \$100, which will be paid after evidence of the frequency change is uploaded to the CBA portal.

Item	Description	Amount
1	Benchmark test of antenna performance	\$100.00
2	Change the frequency on the satellite receiver for a given service and verify that lock on the new signal occurs	
3	Travel to and from the site	
4	Sign-off from end user that work has been completed	
	Total End User-led Reimbursement per frequency change on a receive antenna	\$100.00

Any circumstances that necessitate additional consideration should be submitted through the CBA Review Process.

C. End User-Led Polarity Changes

Many End Users have performed polarization changes in the past and the CBA expects many will choose to perform this work with internal resources. End Users who perform polarization changes themselves will receive a \$100 stipend. The stipend will be paid after evidence of the polarity change is uploaded to the CBA portal. An additional stipend of up to \$100 total will be available for incidental expenses such as excess labor costs. To receive the additional stipend, evidence of the incidental expenses must be submitted through the CBA Review Process.

Item	Description	Amount
1	Benchmark test of antenna performance	\$100.00
2	Labor to reposition feed or remove and replace it with a new feed suited to the new polarization, re-point the antenna and to return the antenna to working condition	
4	Post install testing of the signal levels to ensure service is functional	
5	Travel to and from the site	
6	Contingency – intended to cover incidental expenses, such as excess labor, a replacement LNB, or the cost of rental equipment, lifts, etc. as required	
	Total per antenna polarization change	\$200.00

D. End User-Led Satellite Changes

In most cases, when a service is moved from one satellite to another, the filter will be installed at the same time the antenna is repointed. In those cases, End Users will receive a \$400 stipend for the incremental work and costs associated with the satellite change. The stipend will be paid after evidence of the satellite change is submitted via the CBA portal.

Item	Description	Costs
1	Benchmark test of antenna performance	\$400.00
2	Labor to re-point the antenna to the new orbital location and make adjustments to frequency or polarity to receive the signal	
3	Post maintenance test of antenna performance to ensure service is functioning to specification using a spectrum analyzer or other tools as required	
4	Documentation and submission of the evidence of installation to the CBA	
5	Travel to and from the site	
5	Sign-off from End User that work has been completed	

Total per satellite change	\$400.00
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VI. Antenna Seeding and Antenna Replacements

There will be cases where an End User needs a new antenna to point to a satellite orbital location to which the End User has no antenna pointed or has old equipment that cannot feasibly be repointed. In these cases, the CBA will work with the End User to understand the need. If it is determined to be a reasonable expense attributable to the satellite change, the CBA will cover the associated costs. This will require coordination and communication with the End User and a possible site survey.

In these cases, End Users will be reimbursed as outlined below:

Item	Description	Qualified Expense?
1	3.7M Fixed Mount Antenna	Provided by CBA, free of charge **OR** \$3700 stipend pending evidence of install
2	Feed and cables required to provide connectivity to the new orbital location	Provided by CBA, free of charge **OR** included in stipend
4	Double or triple feed assembly to receive multiple signals	Provided by CBA, free of charge **OR** included in stipend
5	LNB(s) and cables	Provided by CBA, free of charge **OR** included in stipend
6	Installation kit for antenna	Provided by CBA, free of charge **OR** included in stipend
7	Line of site landscaping, tree-trimming	Provided by CBA, free of charge **OR** included in stipend
8	Civils and licenses	Provided by CBA, free of charge **OR** included in stipend
9	Installation of the antenna and assembly of the feeds	Provided by CBA, free of charge **OR** included in stipend
10	Connection of cables and power	Provided by CBA, free of charge **OR** included in stipend

VII. CBA Review Process

The CBA Review Process will consider requests for services or reimbursements that are above and beyond those outlined in the schedule of costs above based on the following:

For CBA-led installations, the contractors performing work on-site will facilitate the request for review directly with the CBA. The contractor will assess the situation at the antenna site, gather the necessary data for submission, and request a review of the materials. The CBA will review requests as soon as possible, usually within 24 hours, and either approve, request more information, or reject the request. Approved requests will either be performed while the technician is on site or will be rescheduled, depending on availability of the equipment required and timing of the review.

Customers or End Users that choose to complete the work on their own (“self-installers”), must submit information on the work requiring a higher reimbursement for review and decision by the CBA in advance of performing the work. The self-installer will call the CBA Support Desk to register the request. The Support Desk will assess the request and communicate the supporting documentation required to support the request (which could include items such as pictures or a brief write-up, quotes from contractors, etc.). The CBA will review the request using the same process as CBA-led installations and respond to the self-installer. The CBA reserves the right to perform site surveys using a CBA installer to validate or gather data to support the decision.

The criteria used to decide whether extraordinary circumstances and expenses are reimbursable by the CBA will include:

- Is the change the direct result of work required to clear spectrum per the CBA’s implementation plan?
- Is the change required to ensure the same or better quality of service compared to the service the site receives today?
- Is the request commercially reasonable?

The CBA reserves the right to refuse any request it deems out of scope or unnecessary to restore service.