Technical Aspects of Federal Regulatory Issues

Overview of the FCC's Rate-of Return Reforms

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Rate of Return Reform

- On April 30, 2016 the FCC FINALLY released their Report and Order reforming the federal Universal Service Fund (USF) distribution mechanisms
- Link to the Order (FCC 16-33) is http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0330/FCC-16-33A1.pdf
- The document is 249 pages long
- This proceeding has been long awaited. While it does not do everything we would have liked to have seen, it goes a long way to provide some stability and certainty to the Rural Independent Telecom Service Providers

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Rate of Return Reform

- The Order provided for two “paths” from which the Rural Carrier can choose to receive support
- Order finally places support emphasis on broadband deployment
- Each path uses (and therefore requires carriers to transition to) census blocks and geo-coded locations
- Alternative Connect America Cost Model (A-CAM) Support Fund
- Existing (Legacy Rate-of-Return Support Mechanisms

Voluntary A-CAM Support Path

- Alternative Connect America Cost Model (A-CAM) Support Fund
  - Support is calculated by a cost model
  - Model path provides a defined term of support
    - Support provided over a ten (10) year period
    - Support is a set amount of monthly support (does not change over the term)
  - There are specific deployment obligations with annual interim deployment milestones

Voluntary A-CAM Support Path

- Alternative Connect America Cost Model (A-CAM) Support Fund
  - Support is calculated by FCC's Cost Model
    - https://transition.fcc.gov/wcb/ACAM040115.pdf
  - Model was created and calculated by the FCC
  - Two Components to the A-CAM Model
    - Cost Model
    - Support Model

Voluntary A-CAM Support Path

- A-CAM Cost Model Calculates Cost considering
  - Cost Model
    - Network topology
      - Use geo-spatial based routing to meet engineering constraints for a given network topology
      - Uses actual geo-coded locations, where available
      - Calculates distances along real roads to individual end-user locations
    - Costing - determination of cost to serve using the network topology
  - Support model
    - Calculated cost as an input
    - Uses regional comparative data as a basis

Voluntary A-CAM Support Path

- A-CAM Cost Model Calculates Cost considering
  - Cost Model
    - The model uses passive Gigabit Passive Optical Network (GPON) Fiber to the Premise (FTTP) technology
    - Model uses GIS to do route-tracing to produce “efficient” network that connects pedestals to splitters via a road-tracing distribution network
    - And connects splitters back to wire centers via feeder network

Voluntary A-CAM Support Path

- Output of model run produces
  - Number of locations
  - Feet of feeder plant and distribution plant
  - Pedestals associated with block
  - Equipment and feet of transport for nodes
  - Serving Wire Center
  - Area
  - Density Zone - based on if block is considered, rural, suburban or urban
  - Terrain
  - Three-digit ZIP code

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Voluntary A-CAM Support Path

- Cost Model
  - Model can be user-configurable to add/modify
    - Plant mix (aerial, buried and underground facilities)
    - Tax Rates
    - Regional cost adjustments
  - Cost per unit for each network asset, including
    - Fiber
    - Outside-plant structure (e.g. poles, conduit, manholes)
    - FTTP Hardware (e.g. splitters, ONTs, OLTs)
    - Network hardware (e.g. optical add-drop multiplexers, routers)
    - Asset lifetimes and cost of capital
  - Customer drop rate
  - Capacity demand

Voluntary A-CAM Support Path

- Model can calculate such things as aerial, rural buried, soft rock, underground, splice cost, etc
- Can apply Regional Cost Adjustment
- Routes where feeder and distribution overlap uses a calculated adjustment for shared structure

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Voluntary A-CAM Support Path

- A-CAM Support Model Calculates Cost considering allocated
  - Capital recovery (depreciation)
  - Cost of Money
  - Tax
  - Network Operations
  - Customer operations and marketing
  - G&A (Corporate expenses)
- Support model is capped based on regional averages

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Voluntary A-CAM Support Path

- A-CAM path budget and process
  - Order provided for up to an additional $150 million annually (over existing legacy support), or up to $1.5 billion over the 10-year term
  - If demand for the model exceeds the budget, the FCC may consider whether to allocate additional funding (up to an additional $50 million per year)
  - Absent an additional allocation of funds, the FCC will lower the per-location funding cap to a figure below $200 per location if needed

Voluntary A-CAM Support Path

- Specific deployment obligations with annual interim deployment milestones
- FCC has re-defined “broadband” with its new service obligations
- With the model support path all locations receiving support must provide at least 10 Mbps down and 1 Mbps up
- Initial minimum usage allowance of 150 GB per month (subject to change by FCC as customer demand increases) with peak period network round-trip latency at or below 100 milliseconds
- Carriers must provide 25/3 to a certain percentage of supported locations depending on density of the carriers service area across the state
- Certain locations will be permitted to be less than 10/1 but 4/1 or greater based on cost per loop (Capped Locations where cost per loop exceeds $252.50)

Voluntary A-CAM Support Path

- Cost per loop calculations are REALLY complicated but essentially the elements of cost per loop include
  - Depreciation and Amortization of Cable & Wire/ Loop Plant
    - Includes COE necessary for and allocated to loop plant
    - Includes materials and supplies, contractor cost, engineering, allocated staff costs
  - Cable & Wire/Loop Maintenance Expense
    - Includes COE maintenance expense necessary for and allocated to loop plant
  - Operating Taxes associated with C&W and allocated COE
  - Network Operations and Network Support expenses associated and allocated for loop (C&W and associated COE)
  - Corporate Operations Expense assigned to/allocated to loop (C&W and associated COE)

Voluntary A-CAM Support Path

25/3 Deployment Requirements

Density	Funded locations (25/3 by end of 10 year term)	Capped locations (4/1 by end of 10 year term)
10 or more locations per sq. mile	At least 75 percent of locations	50 percent
More than 5 but less than 10 locations per sq. mile	At least 50 percent	25 percent
5 or fewer locations per sq. mile	At least 25 percent	25 percent

Calculations to determine density will be # of housing units (as determined by US Census) / Square miles of the carrier's study area(s) in the state

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Voluntary A-CAM Support Path

Year	Milestone
Year 1 (2017)	**
Year 2 (2018)	**
Year 3 (2019)	**
Year 4 (2020)	40%
Year 5 (2021)	50%
Year 6 (2022)	60%
Year 7 (2023)	70%
Year 8 (2024)	80%
Year 9 (2025)	90%
Year 10 (2026)	100%

* Must deploy to 95% of the required number of locations by the end of the 10-year period

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Voluntary A-CAM Support Path

- FCC has already run several A-CAM models and provides level of support for each carrier that might select model path
- Latest version was sent out by FCC in February
- https://transition.fcc.gov/wcb/ACAM22v2_Ill_Rprt_6_0_040716_FINAL.xlsx
- Order provides a deadline to submit Form 477 corrections to be incorporated into a final model

Voluntary A-CAM Support Path

- Once final model is prepared and sent out the FCC will release a Public Notice showing the offer of model-based support and deployment obligations for each carrier, predicated on monthly per location of $200.
- Carriers will have 90 days to indicate whether they are interested in electing model-based support
    - That election is irrevocable if collectively electing carriers do not exhaust the budget set by the FCC
- If demand exceeds the budget, further steps to determine revised order
    - Carriers will have an additional 30 days to decide whether to accept the revised offer
- Once accepted is finalized the FCC will issue a public notice of electing carriers
- Release of final model/offer will be no earlier than June 2016

Voluntary A-CAM Support Path

- No offer will be made to any carrier that reports that it has deployed 10/1 broadband to 90 percent of more of its eligible locations in a state
- In addition, support will not be provide for census blocks where incumbent or affiliated entity is providing 10/1 Mbps or better using either FTTP or cable technologies

Existing (Legacy) Rate-of-Return Path

- The order provides for support for standalone broadband
- This will finally allow carriers to offer an unbundled “naked” DSL/Broadband service offering
- The Interstate Common Line Support (ICLS) support element will be renamed the Connect America Find Broadband Loop Support (CAF BLS)
- CAF BLS will provide support for broadband only lines (as well as voice lines and voice/broadband lines)

Existing (Legacy) Rate-of-Return Path

- Rate-of-Return path will include an Operating Expense cap based on a formula that looks at the range of operating costs for carriers that serve a similar number of locations with similar density
- Opex limitations will be phased in over first year
- Each carrier will have a capex allowance based on that carrier's current inflation-adjusted deployment
  - Adjusted upward by 1% for each percentage point the carrier is below average
  - Adjusted downward by 1% for each percentage point the carrier is above average

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Existing (Legacy) Rate-of-Return Path

- Capital investment allowance to be adjusted in specific situations:
  - Areas lacking wireline infrastructure
  - Areas where grant funds were used
  - Areas covered by a pre-existing loan where the loan disbursement has occurred
  - Areas where the carrier has already awarded a construction contract

Existing (Legacy) Rate-of-Return Path

- CAF BLS will not be provided in areas that are served by a qualifying unsubsidized competitor
  - QUCs are determined by Census Block based on most recent Form 477 filings
  - Supported carrier can challenge to which areas are actually served by unsubsidized competitors
- To be considered an unsubsidized competitor in a give census block a fixed broadband competitor must offer service in accordance with the FCC's current service obligations
  - Competitors must certify that they are offering service to at least 85% of the locations in the census block

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Existing (Legacy) Rate-of-Return Path

- Carriers less than 80% deployed with 10/1Mbps are required to utilize a specified percentage of their five-year forecasted CAF BLS to deploy 10/1 or better broadband service in areas lacking over a five-year period

Carrier-Specific 10/1 Deployment	Percentage of CAF-BLS Support
Less than 20%	35%
20 to < 40%	25%
40 to < 80%	20%

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Existing (Legacy) Rate-of-Return Path

- Carriers subject to a defined five-year deployment obligation may choose to meet their obligation at any time during the five-year period
- Failure to meet these obligations can result in support reductions which will be determined on a case-by-case basis
- Rate-of-return carriers also remain subject to the reasonable request standard for their remaining locations
- Carriers remaining on the legacy mechanisms are encouraged to identify any census blocks where they expect not to deploy broadband for inclusion in an upcoming auction

Existing (Legacy) Rate-of-Return Path

- Rate-of-return will be reduced from the currently authorized rate of return of 11.25% to 9.75%
- The current 11.25 percent rate of return will be reduced by 25 basis points per year starting July 1, 2016 and continuing until July 1, 2021 until it reaches 9.75%

Existing (Legacy) Rate-of-Return Path

- Reporting requirements
  - All rate-of-return ETC's must provide geocoded location and speed information of newly served locations no later than March 1 for the prior calendar year
  - Rate-of-return ETCs no longer are required to file a five-year plan and annual progress reports (except for this year)
  - Rate-of-return ETCs that fail to file their geolocation data and associated deployment certifications by March 1 for the prior calendar year are subject to the same reductions as previously established for the annual FCC Form 481

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QUESTIONS ?

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