

17 April 2019

**Ex Parte**

Marlene H. Dortch  
Secretary, Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

*Re: Expanding Flexible Use of the 3.7 to 4.2 GHz Band; GN Docket No. 18-122*

Dear Ms. Dortch:

On 16 April 2019, James Frownfelter, Chairman and CEO of ABS Global Ltd. (“ABS”), Srinivasanna of ABS and undersigned counsel met on behalf of the Small Satellite Operators (ABS, Hispasat S.A. and Claro S.A.) with Peter Daronco, Matthew Pearl, Becky Schwartz, Jeffrey Tignor and Brian Wondrack of the Wireless Telecommunications Bureau; Giulia McHenry of the Office of Economics and Analytics; Jose Albuquerque, Diane Garfield, Jennifer Gilsenan and Jim Schlichting of the International Bureau; and Michael Ha and Julius Knapp of the Office of Engineering and Technology.

We discussed the Small Satellite Operators’ (SSOs) interest in ensuring that the C-band reallocation process moves quickly, so that the SSOs are able effectively to utilize their FCC licensed C-band satellites to provide service to customers in the United States. We stated that, to be prompt and successful, any transition plan must:

- (1) Compensate fairly all satellite operators with satellites authorized by the Commission to provide C-band service in the United States for the loss of valuable spectrum that they are currently authorized to use to offer services;
- (2) Encourage the prompt relocation of earth station operators through the use of substantial incentive payments, in addition to covering their relocation costs;
- (3) Provide U.S. taxpayers, through payment to the Treasury, a fair share of the proceeds generated by any reallocation of C-band spectrum.

We also explained that the Commission has the legal authority under the Communications Act and its own precedent to adopt a reallocation order that accomplishes all of these goals through a market-based transaction.

Finally, we explained that the SSOs have no objection to a government-run auction that accomplishes these goals. But we pointed out that the latest incentive auction proposal submitted by T-Mobile was plainly unlawful because, by forcing satellite operators to bid against earth station owners, it failed to provide for the solicitation of bids from “competing licensees.” We also pointed out that, because of the vast differential in value between satellite transmit rights and earth station receive rights, any auction forcing earth station operators to bid against satellite

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operators would exclude the latter from meaningful participation and thus violate the statutory mandate that an incentive auction encourage licensees to relinquish spectrum rights “voluntarily.”

We ended the meeting by reiterating the SSOs’ openness to any lawful, inclusive and incentive-based solution, be it market- or auction-based. The SSOs also provided part of a PowerPoint presentation, attached, that they had placed in the record in December 2018.

Please let us know if you have any questions about this filing.

Sincerely,

A handwritten signature in black ink that reads "SCOTT HARRIS". The signature is written in a cursive, slightly stylized font.

Scott Blake Harris

Shiva Goel

*Counsel to the Small Satellite Operators*

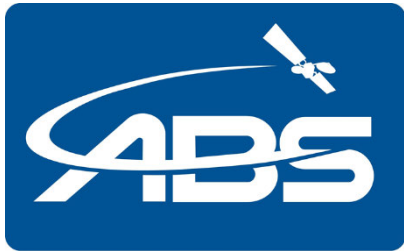
cc: meeting attendees

# **ATTACHMENT**

# **REPURPOSING C-BAND SPECTRUM: AN EQUITABLE DISTRIBUTION OF PROCEEDS**

**Excerpt from Ex Parte Presentation of the Small  
Satellite Operators Dated December 18, 2018**

**April 16, 2019**



## C-Band Satellite Operations: Key Facts

1. 62 satellites owned by 8 satellite operators have FCC authorization to operate in the C-band in CONUS.<sup>(1)</sup>
2. Intelsat and SES have an aging fleet. As of 2021, they will have an average satellite service life of less than 4 and 2.5 years, respectively.
3. Due to the size of their fleets, Intelsat and SES still account for 69% of the total service life remaining across all 62 C-Band satellites. Yet they would gain ~92% of satellite operator proceeds under the CBA proposal.<sup>(2)</sup>
4. There are ~20,000 earth station antennas registered, which are owned by over 2,700 entities.<sup>(3)</sup>
5. Top 24 Earth Station operators own around 50% of registered antennas.

### Notes

- 1) Source: Space Station Approval List (based on FCC data last revised September 11, 2018) with the adjustments described in Slide 26 of the SSO Ex Parte filed on December 12, 2018
- 2) Source: Bloomberg
- 3) Number of earth stations rounded up to 20,000 for purposes of analysis and model inputs

## DSM: Key Principles

### COMPREHENSIVE PLAN

Include All Stakeholders To Ensure a Successful Repurposing

### MEANINGFUL INCENTIVES

Incent all Stakeholders to Participate and Cooperate with Specific and Meaningful Economic Incentives

### EQUITABLE DISTRIBUTION

Allocate Value to Stakeholders In Proportion to the Value Added to the Process

# DSM Mechanics: The Proceeds Waterfall

$$(SP = E + T + SO)$$

All SALE PROCEEDS [SP]



EARTH STATION POOL [E]

**Relo Costs**: Cost of filter for all Earth Stations + Cost of Relo/Retune for impacted Earth Stations

**Incentive**: Fixed amount for each impacted Earth Station



TAXPAYER POOL [T]

**Fixed Percentage** of remaining proceeds (i.e.,  $SP - E$ )



SATELLITE OPERATOR POOL  
[SO]

**Company Allocation**

- 1/3<sup>rd</sup> of proceeds remaining after E and T pools filled
- Equally divided among 8 companies

**Satellite Allocation**

- 2/3<sup>rd</sup> of proceeds remaining after E and T pools filled
- Divided among 62 satellites based on service life. Each satellite is given a Service Life Score equal to its remaining service life divided by the total remaining service life of all satellites.

# Inputs Used

## SALE PROCEEDS [SP]

**200 MHz** across 320 mil Pops @ **\$0.40/MHz-Pop** (see Slide 20 of the SSO Ex Parte filed on December 12, 2018)

- \$ 25.60B

## EARTH STATION POOL [E]

**Relo Costs:** Cost of filter for all Earth Stations + Cost of Relo/Retune for impacted Earth Stations

**Incentive:** Fixed amount for each impacted Earth Station

- Filter: \$1,000 per Earth Station for **all** Earth Stations (i.e. 20,000)
- Relo/Retune: \$5,000 per Earth Station for **all** Earth Stations (i.e. 20,000)
- Incentive: \$200,000 per Earth Station assuming proceeds at \$25.6B and **all** Earth Stations (i.e. 20,000)

## TAX PAYER POOL [T]

**Fixed Percentage** of proceeds remaining after E pool filled

- $20\% \times (SP - E)$

## SATELLITE OPERATOR POOL [SO]

### **Company Allocation [CA]**

- 1/3<sup>rd</sup> of proceeds remaining after E and T pools filled
- Equally divided among 8 companies (1/8 = 0.125)

### **Satellite Allocation [SA]**

- 2/3<sup>rd</sup> of proceeds remaining after E and T pools filled
- Divided among 62 satellites based on service life. Each satellite given a Service Life Score equal to its remaining service life divided by the total remaining service life of all satellites. See Slide 15, "Total Service Life Remaining of Satellite Fleet," for details.

- $CA = 0.33 \times 0.125 \times (SP - E - T)$
- $SA = 0.67 \times (\text{Service Life Score}) \times (SP - E - T)$



# Comparison of Results: Revenue Metric v. DSM

## Sale Proceeds

200 MHz across 320  
mil Pops @  
\$0.40/MHz-Pop (see  
Slide 20 of the SSO  
Ex Parte filed on  
December 12, 2018)

### **Total Proceeds**

Revenue Metric Approach	
\$	<b>25.60</b>

DSM Approach	
\$	<b>25.60</b>

### **Total in \$Bil**

Total Earth Station Pool

\$	0.12
\$	-
\$	25.48
\$	25.60

\$	4.12
\$	4.30
\$	17.18
\$	25.60

Total Tax Payer Pool

Total Satellite Operator Pool

Total Proceeds

### **% of Split**

Total Earth Station Pool

0.5%
0.0%
99.5%
100.0%

16.1%
16.8% <sup>(1)</sup>
67.1%
100.0%

Total Tax Payer Pool

Total Satellite Operator Pool

Total Proceeds

### **% of Split (US vs. Non-US)**

US taxpayer and US Companies

0.5%
99.5%
100.0%

32.9%
67.1%
100.0%

Non-US Companies

Total Proceeds

## **Note**

1) 20% applied to the proceeds net of the earth stations/broadcasters/MVPDs portion

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\$ 0.12

\$ 4.12

Total Tax Payer Pool

\$ -

\$ 4.30

Total Satellite Operator Pool

\$ 25.48

\$ 17.18

Total Proceeds

\$ 25.60

\$ 25.60

### **Satellite Operator Pool Split**

Intelsat

\$ 11.72

\$ 6.29

SES

\$ 11.72

\$ 3.06

Eutelsat

\$ 1.27

\$ 2.01

Telesat Canada

\$ 0.76

\$ 1.22

ABS

\$ -

\$ 1.70

Empresa Argentina

\$ -

\$ 1.13

Hispasat

\$ -

\$ 1.00

Star One

\$ -

\$ 0.76

### **Satellite Operator Pool % Split**

Intelsat

45.8%

24.6%

SES

45.8%

12.0%

Eutelsat

5.0%

7.9%

Telesat Canada

3.0%

4.8%

ABS

0.0%

6.6%

Empresa Argentina

0.0%

4.4%

Hispasat

0.0%

3.9%

Star One

0.0%

3.0%

**Total Satellite Operator Pool**

**99.5%**

**67.1%**