Questions on Cable System Capacity and Retransmission Consent Agreements

### Question 1

Please complete the following table with the total number of subscribers served by all of your cable systems and your best estimates of the percentage of your total subscribers in each year that will be served by cable systems of the specified capacity. For each year the column percentages for the five system capacity classes ("Under 500 MHz" to ">750 MHz") should sum to 100.

TOTAL NUMBER OF SUBSCRIBERS SERVED AND % DISTRIBUTION BY SYSTEM CAPACITY

Cable	Yearend	end 1999 Yearend 200		2000	Yearend 2001		Yearend 2002		Yearend 2003	
System										
Capacity										
	Number	%	Number	%	Number	%	Number	%	Number	%
Cable										
System										
Capacity										
>750 MHz										
750 MHz										
Between										
550 and										
750 MHz										
550 MHz										
Under 500										
MHz										
Total		100%		100%		100%		100%		100%

### Question 2

Please provide, for each of the five capacity classes and for each year, a breakdown of the total MHz usable for downstream transmissions. The breakdown should be based on a representative cable system in each size class, specifically the one with the largest number of subscribers. For the >750, <550, and 550-750 MHz capacity classes, please specify the capacity of the system for which the information is being provided.

If the total downstream capacity does not equal total capacity minus the bandwidth below 54 MHz, please explain the discrepancy. Also please note if any capacity above 54 MHz is used for upstream services. Please provide the total MHz expected to be used for analog video transmission, the total MHz expected to be used for digital video transmission, and the total MHz expected to be used for other purposes, and list the anticipated other services. The sum of the total MHz used for analog, digital, and other downstream services should equal total MHz usable for downstream transmissions.

	Specific	Total MHz	Total MHz	Total MHz	Total MHz
Capacity of	Capacity	usable for	expected to	expected	expected to be
Representative		downstream	be used for	to be used	used for other
Cable System		transmissions	analog video	for digital	downstream
				video	services+
>750 MHz*					
750 MHz					
550-750 MHz**					
550 MHz					
< 550 MHz***					

<sup>+</sup>Identify any other downstream services

Capacity of Representative Cable System	Specific Capacity	Total MHz usable for downstream transmissions	Total MHz expected to be used for analog video	Total MHz expected to be used for digital video	Total MHz expected to be used for other downstream services+
>750 MHz*					
750 MHz					
550-750 MHz**					
550 MHz					
< 550 MHz***					

<sup>+</sup> Identify any other downstream services

	Specific	Total MHz	Total MHz	Total MHz	Total MHz
Capacity of Representative Cable System	Capacity	usable for downstream transmissions	expected to be used for analog video	expected to be used for digital video	expected to be used for other downstream services+
>750 MHz*					
750 MHz					
550-750 MHz**					
550 MHz					
< 550 MHz***					

<sup>+</sup> Identify any other downstream services

Capacity of Representative Cable System	Specific Capacity	Total MHz usable for downstream transmissions	Total MHz expected to be used for analog video	Total MHz expected to be used for digital video	Total MHz expected to be used for other downstream services+
>750 MHz*					
750 MHz					
550-750 MHz**					
550 MHz					
< 550 MHz***					

<sup>+</sup> Identify any other downstream services

	Specific	Total MHz	Total MHz	Total MHz	Total MHz
Capacity of	Capacity	usable for	expected to	expected	expected to be
Representative		downstream	be used for	to be used	used for other
Cable System		transmissions	analog video	for digital	downstream
				video	services+
>750 MHz*					
750 MHz					
550-750 MHz**					
550 MHz					
< 550 MHz***					

<sup>+</sup> Identify any other downstream services

Please explain here any discrepancies between capacity usable for downstream transmissions and total capacity minus the bandwidth below 54 MHz.

<sup>\*</sup> fill in a capacity greater than 750 MHz if applicable, or enter NA if no systems in the >750 MHz category

<sup>\*\*</sup> fill in a capacity between 550 and 750 MHz if applicable, or enter NA if no systems in the 550-750 MHz category

<sup>\*\*\*</sup> fill in a capacity below 550 MHz if applicable, or enter NA if no systems in the <550 MHz category

### **Question 3**

For each capacity class and year entered in question 2, please provide (i) information on the digital modulation techniques you intend to use and (ii) a further breakdown of the total MHz expected to be used for downstream digital video transmission. To answer this question, use the same representative cable systems that you used in question 2. What modulation technique do you expect to use (e.g., 64 QAM, 256 QAM)? How many MHz do you anticipate devoting to HDTV transmissions and how many HDTV program streams do you anticipate transmitting in each 6 MHz of spectrum devoted to that purpose? How many MHz do you anticipate devoting to standard definition television program streams and how many such program streams do you anticipate transmitting in each 6 MHz of spectrum devoted to that purpose?

NOTE: If you plan to use different modulation techniques on a single system or on different systems in the same capacity class, please explain below. If the number of HDTV or SDTV program streams per 6 MHz is expected to vary, please indicate a typical figure in the table and explain the range of variation below.

**YEAR 1999** 

Capacity of	Specific	Total MHz	Modulation	MHz expected	HDTV	MHz	SDTV
Representative	Capacity	expected to	technique	to be devoted	Program	expected	program
Cable System		be used for		to HDTV	streams	to be	streams
		digital video		transmissions	per 6	devoted to	per 6
		transmission		(broadcast or	MHz	standard	MHz
		(from		nonbroadcast)		definition	
		question 2)				video	
>750 MHz*							
750 MHz							
550-750 MHz**							
550 MHz							
<550 MHz***							

Capacity of	Specific	Total MHz	Modulation	MHz expected	HDTV	MHz	SDTV
Representative Cable System	Capacity	expected to be used for	technique	to be devoted to HDTV	Program streams	expected to be	program streams
		digital video		transmissions	per 6	devoted to	per 6
		transmission		(broadcast or	MHz	standard	MHz
		(from		nonbroadcast)		definition	
		question 2)				video	
>750 MHz*							
750 MHz							
550-750 MHz**							
550 MHz							
<550 MHz***							

Capacity of	Specific	Total MHz	Modulation	MHz expected	HDTV	MHz	SDTV
Representative	Capacity	expected to	technique	to be devoted	Program	expected	program
Cable System		be used for		to HDTV	streams	to be	streams
		digital video		transmissions	per 6	devoted to	per 6
		transmission		(broadcast or	MHz	standard	MHz
		(from		nonbroadcast)		definition	
		question 2)				video	
>750 MHz*							
750 MHz							
550-750 MHz**							
550 MHz			-				
<550 MHz***			_				

Capacity of	Specific	Total MHz	Modulation	MHz expected	HDTV	MHz	SDTV
Representative	Capacity	expected to	technique	to be devoted	Program	expected	program
Cable System		be used for		to HDTV	streams	to be	streams
		digital video		transmissions	per 6	devoted to	per 6
		transmission		(broadcast or	MHz	standard	MHz
		(from		nonbroadcast)		definition	
		question 2)				video	
>750 MHz*							
750 MHz							
550-750 MHz**							
550 MHz						-	
<550 MHz***		,			·		

Capacity of Representative Cable System	Specific Capacity	Total MHz expected to be used for digital video transmission (from	Modulation technique	MHz expected to be devoted to HDTV transmissions (broadcast or nonbroadcast)	HDTV Program streams per 6 MHz	MHz expected to be devoted to standard definition	SDTV program streams per 6 MHz
>750 MHz*		question 2)				video	
750 MHz							
550-750 MHz**							
550 MHz							
<550 MHz***			_				

<sup>\*</sup> fill in a capacity greater than 750 MHz if applicable, or enter NA if no systems in the >750 MHz category

Please describe here any situations in which you plan to use different modulation techniques on a single system or on different systems in the same capacity class.

If the number of HDTV program streams per 6 MHz is expected to vary, please explain the range of variation here.

If the number of SDTV program streams per 6 MHz is expected to vary, please explain the range of variation here.

<sup>\*\*</sup> fill in a capacity between 550 and 750 MHz if applicable, or enter NA if no systems in the 550-750 MHz category

<sup>\*\*\*</sup> fill in a capacity below 550 MHz if applicable, or enter NA if no systems in the <550 MHz category

#### Question 4

On Chart 4A below, please list the cable systems and television stations for which you have negotiated retransmission consent agreements that include carriage of digital transmissions by the station. For each television station, please include in parentheses the network affiliation if any. Please include, if known, the capacity of each system in MHz, the Designated Market Area ("DMA") in which the station is located, when digital carriage is scheduled to commence, the modulation technique you intend to use (e.g., 8 VSB, 64 QAM, 256 QAM), the format (480P, 720P, 1080I, something else) of the signal as received from the broadcaster, and the format that you plan to use for retransmission through the system to subscribers.

On Chart 4B below, please provide the best information available at this time on pending retransmission consent negotiations, if possible. If you have pending negotiations with respect to more than 10 systems, please provide information for the five largest and the five smallest systems, measured by number of subscribers.

Note: If you have signed digital retransmission agreements with a television station for more than one cable system, please make a separate entry for each cable system.

Please use additional pages if necessary for response.

### CHART 4A: COMPLETED RETRANSMISSION CONSENT AGREEMENTS

DMA	Television Station (with affiliation status)	Cable System	System Capacity (MHz)	Date Carriage Commenced or is to Commence	Modulation Technique	Broadcast Transmission Format	Retransmission Format	Number of Stations in DMA now transmitting a digital signal

### CHART 4B: RETRANSMISSION CONSENT AGREEMENTS IN NEGOTIATION

DMA	Television Station (with affiliation status)	Cable System	System Capacity (MHz)	Date Carriage is to Commence	Modulation Technique	Broadcast Transmission Format	Retransmission Format	Number of Stations in DMA now transmitting a digital signal