

1 **Q. Would you now discuss the first of these issues--the scope of unbundling?**

2 A. Yes. Bell says that some services discussed are not "essential." "Bell does not believe  
3 that unbundled loops are in fact essential facilities." Proposal at 7. However, the  
4 Commission did not limit the scope of its unbundling order to "essential" facilities or  
5 services. To the contrary, the Commission required unbundling of all of the facilities that  
6 are necessary to providing local exchange service. The scope of this requirement should  
7 not be limited to merely those that are extremely costly for new entrants to provide  
8 themselves, or those that Bell chooses to admit are "essential." The public interest will  
9 best be served by interpreting the Commission's decision as broadly as feasible,  
10 thereby ensuring that a wide variety of different potential competitors are attracted to  
11 enter the market, including pure resellers, mixed-mode carriers, and carriers that  
12 attempt to completely duplicate Bell's network. Even the latter firms will find it  
13 necessary to purchase unbundled loops and other network components from Bell  
14 during the start-up phase, while their network is under construction.

15  
16 **Q. What is your reaction to the Company's proposals concerning the manner in  
17 which it will make unbundled loops available?**

18 A. In Appendix 1 to its proposal, Bell presents Diagrams 1 and 2 illustrating this. Three  
19 types of bop facilities are used in Bell's system: (1) twisted copper pairs (one pair per  
20 access line) directly connected to analog equipment in the central office and passing  
21 through such equipment into a dial tone port in the CO switch; (2) Universal Digital  
22 Loop Carrier (UDLC), which is multiplexed at a 24-line remote terminal, then returned  
23 to analog at the central office main distribution frame and treated like a copper pair  
24 signal on its way to the CO switch; (3) Integrated Digital Loop Carrier (IDLC), which  
25 is multiplexed at a 24-line remote terminal, then routed directly to a digital interface in  
26 the CO switch. The first two types of bop facilities are readily sold on an individual

1 basis. However, says Bell, the IDLC signals are inaccessible to a co-carrier between  
2 the customer premises and Bell's switch. Therefore, customer lines with IDLC service  
3 must be reassigned to other facilities (e.g. ordinary copper cable) in order to be  
4 unbundled and sold separately from the port. Such retrofit is not possible where the  
5 only facilities are fiber optic with IDLC (as in some recent installations). Bell also argues  
6 that where retrofit is possible, it imposes added costs on the system, costs which Bell  
7 must pass on to the co-carrier.

8 From an engineering perspective, there is merit to some of the Company's  
9 arguments. However, the Commission should be careful not to mix and match elements  
10 of a short run costing approach with elements of a long run approach. The Commission  
11 has endorsed a long run approach to costing (TSLRIC). To be consistent, this analysis  
12 should exclude any retrofitting costs that are only required in a short run context. If the  
13 costs in question would not be incurred in the long run, where plant and equipment are  
14 designed to minimize costs consistent with a multi-carrier environment, they should not  
15 be considered in pricing the wholesale service.

16 In any event, there are relatively few locations where IDLC on fiber is the only  
17 available technology. In the vast majority of locations, unbundled loops can be provided  
18 by simply using an ordinary pair of copper wires. If Bell happens to service the  
19 particular end user in question using an IDLC facility, it can simply disconnect that  
20 arrangement, and provide the use of an unbundled copper loop to the new carrier. This  
21 will free up capacity on the IDLC facility for another one of the Company's retail  
22 customers.

1           **Q.     Should the incumbent select the technology used to provide unbundled**  
2           **wholesale services ?**

3           A.     No. In an unbundled, wholesale context, the choice of technology should not be left up  
4           to the provider. The wholesale customer should have options, which allow it to select  
5           the type of network components that will best meet its needs, and be most cost  
6           effective given its network configuration and facilities. It is particularly important to  
7           provide entering carriers with the option of renting or leasing the underlying network  
8           elements that they want or need (e.g., twisted copper pairs, dark fiber) on an  
9           unbundled basis, to the maximum extent technically feasible.

10                     Bell is suggesting that digital voice-equivalent circuits may be very costly for co-  
11                     carriers, because of problems with testing and maintenance, as well as incompatibility  
12                     with IDLC equipment. However, as MFS has pointed out, things are not quite that bad.  
13                     Digital interfaces or other technology may be available, or be developed, which will  
14                     allow economical unbundling even of IDLC loops. In any event, as the Maryland  
15                     experience suggests, surplus copper circuitry will likely be widely available along routes  
16                     that have been retrofitted with IDLC equipment. MFS Response at 4-5.

17                     Furthermore, this issue would be of less importance if co-carriers were free to  
18                     select other, more fully unbundled, options that exclude this equipment. All of the  
19                     options described by Bell involve a higher degree of bundling than is actually necessary.  
20                     For instance, none of the scenarios described by Bell involve the use of twisted copper  
21                     pairs, or dark fiber, which is provided by Bell and used in conjunction with IDLC or  
22                     other pair gain equipment that is provided by the co-carrier. The latter configuration  
23                     may be a cost effective and practical solution to many of the problems described by  
24                     Bell.

25                     Another example of added expense Bell adduces is loop test equipment and  
26                     procedures:

1                   Some of these additional costs may be reduced in time through redesign and  
2                   mechanization of such things as initial order processing [but] others, such as the  
3                   need to test in new ways with new equipment, probably will not change.  
4                   Proposal at 10.  
5

6                   Perhaps this issue would be less important, and be less of an impediment to  
7                   competition, if Bell wouldn't insist on its "right" to test loop facilities that have been  
8                   unbundled and rented to other carriers, and to charge them for the privilege, regardless  
9                   of whether all this testing is wanted or needed. Certainly, Bell is entitled to assurance  
10                  that its plant is being properly used and maintained in a way that prevents damage to the  
11                  system and preserves Bell's investment. Beyond this, however, co-carriers should be  
12                  allowed to maintain their own loops, to the maximum extent feasible. Carriers should  
13                  not be forced to purchase maintenance service from Bell, if cost effective alternatives  
14                  exist. In other words, beyond the minimum level which Bell can readily perform with  
15                  maximum efficiency and minimum cost, testing and maintenance should logically be  
16                  optional items, which are available on an unbundled basis. To the extent this can be  
17                  achieved, carriers would be free to perform their own testing and maintenance  
18                  activities, and thus there would be less reason to be concerned about the added costs  
19                  and inefficiencies that Bell claims unbundling will entail.

20                  Bell also seeks "sole discretion" in determining "what facilities and technology  
21                  will be used to provide an unbundled loop." Id. at 11. The Commission should reject  
22                  this claim. As noted earlier and confirmed by the 1996 Act, unbundling for the benefit  
23                  of wholesale customers is in the public interest, and the special interests of incumbent  
24                  carriers should not control. Assuming the facilities are sufficiently unbundled, there  
25                  should be little discretion, and even less controversy, over what facilities or technology  
26                  will be provided. This follows logically from the very concept of unbundling: individual  
27                  network components are split off and made available on a separate basis. Hence, the

1            purchaser can and should be given full discretion to select the type of facilities or  
2            technology it wants or needs. Normally, this can be accomplished by selecting the  
3            particular tariff items it wants to purchase. Where unique needs arise, that are different  
4            from, or involve greater disaggregation than was anticipated in developing the wholesale  
5            tariff, this can be accommodated through a negotiated contract. If negotiations fail, or  
6            the parties cannot agree on an appropriate price, the Commission can step in to resolve  
7            the controversy. In this manner, a reasonable balance can be struck between the  
8            interests of the providing carrier and those of the purchasing carrier.

9            This principle can perhaps best be illustrated by noting that co-carriers should  
10           have the right to rent twisted copper pairs, if that will suit their needs. These typically  
11           exist in ample quantities; where Bell is in the process of converting to fiber optic, they  
12           will soon become surplus. Hence, copper cabling should be offered on an unbundled  
13           basis, without requiring the purchaser to acquire any unwanted services. Furthermore,  
14           competitors should not be limited to a generic “loop is a loop” style offering where they  
15           won’t know what type or quality of facilities they will receive. Carriers that want to rent  
16           or lease ordinary twisted pair circuits should be allowed to do so; those that want to  
17           combine these cable facilities with their own electronics in order to provide fully digital  
18           service should also be allowed to do so. This flexibility cannot be achieved if Bell is  
19           given the freedom to pick and choose what it will provide to its competitors.