

licensees would cease use of the frequencies occupied by the existing BAS channel 1 (1990–2008 MHz) in order to allow MSS entry into the band, but could continue to use channel 2 until there were a significant number of MSS entrants so as to require use of the 2008–2025 MHz band. Now, however, more than half of the Phase I spectrum will be used for new Fixed and Mobile applications, such as AWS. Because each MSS licensee will be eligible to choose a five megahertz Selected Assignment in the revised MSS allocation, only one MSS licensee will be able to operate in the portion of the band that contains spectrum that will be available under Phase I of the relocation plan. In the best case—one in which the first MSS entrant selects the lowest portion of the band—the entry of the second MSS licensee will trigger Phase II of the relocation plan. If the first MSS licensee instead were to choose an assignment at 2005 MHz, 2010 MHz or 2015 MHz, its entry would immediately trigger Phase II.

10. We conclude that the practical effect of these changed circumstances is that new MSS licensees will begin using Phase II spectrum (2008–2025 MHz) sooner than was anticipated in the *MSS Second Report and Order*. Under the revised MSS allocation, no more than one MSS licensee may operate in the Phase I spectrum. The second MSS licensee seeking to begin operations (assuming the first chooses 2000–2005 MHz as its Selected Assignment) would initiate the Phase II relocation process. In order to meet the milestone requirements for MSS licensees—which require, for example, that non-GSO MSS licensees construct and launch the first two satellites in their system by January 17, 2005—MSS licensees will need to act quickly to deploy their systems and it is therefore highly likely that BAS relocation to the Phase I channels would not be complete when Phase II starts.

11. The initiation of the Phase I relocation and quick transition to Phase II would undercut one rationale for a two-phase transition—that the potential to leave substantial amounts of spectrum unused for a long period of time would result in inefficient use of valuable 2 GHz spectrum. In addition, a two-phase transition was an appropriate means of spreading out overall MSS relocation costs when it appeared that MSS licensees would begin operations within the Phase I spectrum and would not need Phase II spectrum until much later—after their systems had grown and matured. Under that scenario, a multi-phase approach would reduce initial costs to MSS entrants because a smaller number of BAS licensees (those in

markets 1–100) would need to be relocated during Phase I, and because it is more likely that existing BAS equipment could be retuned (versus replaced) in order to operate in 14.5–15 megahertz-wide channels (versus the final 12.5 megahertz-wide channels). This plan also would have minimized the initial costs incurred by the Phase I MSS licensees. At that time, MSS system proponents were “at widely differing points in the process of preparing to begin service.” Now, due to impending milestones, the difference in time between an “early” MSS entrant and a “later” MSS entrant will necessarily be small.

12. Were we to retain the two-phase relocation approach, MSS licensees would be responsible for the costs of relocating some BAS licensees to the Phase I channel plan, plus the costs of relocating all BAS licensees to the Phase II channel plan soon after. This situation would negate any cost-spreading benefits that were envisioned by a two-phase approach, and might even increase overall relocation costs over a relatively short term. If Phase II of the transition is initiated during the time in which Phase I relocations are taking place, BAS operations may be on three different band plans, and some BAS licensees would face the disruption and down time associated with being twice relocated in a short period of time.

13. The *MSS Second Report and Order* also adopted a two-phase relocation plan because of the “significant likelihood” that little or no new equipment that would operate in the Phase II channels would be manufactured in time for MSS to begin service. Much of the new equipment was anticipated to be purchased during Phase II of the transition, at which time the Commission predicted that digital BAS equipment would “benefit from more time for design development, becoming higher capacity, smaller, less expensive, and less power-intensive.” Such developments have taken place. BAS manufacturers now offer extensive lines of digital equipment that are designed to operate in a variety of channel widths, including the narrow channels associated with Phase II. Moreover, digital equipment has been available for a sufficient time, in such quantity, and such cost that broadcast stations buying new equipment have begun purchasing digital ENG equipment. At the time the Commission developed its relocation plan, digital equipment for one BAS link was estimated to cost \$93,000. Recent filings in the docket reflect lower cost projections. SBE now estimates relocation costs for a BAS link to be

between \$20,000 and \$25,000 (for a receive site) and between \$40,000 and \$55,000 (for a typical ENG vehicle). ICO has derived similar cost estimates, based on its separate informal discussions with manufactures of 2 GHz capable digital BAS equipment. A survey of the broadcast industry conducted by the Ad Hoc 2 GHz Reallocation Committee in September 2003 estimated the total population of 2 GHz transmitters and receivers in use at television stations in the United States and projected an overall cost of \$397 million to convert 2 GHz ENG services to digital operation and as much as \$115 million to convert 2 GHz fixed links to digital operation. We note that the BAS relocation cost estimates based on the Ad Hoc Survey compare favorably to overall 2 GHz MSS relocation costs of up to \$3 billion that had been estimated when the MSS allocation was initially proposed and support our overall conclusion that BAS equipment that can operate in the Phase II frequencies is now both readily available and available at a cost that is less than that which was anticipated at the time the relocation plan was adopted.

14. Collectively, all of these factors make the Phase I relocation plan no longer practical. We will initiate Phase II of the transition by way of this *Report and Order*. Our decision to initiate Phase II immediately is consistent with suggestions made by several commenters, including SBE. As a practical matter, because the rapid introduction of Phase II that would likely occur were we to retain the existing rules would eviscerate the benefits associated with Phase I of the transition, this decision simplifies what would otherwise become a complex relocation procedure with minimal attendant benefits. For the reasons described above, we can no longer conclude maintaining the existing two-phase relocation procedures strikes the appropriate balance that is “not unreasonably burdensome upon MSS, while also fair to the incumbents.” Given the subsequent developments in the 1990–2025 MHz band, our decision to initiate Phase II more effectively meets this goal.

15. The initiation of Phase II will allow us to supersede the remaining mandatory negotiation period for Phase I, which was due to end on November 13, 2003. Because the rules we adopt herein may not take effect before November 13, we will, effective immediately, extend the stay of the Phase I mandatory negotiation period that was adopted in the *Third Suspension Order* until such time that the rules become effective.