

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Redevelopment of Spectrum to)
Encourage Innovation in the Use of) ET Docket No. 92-9
New Telecommunications)
Technologies)

To: The Commission

COMMENTS OF
MILlicom, INC.

Millicom, Inc., ("Millicom"), by its attorneys, submits these comments in response to the Commission's Notice of Proposed Rulemaking, FCC 92-20, released February 20, 1992, proposing to allocate 220 MHz of spectrum in the 1.85-2.20 GHz range for emerging telecommunications technologies. The Commission has proposed regulatory measures to accommodate the introduction and development of emerging technologies and mechanisms designed to facilitate, with minimum disruption, the relocation of existing fixed microwave licensees to other technically suitable frequency bands. Millicom supports the Commission's efforts to balance the interests of telecommunications users in obtaining the benefits of emerging services, such as personal communications services (PCS), with the concerns of existing licensees in the continuing availability of suitable frequencies and adequate bandwidth to satisfy their requirements.

In its comments filed in this proceeding, Telocator presents a proposal for accomplishing the Commission's announced goals of stimulating the development of advanced technology services while addressing the concerns of existing fixed microwave licensees. Millicom supports the basic features of the Telocator proposal discussed below and urges the Commission to give it serious consideration.

In brief, Telocator recommends that the Commission provide a "safety net" for existing fixed microwave licensees in the emerging technologies band. This measure would guarantee existing licensees that they may continue their current 2 GHz operations unless and until suitable alternative facilities are implemented and tested. The emerging technologies entrant would have to demonstrate that technically suitable alternative frequencies exist and agree to compensate the existing licensee for its relocation costs.

Under Telocator's plan, the emerging technology entrant would provide the existing licensee with an engineering plan for either performing modifications to its system or for relocating to other frequencies or facilities; an analysis of alternative options and an explanation of the reasons for the plan it selected; cost estimates for performing the necessary modifications or the relocation, including all direct or indirect costs; and projections of the timetable needed to achieve the modification or relocation. Telocator recommends that, if the parties cannot reach an agreement on the timetable and compensation, the dispute would be taken to mediation with the Commission acting as the final arbiter for unresolved controversies. Telocator suggests that, if the Commission adopts a fixed timetable for the expiration of

existing licensees' co-primary status, it could grant sliding extensions of that status where there has been no initial interest in the use of the licensees' frequencies by an emerging technologies entrant.

Telocator appropriately recognizes the unique circumstances of public safety licensees, including police, fire and emergency medical, and excludes these licenses from its frequency allocation and transition proposal. Public safety licensees would be granted permanent co-primary status in the emerging technologies band and would never be required to relocate. However, at their election, public safety licensees could agree to be compensated by emerging technology licensees to relocate to other suitable frequencies. Only public safety licensees would be accorded this special status. All other licensees could be required to move when an acceptable alternative becomes available.

Millicom submits that Telocator's proposal appropriately balances the interests of both existing licensees in the 2 GHz bands and consumers in the development and implementation of advanced telecommunications services. Millicom is confident that technically and operationally suitable frequencies can be made available to existing licensees and that suitable financial arrangements can be made to accomplish their relocation without unacceptably disrupting their operations.

Telocator also acknowledges that the introduction of PCS services in particular can be facilitated through the application of spectrum sharing techniques. As the Commission knows, Millicom is one of the major proponents of spread spectrum techniques. Millicom has pioneered the

development of this technology for PCS services. Millicom's CDMA technology, with its fundamental co-existence features, would permit the Commission to employ a "soft reallocation" approach whereby existing licensees would gradually migrate to other frequencies on a negotiated basis. In some instances, existing licensees could be converted to CDMA technology where that would permit compatible operations, instead of relocating to other frequencies. The use of spread spectrum technology would not displace existing licensees but instead would permit more efficient spectrum use while permitting existing licensees and PCS licensees to co-exist. Spread spectrum technology can be used to both overlay a currently allocated band with a new service and permit existing service operations within a band to function with significantly greater spectrum efficiency. In short, spread spectrum technology has pronounced public interest advantages, including facilitating band sharing and improving the transmission quality of portable and mobile services by avoiding dropped calls, noise and garbled transmissions that are unfortunately common in current cellular systems.

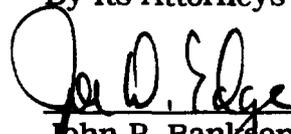
Millicom believes that by authorizing the use of spread spectrum technology and permitting existing licensees to continue to operate in the emerging technologies frequency band until such time as suitable alternative bands can be identified and financial arrangements made to accommodate their relocation, the interests of all licensees can be advanced. This approach will permit emerging technology services such as PCS to be introduced consistent with marketplace requirements. As the marketplace demands PCS applications, spread spectrum technology would enable those applications to

be introduced on an economically and technically efficient basis without unreasonably displacing or disrupting the operations of existing licensees. The signal advantage of spread spectrum technology is that it would facilitate the smoothest possible technically and economically justifiable transition to accomplish the introduction of new technological services in frequency bands currently used by fixed microwave licensees.

The proposal of Telocator, combined with the application of spread spectrum technology, would effectively advance the Commission's goals in this proceeding. Existing fixed microwave licensees would be relocated to other frequencies only when it is established that those frequencies are suitable for their purposes and these licensees are appropriately compensated for relocating. The interests of consumers of emerging technology services, providers of those services, and existing licensees will all be served by this proposal.

Respectfully submitted,

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