

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

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Federal Communications Commission  
Office of Secretary

In the Matter of )  
)  
Replacement of Part 90 by Part 88 to )  
Revise the Private Land Mobile Radio )  
Services and Modify the Policies )  
Governing Them )  
)  
and )  
)  
Examination of Exclusivity and )  
Frequency Assignment Policies of the )  
Private Land Mobile Radio Services )

PR Docket No. 92-235

TO: The Commission

COMMENTS OF UTC  
ON ITA's PROPOSED TECHNICAL BLUEPRINT

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### Summary

The Commission should reject the ill-conceived two-pool consolidation plan proposed by ITA. Instead, UTC urges it to consider the unique public service and emergency response functions of existing radio services by adopting UTC's three-pool approach. To promote efficient spectrum use and protect public safety, the Commission should consolidate the existing private radio services into new Emergency Response, Public Service and Business/Commercial pools.

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TO: The Commission

**COMMENTS OF UTC  
ON ITA's PROPOSED TECHNICAL BLUEPRINT**

Pursuant to Section 1.415 of the FCC's Rules, UTC, The Telecommunications Association (UTC)<sup>1</sup>, respectfully submits the following comments in response to the FCC's Public Notice, DA 97-206, dated January 28, 1997, inviting comment on the Industrial Telecommunications Association's (ITA) proposal to consolidate the current Part 90 Radio Services into two pools: a Public service pool and a Private Wireless Service Pool. As discussed more fully below, UTC opposes the ITA proposal as currently written.

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<sup>1</sup> UTC was formerly known as the Utilities Telecommunications Council.

As the national representative on communications matters for the nation's electric, gas and water utilities and natural gas pipelines, and as the FCC's certified frequency coordinator for the Power Radio Service, UTC has been an active participant throughout this proceeding. Over 1,200 utilities and pipelines are members of UTC, ranging in size from large combination electric-gas-water utilities which serve millions of customers, to smaller, rural electric which cooperatives serve only a few thousand customers each. All utilities and pipelines depend upon reliable and secure communications to assist them in carrying out their public service obligations. In order to meet these communications requirements, utilities and pipelines operate extensive private, internal radio networks. UTC is therefore pleased to have this opportunity to respond to ITA's proposed "Technical Blueprint" for consolidating the existing private land mobile radio services.

## **I. Background**

The original *Notice of Proposed Rulemaking* in this docket proposed consolidating the various radio services in the bands below 800 MHz into three broad categories: a Public Safety radio service; Non-Commercial radio service; and a General Category radio service. The FCC also proposed to allow competitive coordination in each of the new radio services. Because of a wide difference of opinion among the commenters as to the desirability of consolidating service pools, as well as the composition of consolidated service pools, the FCC requested further comment on this issue. The FCC requested user groups and frequency coordinators to submit a proposal that "reflects the interests and needs of the PLMR community, and that is "mutually agreeable, reasonable, and workable."<sup>2</sup> The FCC also asked for comment on how to

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<sup>2</sup> *FNPRM*, para. 50.

create competition in the frequency coordination function. It was emphasized that the intended purpose of consolidating radio services “is to distribute assignments between low-use and high-use groups more evenly, to simplify interservice sharing procedures, to organize channel allocations that will enable licensees to more easily utilize advanced technologies, and to organize the services in such manner to achieve more efficient and flexible spectrum use.”<sup>3</sup>

Despite numerous industry meetings and filings in the intervening 18 months since the adoption of the *R&O* the parties have yet to reach a consensus on pool consolidation. Nevertheless, UTC believes that this proceeding presents an opportunity for the FCC to make a rational consolidation of radio services that will help in the overall administration of the PLMR spectrum and in carrying forward the other rule and policy changes adopted in this docket. The present system of frequency management has adequately served the needs of users and substantially lessened FCC involvement in the coordination and application-review process. However, there is no longer a compelling need for the FCC to maintain 20 separate radio services, and UTC concurs that some consolidation would be appropriate. At the same time, UTC does not believe that the FCC should lose sight of the legitimate distinctions that exist between the various radio services in terms of the relative need for access to communications channels. Specifically, public safety agencies and public service entities, such as utilities, pipelines and railroads, have a compelling public interest need for access to reliable and clear communications channels that is distinct from that of many other private radio services. Unfortunately, the ITA proposal does not adequately make this distinction.

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<sup>3</sup> *FNPRM*, para. 51.

In contrast, UTC submitted detailed comments and reply comments earlier in this proceeding outlining a “3-Pool” proposal (Public Safety; Public Service; and Business/Commercial) that allows for the efficiencies of consolidation while also preserving the ability of the nation’s essential public service organizations to meet their private radio communications requirements. Recently UTC submitted an outline of its 3-Pool proposal to the Commission,<sup>4</sup> a copy of this outline is attached to this filing.

## **II. Two-Pool Consolidation Plans Ignore Practical and Operational Realities of Existing PLMR Licensees**

ITA’s consolidation proposal is to create two pools: Public Safety and everyone else. UTC considers the ITA consolidation plan to be ill-conceived and overly simplistic. The ITA plan, as currently written, amounts to a “one-size-fits-all approach” to spectrum, management and use, and ignores the needs of those segments of the PLMR community that provide critical public services. ITA’s characterization of its two-pool plan as a “technical blueprint” is symptomatic of its inherent flaws. Although purporting to be “strictly a technical, non-judgmental document,” the proposal is actually highly judgmental and misleading. It is a reflection of the subjective opinions of the author, a trade association representing only a portion of the total PLMR licensees, as to the needs and requirements of all PLMR licensees.

The proposal is premised on the misguided assumption that a two-pool plan can address the needs of licensees whose operational needs are extremely diverse. Miscalculations in the coordination of commercial interests would undoubtedly cause

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<sup>4</sup> UTC 3-Pool *Ex Parte*, “*Twenty is Divisible by Three*” January 28, 1997, PR Docket No. 92-235.

some hardship on these licensees; miscalculations in the coordination of vital public interests, such as utilities and pipelines, would result in disaster.

**A. Problems with ITA's Two-Pool Approach**

**1. The Two-Pool Approach Does Not Distinguish Between Critical and Non-Critical Services**

The Blueprint asserts that the two-pool approach will obviate the need for the “costly and cumbersome” concurrence process among the certified frequency coordinators. While true, this is not a unique attribute to the two-pool plan — virtually any consolidation plan will reduce the burden relating to intercategory sharing by reducing the number of services. UTC's three-pool plan, for instance, would likewise reduce this burden, but would also protect public safety/public service operations. The real issue is whether the plan can and will work to ensure efficient use of the spectrum, protect incumbent operations and foster an environment where more advanced, efficient technologies can be implemented. Under these criteria, UTC's three-pool plan is superior.

The Blueprint characterizes the two-pool approach as maximizing spectrum efficiencies by eliminating artificial distinctions and cumbersome barriers among the radio services, noting that new digital technologies do not discriminate among users. This is an accurate technological statement, but it does not address the fundamental issue of service consolidation. The issue is not whether the same type of digital radios can be used for different functions in different services, but rather, whether the consolidation plan recognizes the distinction between the level of protection required by different types of users in terms of availability, channel loading and spacing. It also ignores the fact that the migration to a digital world will take many years, and these bands will remain for at

least the next several years, home to millions of analog transmitters in a shared frequency environment.

UTC believes that the most rational basis for service consolidation is to look at the relative criticality of the functions served by users in each of the various services. Different industries may use mobile radio for different applications (e.g., locomotive control; law enforcement dispatch; utility service restoration; etc.) but from a coordination and licensing standpoint, differences in the applications or functions supported by the radio transmitter are only significant in terms of the criticality of function and the amount of protection to be afforded to the system. Even within industries, there are wide variations in the types of radio systems and applications supported by licensed radio devices. However, it is possible to group spectrum users in a way that will ensure that “high priority” users have ready access to channels and that any distribution of assignments between “low-use” and “high-use” services will not jeopardize the ability of higher priority users to secure access to channels. Such categorization is consistent with the FCC’s mandate to provide radio service “for the purpose of promoting safety of life and property.”<sup>5</sup> The ITA proposal does not provide such protection for critical public service providers.

The Technical Blueprint ignores the fact that the Commission has repeatedly found that utilities, pipelines, railroads and other public service/safety entities provide a type of service that is distinct from other more generic businesses that rely on private land mobile radio. For example, in a recently released white paper on Private Land Mobile Radio Services the FCC’s Wireless Bureau states:

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<sup>5</sup> 47 U.S.C. § 151.

*Utility companies, railroad and other transportation providers, and other infrastructure-related companies use their systems to provide vital day-to-day control of their systems (including monitoring and control and routine maintenance and repair), and also to respond to emergencies and disasters -- often working with public safety agencies.<sup>6</sup>*

In proposing a two-pool approach, the blueprint indicates that its recommended definition for “Public Safety Service” is adapted from the Commission’s proposed definition of the term in its public safety *Notice of Proposed Rulemaking*. However, the blueprint does not mention that its proposed definition is actually an amalgamation of several subcategories of “public safety services” developed by PSWAC and tentatively endorsed by the Commission in its *NPRM*. Significantly, the blueprint fails to disclose that its definition omits the “public services” component of the PSWAC proposed definition for “public safety services.” Moreover, in proposing the PSWAC definitions the FCC expressed concern that the definition of public safety services be sufficiently broad to encompass utility, pipeline and railroad services.<sup>7</sup> The Final PSWAC Report addresses this concern by explicitly referencing utilities and pipelines in its definition of essential public service infrastructure providers that warrant treatment that is different from other private wireless users.

A fundamental inconsistency in the Blueprint is its proposed special protection of the railroad radio services and airport ground personnel but not other public services. UTC agrees that the railroads and airport maintenance crews have operational and safety requirements that merit different treatment from the majority of the private radio services; however, the authors of the Blueprint have not provided any reason for not extending the

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<sup>6</sup> Private Land Mobile Radio Services, Staff White Paper, FCC Wireless Telecommunications Bureau, released December 18, 1996, p. 3.

<sup>7</sup> *NPRM*, WT Docket No. 96-86, at para. 25.

same protections for other critical public service providers such as utilities and pipelines. In fact, utilities and pipelines may have greater needs for protection of their communications channels due to their unique operating characteristics. Unlike railroads or airports, virtually every location in the US has electric, water and/or gas service; thus, the need for communications channels by these entities is extremely widespread. In fact, many areas have multiple utilities, which greatly increases the need for communications channels to support these services. And unlike airports, virtually every utility must operate 24 hours a day under all environmental conditions. Clear, reliable communications is essential to providing continuous service.

The fact that the ITA proposal concedes the need to provide a level of special protection for some types of public service, such as railroads, undermines their entire argument that there is no need to differentiate among the various private wireless users on the basis of their type of service. At a minimum the ITA plan would have to be refined to afford the same level of protection to other public service providers, such as utilities and pipelines, as it affords railroads and airport ground personnel.

Unlike the ITA proposal, and consistent with the findings of the Commission and PSWAC, UTC would distinguish “public service” providers from other more generic private wireless users. UTC would define public service providers as including those services that provide critical logistical functions in support of the general population, including public utility services (such as electric, water and gas services). Users in this category are typically state or local government entities, or private entities that provide essential public services in compliance with Federal, State or local requirements. Utilities, for example, are required by law to provide electric, gas and water service to the

population in a safe, continuous, and cost-effective manner. Radio communications facilities are needed not only to meet day-to-day requirements, but to provide critical coordination of activities during or following storms and other natural disasters that disrupt the delivery of these vital public services. Some states require the dispatch of a properly-trained employee to any customer-reported emergency within a set time frame (often 60 minutes) after notification to the utility. This would be impossible for utilities with large operating territories if they did not have reliable mobile communications. Thus, for public service providers, availability of a clear channel is just as important as the use.

By calling for the separate treatment of public service providers UTC does not intend to downplay the importance of private radio to other categories of users. Other private radio users could no doubt demonstrate that private radio allows them to conduct business in a safer, more efficient manner. However, these industries are typically not required to respond to emergency life-and-death situations, nor are they engaged in the delivery of vital public services such that delay of response (such as through delay of communication) would create a threat to life or property.

Further evidence of the flawed nature of the ITA proposal is that the Blueprint itself recognizes that the two-pool plan cannot be effectively administered over the entire band below 512 MHz. Regarding the 470-512 MHz band, the Blueprint indicates that "the logic of a two-pool approach breaks down because of the erratic distribution of frequencies among the existing public safety and non-public safety services."<sup>8</sup> For this

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<sup>8</sup> *Technical Blueprint* at pp. 8-9.

band, ITA recommends abandoning its approach and consolidating all services into a single pool. This approach would eliminate even the limited Public Safety protections provided in the two-pool plan, in favor of administrative convenience. The Commission cannot take the easy road out; it must ensure that all public safety services are adequately protected.

While the plan purports to address the emergency communications concerns of public services entities, its proposal falls far short of the actual requirements of utilities and pipelines. ITA proposes to allocate eight paired channels for emergency response communications. UTC has long supported the allocation of spectrum to meet emergency response and mutual aid requirements of utilities, pipelines and other public service entities; however, the eight paired channels proposed in the Blueprint are woefully inadequate. There are over 3,000 utilities operating in the US, many of which share some portions of their operating service territories with other utilities (for example, one area may be serviced by different electric, gas and water utilities). During a major natural disaster such as a hurricane, it is not unusual to have more than 40 neighboring utilities participate in effecting repairs and restoring service. Even if these eight channels were limited to use by utilities and pipelines, which they are not, the channels could not meet these organizations' emergency response or mutual aid needs.

By consolidating all private wireless services other than public safety agencies into a giant homogenous pool the Blueprint would reduce the private land mobile radio environment to the lowest common denominator, and in the process sacrifice safety, reliability, and public service, simply for the sake of administrative efficiency and a larger potential market for ITA's frequency coordination business.

## B. Exclusivity

ITA's two-pool approach would frustrate the Commission's goal of introducing advanced technologies in the private land mobile bands. The two-pool approach would hinder the introduction of exclusivity in these bands due to the proliferation of existing licensees and widely disparate services in the proposed "private wireless services" pool. By eliminating any chance for users to establish exclusivity, licensees will be less likely to introduce new technologies, such as trunking. As the Commission noted in the *FNPRM* in this proceeding, "exclusivity enables users to introduce more spectrally efficient technologies, such as trunking, without the concern that other users will be licensed on their channels using conventional equipment that may interfere with their trunked equipment."<sup>9</sup>

UTC's three-pool approach would permit the development of exclusivity by licensees in the services in which it is most feasible. Under UTC's plan, each of the three pools could have exclusivity rules tailored to the unique needs of that pool. For example, exclusivity may not be necessary in the Emergency Response pool since these users already operate with a form of *de facto* exclusivity protected by the coordinators. In the Business/Commercial pool, exclusivity may be desirable but practically unobtainable due to the significant amount of sharing that exists on their channels. In the Public Service Pool, however, exclusivity may be obtainable. As explained in UTC's comments and reply comments on the *FNPRM*, UTC supports the creation of a "shared-exclusivity" licensing option for the Public Service Pool, under which a licensee may "earn"

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<sup>9</sup> *FNPRM*, para. 118.

protection for a specific service area. Specifically, existing licensees would have the option to enter into contractual agreements with neighboring co-channel licensees to establish areas of exclusive assignment, thereby precluding new co-channel licensees from being licensed within the area, except by mutual agreement of all parties to the exclusivity plan. To earn the shared-exclusivity protection cap on new assignments, all licensees on the channel must agree to convert to narrowband technology, or meet an equivalent efficiency standard within a specified time period.

The shared exclusivity option appears to be particularly suited to those entities that would compromise the Public Service pool. Like Emergency Response Services, Public Service entities, such as utilities and pipelines, often have *de facto* exclusivity in order to ensure secure and reliable communications. Further, these entities are more likely than other private land mobile users to have extensive service territories that would benefit from the wide-area trunked systems that shared exclusivity would allow. Finally, shared exclusivity may be more viable in the Public Service Category as the more limited number of eligibles and similar functionalities between licensees affords a greater likelihood of co-channel licensees reaching a mutual agreement.

If a two-pool consolidation plan is adopted, the FCC must still ensure that utility and pipeline operations are protected. The Commission should permit a limited form of exclusivity under which incumbent utilities and pipelines can seek to protect vital operations. The Commission should permit utilities, pipelines and other public service licensees with a need to protect vital operations to file applications with the Commission to gain limited exclusivity zones around their existing channels. For ease of administration, applications could be required to be filed by a date certain (i.e., six

months after the effective date of the rules). After this date, any unprotected channels would be available for use, subject to frequency coordination, by all eligible services.

### **C. Prior-Coordination**

ITA's consolidation plan also presents an unworkable plan for handling post-consolidation concurrences. Under ITA's proposal, as detailed in its January 6, 1997, letter to the Commission, ITA would provide mere notification of coordinations to other authorized coordinators in a pool. Recklessly ignoring the well-stated needs for prior coordination notices provided by the Coalition of Industrial and Land Transportation Radio Users (Coalition), ITA's plan further threatens public safety. As the Coalition noted in its January 21, 1997, response to ITA, prior coordination notices will protect facilities which are critical for worker safety or other operational considerations from interference during the transition to consolidated radio pools. UTC, therefore, supports the Coalition's position on this matter.

ITA's two-pool plan would make prior coordination notices unworkable. The sheer number of applications likely to be filed by the licensees in ITA's "superpool" of all non-emergency response users would overwhelm attempts to respond to prior coordinations within a reasonable period of time. Under UTC's three-pool plan, the smaller pools would make prior coordination with a reasonable concurrence period (10-20 days) feasible. Furthermore, because UTC's approach includes services with similar critical functions in the same category, the more critical categories are more likely to benefit from and ensure compliance with any prior notification rules.

### **III. Conclusion**

The Commission should reject the ill-conceived two-pool consolidation plan proposed by ITA. Instead, UTC urges it to consider the unique public service and emergency response functions of existing radio services by adopting UTC's three-pool approach. To promote efficient spectrum use and protect public safety, the Commission should consolidate the existing private radio services into new Emergency Response, Public Service and Business/Commercial pools.

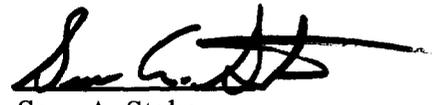
**WHEREFORE, THE PREMISES CONSIDERED,** UTC requests the Federal Communications Commission to take action in accordance with the views expressed in these comments.

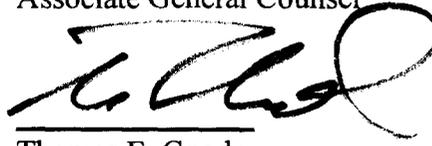
Respectfully submitted,

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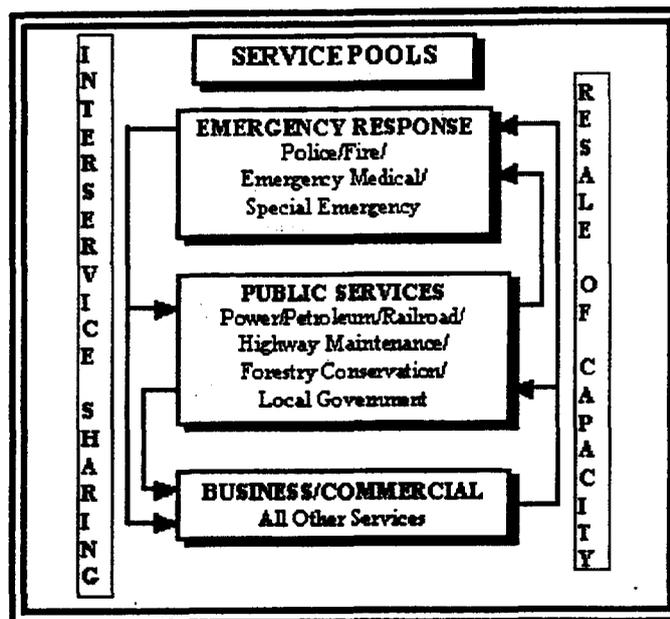
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Dated: February 7, 1997

# Twenty is Divisible by Three

UTC's Three-Pool Consolidation Plan  
for the Private Land Mobile Bands Below 512 MHz



Submitted by:  
UTC, The Telecommunications Association  
January 28, 1997

## **The Commission Should Consolidate the Existing Private Land Mobile Bands Below 512 MHz Into Three Pools**

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## Consolidating Private Land Mobile Channels Below 512 MHz: Twenty is Divisible by Three

In PR Docket No. 92-235, the FCC proposed the refarming of the private land mobile bands below 512 MHz and the consolidation of the twenty (20) existing radio service pools into three broad pools. As the frequency coordinator of the Power Radio Pool, and the association representing over 1200 electric, gas and water utilities and natural gas pipelines, UTC has been keenly interested in this proceeding. UTC urges the Commission to adopt a consolidation plan which promotes efficient spectrum usage and recognizes the unique operational needs of different PLMR users.

### I. UTC's Three-Pool Proposal: Consolidating Services According to Functions

UTC recommends that the existing frequency coordination pools be consolidated into three pools — Emergency Response, Public Service and Business/Commercial. The chart below demonstrates how the existing radio services can be logically classified into these three categories:

<b>NEW CATEGORY</b>	<b>OLD RADIO SERVICES</b>	<b>CHARACTERISTICS</b>
<i>Emergency Response</i>	Police (§ 90.19)	<i>Services of private and public organizations to respond to emergencies threatening the safety of life, health or property</i>
	Fire (§ 90.21)	
	Emergency Medical (§ 90.27)	
	Special Emergency (§§ 90.33-55)	
<i>Public Service</i>	Local Government (§ 90.17)	<i>Vital services which support emergency response activities or which are related to the protection of the nation's infrastructure</i>
	Highway Maintenance (§ 90.23)	
	Forestry-Conservation (§ 90.25)	
	Power (§ 90.63)	
	Petroleum (§ 90.65)	
	Railroad (§ 90.91)	
<i>Business/Commercial</i>	Forest Products (§ 90.67)	<i>Services which are not typically required to respond to or support emergency response activities</i>
	Film & Video Production (§ 90.69)	
	Relay Press (§ 90.71)	
	Special Industrial (§ 90.73)	
	Business (§ 90.75)	
	Manufacturers (§ 90.79)	
	Telephone Maintenance (§ 90.81)	
	Motor Carrier (§ 90.89)	
	Taxicab (§ 90.93)	
	Automobile Emergency (§ 90.95)	

By consolidating the radio services by the functions served by users in each of the radio service pools, UTC's three-pool plan protects vital operations. While different industries may use mobile radio for different applications (e.g., locomotive control, law enforcement dispatch, utility service restoration, etc.), from a coordination and licensing standpoint these differences are only significant in terms of the criticality of function and the amount of protection to be afforded to the system. Vital systems must be protected, and spectrum users should be grouped to ensure that "high priority" users have ready access to channels.

At present, access to the spectrum (or stated another way, limiting contention for channels) is controlled through the frequency coordination process. While UTC opposes complete consolidation, partial consolidation may be feasible where the users in each pool have the same relative need for priority access to spectrum. In a perfect world, priority access could be established through technological means. However, there is a significant base of installed radio equipment that is incapable of such prioritization, and it has yet to be determined how priority access designs could function in an environment where licensees are permitted to use differing modulation schemes and channel bandwidths. As a result, prioritization of channel access must depend on the grouping of users with similar needs into common spectrum pools.

UTC's three-pool approach ranks each of the radio service pools according to the relative criticality of their services in accordance with the FCC's mandate to provide radio service "for the purpose of promoting safety of life and property."<sup>1</sup>

The Emergency Response Category — highly critical: the failure of this radio system would likely endanger the safety of life, health or property. The Emergency Response category includes the radio services that have traditionally been labeled "public safety." They require a high degree of protection and have special operational requirements, including unique operating territories and special requirements for security and reliability in communications.

The Public Service Category — critical: the failure of this radio system would endanger the provision of services by emergency response organizations and could endanger life, health and property. The Public Service category includes those services that provide critical logistical functions in support of emergency response organizations and the general population, including public utility services (such as electric, water and gas services). Fire departments, for example, depend on adequate water pressure and availability in carrying out their emergency response functions, and the disruption of a water utility's communications system could adversely impact the ability of fire departments to respond. This category also includes entities that are required by laws or regulations to maintain adequate communications to protect their vital operations. Pipelines, for example, are required to maintain reliable communications with fire, police and other public officials under the Pipeline Safety Act. Finally, Public Service organizations have unique operating characteristics

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<sup>1</sup> 47 U.S.C. § 151.

similar to those of Emergency Response organizations, including unique operating territories and requirements for highly reliable and secure communications systems.<sup>2</sup>

**The Business/Commercial Category** — non-critical: the failure of this radio system would not typically endanger public safety. The Business/Commercial category would include all other private radio users. Even though many of the users in this category could no doubt demonstrate that private radio allows them to conduct business in a safer, more efficient manner, these industries are typically not required to respond to emergency life-and-death situations, nor are they engaged in the delivery of vital public services such that delay of response (such as through delay of communication) would create a threat to life, health or property.

*Channel reallocation.* In reallocating shared channels to the three service categories, UTC recommends making the distribution based on an assessment of factors such as channel loading, areas of operation, criticality of use and airtime. For example, where several channels are shared between two services that would be consolidated into separate pools, their shared channels could be divided based on a weighting of these factors. An attempt should also be made to allocate contiguous channels to each service category in order to facilitate channel-stacking.

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<sup>2</sup> Other organizations also have standards or regulations mandating that utilities operate reliable communications, including the Federal Emergency Management Agency (FEMA) and the North American Electric Reliability Council (NERC). FEMA, for instance, requires reliable primary and backup means of communications between a nuclear facility and the utility's near-site emergency operations facilities, state and local emergency operations centers, radiological monitoring teams and the Nuclear Regulatory Commission. Reliability of these communications systems has to be demonstrated under emergency conditions. NERC standards require "[r]eliable and secure telecommunications networks" and the use of exclusive telecommunications channels between the system and control centers of adjacent electric systems. In fact, NERC's July 1996 Review of Selected 1995 Electric System Disturbances in North America included an acknowledgment of the importance of telecommunications systems used for automatic protection systems in protecting the electric grid and confining problems.

*Interservice Sharing.* To the extent channels cannot be secured within an applicant's consolidated service pool, UTC recommends that interservice sharing be permitted from a higher-ranked service to a lower ranked service, but not *vice versa*. That is, Emergency Response eligibles could secure access to channels in the Public Service or Business/Commercial category; and Public Service eligibles could secure access to channels in the Business/Commercial category. By precluding interservice sharing from lower-priority services into higher-priority services, the channels needed for these services will be preserved. In any event, UTC suspects that the need for interservice sharing will be minimal if the current radio services are consolidated as proposed.

*Resale of Capacity.* UTC's three-pool approach presents an equitable, workable solution to the issue of capacity resale. To ensure that channels in the more critical bands are reserved for vital operations and to promote the efficient use of spectrum, UTC's plan would permit the leasing of "reserve" capacity from the lower, less critical categories to the higher categories. Business/Commercial systems could lease "reserve" capacity to any licensee in their own category or in the more critical categories. Public Service systems could lease capacity to other Public Service licensees and to Emergency Response licensees, but not "down" to Business/Commercial category licensees. Finally, Emergency Response systems could lease capacity only to other licensees in their category.

*Frequency Coordination.* UTC's three-pool plan would promote the use of competitive coordination in a controlled environment. The adverse effects of opening up frequency coordination to the marketplace without sufficient safeguards to protect incumbent operations could be disastrous. Inaccurate coordinations will affect both new applicants and incumbents alike. When vital operations are at stake, the FCC must ensure that coordinators are well-qualified. UTC therefore recommends that, at least for the more critical Public Service and Emergency Response categories, the FCC adopt sufficiently narrow standards for frequency coordination, and limit coordination of channels in a pool to only those coordinators that have been certified to coordinate eligibles in that pool. By consolidating services according to the criticality of their functions, UTC's three-pool plan will help to ensure that only those coordinators with a sufficient understanding of the needs for reliability of Emergency Response or Public Service will be eligible to coordinate these frequencies.

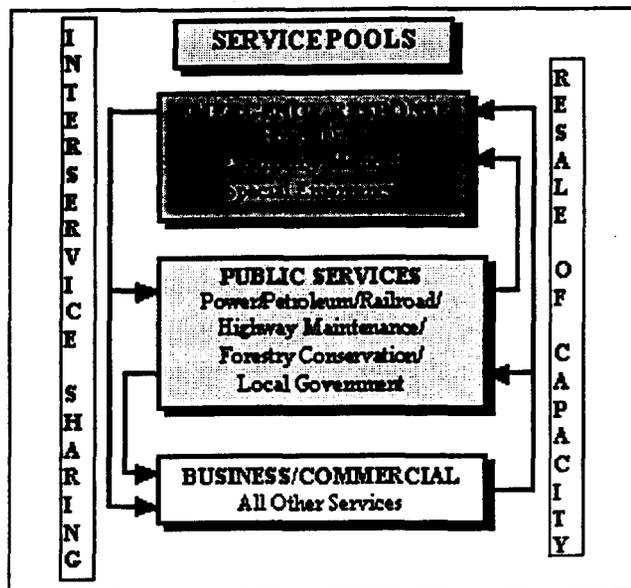


Figure 1 — UTC's Three-Pool Plan

## **II. UTC's Three-Pool Plan Is The Best Solution to the Commission's Stated Goals**

The Commission has announced a number of goals that it hopes to accomplish by consolidating the existing radio pools. These include the Commission's goals: "to distribute assignments between low-use and high-use groups more evenly, to simplify interservice sharing procedures, to organize channel allocations that will enable licensees to more easily utilize advanced technologies, and to organize the services in such manner to achieve more efficient and flexible spectrum use."<sup>3</sup> Moreover, UTC's plan "reflects the interests and needs of the PLMR community and is "mutually agreeable, reasonable, and workable."<sup>4</sup> UTC's plan also protects and promotes the safety of life and property.

### **A. UTC's Consolidation Plan Protects Public Safety**

The FCC's original *Notice of Proposed Rulemaking (NPRM)* recognized the need to protect private systems that are related to public safety even beyond those used by police, fire and other emergency response entities. In the *NPRM*, while discussing exclusivity, the FCC noted its intention to provide greater protection for systems "for which the failure of their PLMR system would create an imminent danger to public safety."<sup>5</sup> UTC's plan protects these safety-related services by creating two categories of vital, safety-related services which are removed from the general business and commercial systems.

While UTC's consolidation plan recognizes that there is a difference between Emergency Response and Public Service systems, it also recognizes that there are some functional similarities that clearly differentiate these two categories from commercial systems. The Commission has acknowledged the relationship between Public Service and Emergency Response systems, noting the important role that utilities and pipelines play in supporting traditional "public safety services." In the *Notice of Proposed Rulemaking* in WT Docket No. 96-86, the proceeding which is examining the appropriate operational requirements for public safety services, the Commission noted that:

the very nature of utility, pipeline, petroleum and railroad often involves potential hazards where reliable radio communications is an essential tool in either avoiding the occurrence of such hazards or responding to emergency circumstances.<sup>6</sup>

The Commission has also acknowledged the need for interoperability among public safety entities. Interoperability is required in day-to-day operations, mutual aid incidents and emergency preparedness events. UTC's three-pool plan protects all public safety-related organizations, including Emergency Response and Public Service organizations, from interference from commercial users and also from the avaricious appetites for channels of these users that could frustrate the establishment of interoperable systems.

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<sup>3</sup> These goals were enunciated by the Commission in *its Further Notice of Proposed Rulemaking (FNPRM)*, PR Docket No. 92-235, at para. 51.

<sup>4</sup> *FNPRM* at para. 50.

<sup>5</sup> *Notice of Proposed Rulemaking (NPRM)*, PR Docket 92-235, at para. 13 n.21.

<sup>6</sup> *NPRM*, WT Docket 96-86, at para 25.