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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

May 22, 1998

HAND DELIVERED

Ms. Magalie Roman Salas
Office of the Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: In the Matter of Biennial Regulatory Review - Amendment of Parts 0,1,13,22,24,26,27,80,87,90,95,97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, WT Docket 98-20.

Dear Ms. Salas:

Enclosed herewith is one (1) original, and five (5) copies of our comments submitted to the Report and Order and Further Notice of Proposed Rulemaking in WT Docket 98-20.

Sincerely,

COMSEARCH

Christopher R. Hardy
Vice President, Microwave and Satellite
Enclosure

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MAY 22 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
Federal Communications Commission
Washington, DC 20554

In the matter of	)	
	)	
Biennial Regulatory Review – Amendment of	)	
Parts 0, 1, 13, 22, 24, 26, 27, 80, 87, 90,	)	WT Docket No. 98-20
95, 97, and 101 of the Commission's Rules	)	
to Facilitate the Development and Use of the	)	
Universal Licensing System in the Wireless	)	
Telecommunications Services	)	

Comments of Comsearch

Comsearch hereby respectfully submits the following Comments to the Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.

Comsearch is an independent engineering firm specializing in spectrum management of terrestrial microwave, satellite, and mobile telecommunications systems. In this role, we provide consultant services to all classes of users including those regulated under Part 101 of the Commission's Rules. Our experience at database development and management, frequency engineering and coordination, and FCC application preparation make us qualified to comment in this proceeding.

Comsearch supports the Commission's efforts to streamline and automate the license application process through rule changes and the implementation of the Universal Licensing System (ULS). The changes proposed in the NPRM reflect a significant step toward improving the license application process. While the benefits are many,

there are several areas of the NRPM that need to be changed and/or clarified. Our comments will be focused primarily on the bands regulated under Part 101 of the Commission's Rules. Specifically we will address areas dealing with the Public Notice and data access, frequency coordination, site coordinate data, "third party filing", fixed microwave service data requirements, and various items on the proposed Form 601.

Public Notice and Data Access

Currently, the Public Notice (PN) provides a daily summary of activity including applications filed, cancellations, dismissals, corrections and miscellaneous changes. Frequency coordinators in the Part 101 bands rely upon the information contained within the PN as well as the actual applications to properly maintain their databases. The information provides the coordination community with necessary closure to the coordination process. It also provides additional information regarding any corrections and changes not previously included during the prior coordination notification. While the NPRM addresses basic inquiries to the ULS data, it does not explain how the PN will be presented or how frequency coordinators will have access to bulk application data.

It is essential to the frequency coordination community that **any and all** modifications to the information contained in the ULS databases be made public on a daily basis. This includes not only changes or additions created through the application process, but also changes implemented through any other channels into the ULS such as the antenna registration. Whether notification and access is accomplished through the use of the formal PN or by some other electronic means is somewhat irrelevant (other than to meet regulatory requirements). What is important is that interested parties be made aware of data changes on a daily basis and provided access to easily download all modified

records. Since a fee is proposed for database access, it is especially important that users be able to download only the data that has changed since the previous download, rather than the entire database.

Frequency Coordination of Amendment and Modification Applications

In paragraphs 49 and 50 of the NPRM, the Commission proposes to amend section 101.103(d) by requiring frequency coordination only for those applicants filing amendments and modifications that involve major changes to technical parameters. However, no such changes are reflected in the rules contained in the NPRM.

Prior coordination is an important precursor to the application and licensing process in the bands subject to Part 101 regulation. It provides the industry with an effective method to identify and avoid potential interference and helps minimize the expenditure of valuable Commission resources in interference avoidance and mitigation. The most important principle of frequency coordination is that data on all new systems and all system modifications, both major and minor, is exchanged among the affected parties. Of secondary importance is whether a thirty day coordination period is required for all changes even if they are "minor". In Paragraph 50 of the NPRM, the Commission is using the 101.103 definition of frequency coordination which requires notification and response with a thirty day (or shorter if mutually agreeable) response period. The Commission also states in Paragraph 50 that while frequency coordination (according to the above definition) would not be required for minor changes, parties would still be required to notify "entity(ies) with which it normally engages in frequency coordination" of the changes.

We are concerned about the underlying implication that changes other than those defined as major in proposed section 1.929 cannot increase the potential for interference. In many situations, this is not the case. For example, a 5 second change in latitude or longitude (defined as minor in the NPRM) can have a significant impact on the azimuth of a short microwave path. An azimuth change of less than one degree (defined as minor in the NPRM) can have a significant impact on the predicted interference based on the highly directional antennas that are used. Replacing one antenna with another of the same beamwidth (defined as minor in the NPRM) can have a significant impact since the two antennas may have vastly different radiation patterns. Reducing the emission bandwidth (defined as minor in the NPRM) can increase the interference potential when objectives are based on the power spectral density of the interfering signal as required by TIA TSB 10-F. Because it is very difficult if not impossible to write Rules to effectively distinguish between changes that are major and minor in terms of interference potential, the Commission should make it clear that all technical changes, whether major or minor under 1.929, should be analyzed for their interference potential, and that all changes that have a significant impact on the interference potential require frequency coordination. The Section 101.103(d)(2)(ix) guideline for coordinating "minor" changes should be maintained: "If, after coordination is successfully completed, it is determined that a subsequent change could have no impact on some parties receiving the original notification, these parties must be notified of the change and of the coordinator's opinion that no response is required." This procedure allows licensees and frequency coordinators maximum flexibility to avoid unnecessary coordination response periods without wrongly suggesting that the changes considered minor for application and licensing purposes cannot have any impact on the interference potential.

The existing standard is that frequency coordination is required to take place if the proposed changes have any impact on the potential for interference. We believe that this standard should be maintained separate and distinct from the definitions of "major" and "minor" changes for filing purposes.

Change to North American Datum 83 Coordinate Data

In paragraphs 69 and 70 of the NPRM, the Commission proposes to require the submission of all site coordinate data in the NAD 83 coordinate system. Comsearch supports the conversion to NAD 83 to consolidate datum formats. We do suggest, however that the Commission give ample time for the industry to convert their databases before NAD 27 coordinates are no longer accepted. In addition, a window is required where both the 415 form and the 601 form is accepted to ensure a smooth transition to the ULS and prevent the return of applications on the old forms. This can be accomplished by making the rule changes effective at least 60 days after the adoption of the NPRM.

Third Party Filing

In the NPRM, the Commission acknowledges that parties other than applicants and licensees ("third party filers") have a need to utilize the ULS to prepare applications.[1] Currently, there are a number of attorneys and consultants that provide application preparation services in the Part 101 bands. Applicants utilize these services for a variety of reasons including an unfamiliarity with the Commission's rules and convenience. In paragraph 71 of the NPRM, the Commission proposes that users of the ULS system be required to enter a TIN number and password to access the filing system. This requirement appears to present a potential barrier to "third party filers" as licensees may be

[1] See NPRM, para. 21.

unwilling to divulge this sensitive information. In this regard, some mechanism needs to be available to allow for third party access and manipulation of data prior to application submittal.

Fixed Microwave Service Data Requirements

In paragraph 84 of the NPRM, the Commission proposes to eliminate type acceptance number, line loss, channel capacity and baseband signal type for each application because this information does not provide useful data in support of the licensing process. Comsearch supports this position and suggests that an additional data field, the digital modulation type, could be dropped as well. These fields do not have any bearing on the technical merit of an application.

Comments on the FCC Form 601

In paragraph 12 of the NPRM, the Commission seeks comments on the proposed forms. Comsearch has the following comments concerning the proposed Form 601.

System Registration Numbers

Items 1 and 2 of Supplement I pertain to the System Registration Number. The filing of stations as part of a system is not currently required or referenced in Rule Part 101. It is however referenced in Rule Parts 74.432 and 74.632. Therefore, Schedule I and its instructions should state that these items are not required under Part 101 and Item 1 should be answered 'No'.

Frequency Coordination

Items 10 -12 of Schedule I pertain to Frequency Coordinator Information. Item 10 requests a

frequency coordination number. This number is not widely used or referenced by Part 101 frequency coordinators and should not be required by those applicants. We recommend instead, adding two columns to the proposed table to identify whether frequency coordination has been completed and the date of the last frequency coordination notification. This information will allow both the Commission and the industry to evaluate and ensure compliance with the frequency coordination requirements.[2] If the applicant indicates that he has not satisfactorily completed frequency coordination, an exhibit should be attached with an explanation. The second item, frequency coordination date, should be required to monitor coordination expiration. Since frequency coordinations are only valid for 6 months, the ULS should return as defective all applications whose coordinations are over 6 months old.

We also note that the new form, like its predecessor the 415, does not address the requirement for a coordination "supplemental showing" for Part 101 filings despite this requirement in Part 101.103(d)(1).[3] Currently, the licensing branch of the Wireless Telecommunications Bureau in Gettysburg requires a coordination supplemental showing as an attachment to the 415 form. This showing, which is signed by a frequency coordinator, reflects the date the coordination was completed, lists the entities that received the coordination notification, and describes any special

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[2] FCC Rule Part 101.103

[3] FCC Rule Part 101.103 (d)(1) "The applicant must identify in the application all entities with which the technical proposal was coordinated. In the event that technical problems are resolved by an agreement or operating arrangement between the parties that would require special procedures be taken to reduce the likelihood of interference in excess of permissible levels (such as the use of artificial site shielding) or would result in a reduction of quality or capacity of either system, the details thereof may be contained in the application."

considerations which may exist with the coordination. If disputes arise, it provides critical documentation regarding the coordination process. We therefore believe that the elements of the "supplemental showing" should be incorporated into the form in some fashion or be retained as a required attachment.

Transmitter ID's

On Supplement 2 of Schedule I, item 6, Transmitter ID's are proposed to be used by the Commission to identify different transmitters employed on a given path. Using this ID, a single path may have multiple transmitter ID's that apply to various frequencies on this form. Item 6 of page 6 in *FCC 601 Schedule I -Instructions*, states "If the transmitter has been previously licensed under this call sign by the Commission, enter its FCC-assigned transmitter number (located on the Authorization)." This "transmitter number" does not currently appear on FCC Authorizations or in the database that can currently be downloaded from the Wireless Telecom Bureau Internet site. It appears, therefore that this field will be created by the FCC upon conversion to the ULS and will not generally be made available, except through the interactive application process. While paper applications are accepted and for those filers using the batch submission of multiple applications, the Commission must make entry of the transmitter ID either "optional", "enter if known" or mandatory only for call signs that have been issued after the conversion to the ULS.

Frequency Polarization

Prior to the release of FCC form 415, private and common carriers filed applications for point to point microwave systems on FCC forms 402 and 494, respectively. Both of these forms allowed for

the polarization of the signal to be associated with a particular frequency so that each frequency stated on the form could reflect it's associated polarization. The 494 Form, for example, asked for frequency and polarization in the same box, such as "6404.79V". This allowed the form to be very flexible and concise. When the Commission released the 415 Form, the simplicity was removed by associating a polarization with a path, rather than with a frequency. The frequency and associated polarization were separated onto schedules B and C of the FCC 415 form. On this form, if a dual polarized antenna is required (which is common in the point-to-point bands), the applicant must fill out 2 sets of identical schedules, B and C, except for the polarization, where one set would have vertical and the other horizontal polarization.

Comsearch, as well as the National Spectrum Managers Association (NSMA), commented to the Commission on this approach in November, 1996 during the development of FCC Form 415. The Commission response indicated that this change was not incorporated into the 415 form because of the variety of applicants and the structure of the licensing database. While this change will require a change in the structure of the FCC database, Comsearch believes that this change will be in the public interest. It will reduce the potential for errors due to repetitive entry and it will save the applicant's time to complete the application form. Comsearch, therefore, requests that the polarization, Item 15 of Schedule I Supplement 3, be moved to Supplement 2, after Frequency and before Tolerance.

Notification of the NRAO

Item 26 of the FCC 415 Form asked, "Is notification of the National Radio Astronomy Observatory

required?" This question appears to have been dropped from the FCC 601 form without explanation. Is notification of the NRAO no longer required by the FCC or the NRAO or will the ULS automatically notify the NRAO when appropriate?

Ground Elevation

On supplement 1 of Schedule I the instructions state that the ground elevation is only required if the antenna structure registration is not available or known. We believe this value should always be required on site based applications because this elevation is required to determine the antenna height above mean sea level (AMSL). Since the proposed Rule Section 1.929(d)(6) states that any increase in antenna height AMSL more than 3 meters is considered major, the ground elevation must be specified on the application in order to determine the total height AMSL. If the ground elevation were not required and the tower owner filed a change to his antenna registration to change the elevation of the tower by more than 3 meters, the Commission might change the overall height of the antenna in the ULS without frequency coordination and without notice to the public. Not including the ground elevation on the application will also make industry database entry more difficult since this information will have to be looked up in the antenna registration tables. Therefore, the instructions should state that the ground elevation must be entered on all applications.

Passive Repeater Numbers

On Schedule I, Supplement 4 Item 6, Existing Passive Repeater Numbers are proposed to be used by the Commission to identify different Passive Repeaters on a given path. Item 6 of page 10 in *FCC 601 Schedule I -Instructions*, states "If the passive repeater has been previously licensed under this

call sign by the FCC, enter its FCC-assigned passive repeater number (located on the Authorization)." This "passive repeater number" does not currently appear on FCC Authorizations or in the database that can currently be downloaded from the Wireless Telecom Bureau Internet site. It appears, therefore that this field will be created by the FCC upon conversion to the ULS and will not generally be made available, except through the interactive application process. While paper applications are accepted and for those filers using the batch submission of multiple applications, the Commission must make entry of the Passive Repeater Number either "optional", "enter if known" or mandatory only for call signs that have been issued after the conversion to the ULS.

Conditional Authorization Form

With the adoption of FCC Rule Part 101, which replaced Part 94 and most of Part 21, the FCC allowed "conditional authorization" for certain geographic areas and frequency bands once an application for license is accepted by the FCC. When the 415 Form was released, a Conditional Authorization form, 415T, was included in the instructions. This form provided an easy way for the applicant to certify that the station complies with the Rules pertaining to conditional authorization. This form does not appear in Form 601, nor in the instructions. This form should be included in the ULS. The Commission may also consider evaluating each application for conditional authorization requirements and issuing a conditional authorization via E-mail or U.S. Mail if the applied-for station qualifies for conditional authorization.

In conclusion, Comsearch believes that the Commission's efforts to streamline the Rules and automate the application and licensing process are long overdue. The Commission should make clear the distinction between certain requirements for filing and those for frequency coordination as well as focus attention on the bulk data access needs of the coordination industry. In addition, certain modifications of the FCC Form 601 are needed to improve the accuracy and completeness of an application in the Part 101 bands.

Respectfully Submitted,

COMSEARCH

Prepared by:_____

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