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15 October 1996

William F. Caton, Secretary
Federal Communications Commission
Room 222
1919 M Street NW
WASHINGTON, D.C. 20554

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Dear Mr. Secretary,

NOTICE OF PROPOSED RULE MAKING 96-86

Enclosed please find our comments on the FCC Notice of Proposed Rule Making (NPRM) 96-86.

Yours sincerely,

Steve Tucker
Development Manager - Technology

enclosure

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

In the matter of)
)
The Development of Operational,)
Technical, and Spectrum Requirements)
for meeting Federal, State and Local)
Public Safety Agency Communication)
Requirements Through the Year 2010)

WT Docket No. 96-86

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INTRODUCTION

ADI Ltd is an Australian based manufacturer of infrastructure for trunking radio and cellular telephone systems. The company only supplies open standard systems (i.e. non-propriety) and is active world-wide in the supply of such systems. It has recently acquired Stanilite Pacific Ltd, which has been an active participant in the APCO Project 25 process and a significant contributor to the standard since 1992. To avoid confusion throughout this submission the company has been referred to as ADI/Stanilite.

THE PSWAC RECOMMENDATIONS

ADI/Stanilite has been following the PSWAC process and from our extensive contact with users believes that there is substantial user support for the recommendations of PSWAC.

Furthermore, it is clear that the user community is desperately seeking the ability to purchase interoperable radio systems from multiple manufacturers and have interoperability with users of other systems at an inter-agency and inter-jurisdiction level.

SELECTION OF TECHNOLOGY

Whilst the APCO Project 25 process may have taken longer than anticipated the user requirements have not changed. Additionally they have high expectations that of when such technology will be available and the features and services it will provide. From

the users' perspective to re-open discussion of the appropriate technology and to repeat the process of the past few years and start now to seek agreement on another technology is simply not an option.

It could be argued that, having been under consideration for several years APCO Project 25 may no longer represent the ultimate leading technology available available in the world today. Against this has to be considered that the user community is regarded as a most risk averse group. The short-comings of TDMA are yet to be accepted by the many users; CDMA in a highly mobile, true multiple access environment is demonstrable theoretically but unproven in practice, similarly for its spectral efficiency. The various SSB techniques are yet to be accepted by the users despite having been around for many years. In contrast, FDMA is totally acceptable to the users, is realisable now and defines a baseline on which to build for the future.

MULTIPLE SOURCING

Along with several other manufacturers ADI/Stanilite has been developing equipment for the Public Safety user in accordance with the APCO Project 25 standard as it has evolved. To reflect that the standard is a generation ahead of what has gone before, such developments are largely 'greenfields developments' incorporating both backwards compatibility to existing systems and migration paths to the future. The users' expectations for multiple sources of interoperable equipment are realisable now with several public demonstrations of interoperability over the past 12 months.

SPECTRUM

The current plan for spectrum management and availability for Public Safety users is less than optimal in that:

- a. the current lack of spectrum in the UHF band will result in some agencies migrating to the 800 MHz bands which poses significant technical challenge, requires greater infrastructure to service and is correspondingly more expensive to implement;
- b. not all agencies will migrate (for reasons of topology and cost) resulting in different agencies operating on different bands. Ultimately users will still be denied the opportunity for true inter-agency interoperability and the achievable benefits of shared spectrum and infrastructure will not be realised.

This contrasts with the trends in Europe and Asia which are making spectrum available in the UHF band for Public Safety use and consolidating such users there and more appropriately leaving the higher frequency bands for the implementation of more commercially focussed and less mission critical Personal Communication Services.

CONCLUSIONS

ADI/Stanolite supports the PSWAC process and believes that it provides an accurate assessment of the requirements of Public Safety users.

APCO Project 25 provides a mechanism to provide for interoperability between agencies.

Additional spectrum is required if the users' expectations of interoperability are to be realised.

Respectfully,
ADI Ltd,

A handwritten signature in black ink that reads "Steve Tucker". The signature is written in a cursive style with a horizontal line underneath the name.

Steve Tucker
Development Manager - Technology

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