SUBMISSION TO THE PRODUCTIVITY COMMISSION

REVIEW OF RADIOCOMMUNICATIONS ACTS AND MARKET BASED REFORM

SUBJECT: SPECTRUM LICENSING

Individual Submission by: Barry Whittle

Introduction:
I am tendering this submission as an individual supporting reform of the complexity of some of the procedures exercised within the spectrum licensing framework. My contention is that the complexity results in additional and often unnecessary expense to licensees and inhibits competition in the provision of services.

I have worked as a technical officer for around 20years in the Customer Service Group of ACA. Since leaving my employment with ACA this year, I have had reason to evaluate opportunities in the radiocommunications planning industry. This experience has prompted me to comment on aspects of spectrum licensing which I believe should be reviewed.

Background:

1. Others have dealt with the background and history of radiocommunications licensing as a form of spectrum management. In summary, the traditional apparatus licensing arrangements were considered to be over-prescriptive and conservative. Innovative technological changes and the application of technologies were sometimes inhibited by inability of the Spectrum Manager to keep pace with those changes.

2. The spectrum licence concept was created and codified by the Radiocommunications Act 1992. The Act provides for a market-based allocation of licenses auctioned in lots identified by frequency and geographical boundaries.

3. Spectrum licenses were supposed to overcome the prescriptive problems associated with apparatus licensing by offering a “technology neutral” alternative. The arrangements were intended to simplify the deployment and use of transmitters within the prescribed boundaries, thus removing obstacles, delays and costs to industry.

4. To some extent, the spectrum licence has succeeded. It provides flexibility for a licensee to manage the spectrum within those boundaries.

Spectrum Licensing Process:

5. In practice the process for implementing full use of the available resource is unnecessarily complicated by the complexity of the spectrum licence form and its core conditions.

6. The spectrum licence has spawned a process for coordinating the deployment of transmitters, requiring an analysis of its transmission profile, termed the device boundary.
7. The complexity of the process, the lack of understanding and information about it ensures that competition among service providers, to provide device registrations will remain limited.

8. The scarcity of competition and the unnecessary complexity leads to additional cost burdens imposed on industry. From their perspective, licensees and potential investors understand the concept embodied in their investments, few understand the details prescribed in the licence documents or the processes for registering devices.

9. After attending a recent training session with ACA as an employee, it is fair to observe that the complexity of the device registration process is not well understood, even by ACA, the Licence Manager. This is due in no small way to the departure from ACA of former employees who designed these processes. These people are now able to take advantage of the business opportunities presented by the complexity they designed.

10. I believe the concept of spectrum licensing, the principles of providing flexibility and efficiency in the use of spectrum remain valid. However, the processes must be reformed.

11. A reformed version of spectrum licensing could either stand-alone or the principles of providing spectrum within a geographic boundary could be incorporated into a single licensing arrangement. Such an arrangement would standardise and simplify frequency coordination processes when they can be commonly applied to devices used in both apparatus and spectrum licensing.

12. Whether administered under a spectrum licensing arrangement or a single licensing framework. Licensees should be given more freedom to manage their spectrum as they see fit and be held responsible for managing harmful interference when it occurs. The level of engineering and frequency coordination within the spectrum and geographical boundaries, should be a matter for the licensee to determine on a case by case basis. For example, maximum utility of spectrum in a CBD is likely to require more coordination than elsewhere.

13. Conversely, in less densely populated areas maximum utility may not be important, it may be appropriate to take a conservative approach to defining “device boundaries”.

14. The engineering models used for all licensing frameworks should be consistent with each other and no more complex than is necessary to manage the spectrum.

Conclusion:

15. Consistency and simplification of the engineering processes and form of licence will increased understanding of all stakeholders, including the Regulator, allowing for better decision making. This would result in lower costs, faster processing and potentially more efficient use of the spectrum.

B F Whittle

13 December 2001