

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 3720

November 2, 2006

Frank A. Cassou Executive Vice President NextWave Wireless Inc. 12670 High Bluff Drive San Diego, CA 92130

Re: NextWave Wireless Inc.

Amendment No. 1 to Form S-4

Filed October 24, 2006 File No. 333-137388

Dear Mr. Cassou:

We have reviewed the above filing and your response letter submitted October 24, 2006 and we have the following comments. We have limited our review to those matters raised in our prior comment letter dated October 13, 2006 and the additional comments set forth in this letter. Where indicated, we think you should revise your Form S-4 in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. We note that in connection with the corporate conversion merger, NextWave Wireless, Inc. common stock will be issued in exchange for each share of CYGNUS common stock not held by NextWave Wireless LLC. In your response to this comment, and with a view towards further disclosure, please tell us whether or not the registration statement will cover the shares to be issued in exchange for the shares of CYGNUS common stock not held by NextWave Wireless LLC.

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The Corporate Conversion Merger, page 31

Reasons for the Corporate Conversion Merger, page 31

2. Regarding the reference to "any future acquisitions or investments we may pursue" in the third bullet, clarify whether or not you have any current plans to issue shares for those purposes. For example, are you currently engaged in any negotiations for the purpose of acquiring other businesses for which you may issue shares as consideration? See prior comment 4.

Material U.S. Federal Income Tax Consequences of the Corporate Conversion Merger, page 32

Holders of Company Interests, page 33

3. We have examined your revisions provided on page 33 of the prospectus, in response to our prior comment 6. If material, please revise the document to provide risk factor, as well as other appropriate disclosure, of the risks to investors arising from the uncertainty of counsel's opinion on the holding period. The revised disclosure should also clarify the degree of uncertainty of counsel's opinion as to the holding period. As one example, discuss the likelihood that the IRS will come to a conclusion that is different from the conclusion of counsel.

<u>Management's Discussion and Analysis of Financial Condition and Results of Operations, page 65</u>

4. As requested by our prior comment 8, please revise this section to include a summary of the results of operations, liquidity, and capital resources of the company for the period from inception to the company's fiscal year end (December 31, 2005). See Item 303(a) of Regulation S-K and Item 14(h) of Form S-4.

Exhibit 8.1, Form of Tax Opinion

5. It appears that Exhibit 8.1 is the "long-form" opinion of counsel as to the material tax consequences of the corporate conversion merger. As a result, please ask counsel to ensure that the discussion in Exhibit 8.1 is consistent with the summary found in the prospectus. For example, the exhibit should include the same level of detail as the discussion in the prospectus, including a clarification of the basis for each of the conclusions set forth in the exhibit. Alternatively, you may revise this exhibit, as well as the discussion on page 32 of the Form S-4, to clarify that the discussion on page 32 is counsel's opinion of the material U.S. Federal income tax consequences of the corporate conversion merger.

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- 6. Please instruct counsel to revise paragraph iv of the exhibit to clarify the reasons for doubt and degree of uncertainty of the "should" opinion in paragraph iv of the exhibit (as requested by our prior comment 6).
- 7. Weil, Gotshal & Manges LLP should remove the statement that "this opinion is rendered solely for your [the Board of Directors'] benefit in connection with the transactions described above," as the quoted language appears to limit investors' reliance upon the opinion.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Please contact Derek Swanson, Attorney-Adviser, at (202) 551-3366, or me at (202) 551-3810 with any questions.

Sincerely,

/s/ Michele M. Anderson Michele M. Anderson Legal Branch Chief

Marita A. Makinen, Esq. cc: Weil, Gotschal & Manges LLP Via Facsimile: (212) 310-8007