



DIVISION OF
CORPORATION FINANCE

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

June 20, 2012

Via E-mail

Michael Wilemon
Chief Financial Officer
Integrated Security Systems, Inc.
15000 W. 6th Avenue, Suite 202
Golden, Colorado 80401

**Re: Integrated Security Systems, Inc.
Current Report on Form 8-K
Filed April 9, 2012
Response letter dated May 22, 2012
File No. 1-11900**

Dear Mr. Wilemon:

We have reviewed your filings and response and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Current Report on Form 8-K

General

1. We note your response to prior comment 1 from our letter to you dated May 8, 2012. You have not provided support for all of the statistical data contained in the bulleted paragraphs on page 3. For example, you do not support with independent data your references to market sizes and growth rates. Similarly, a review of the supplemental

information you provided does not appear to support the assertion you make regarding the amount spent by your average consumer per month on nutritional supplements (\$100, see page 3), nor does it appear to support the “average” age of your customers. Moreover, it is unclear on what basis you can reasonably assert that your “target customers are more established” and with “more disposable income” than the competitors’ target audience. If you retain these various assertions and statistical claims, provide us with independent third party support and further explain the claims in context where necessary.

2. If your claim regarding the status of your products being “leading weight loss products” is based on a single screen shot from a customer’s website, justify the continued reference or delete it. It appears that all of your weight loss products combined would comprise significantly less than one percent of the weight loss market, even assuming that your statistics regarding market size are accurate. Also further support your claim that you are a “leading nutritional supplements firm” with independent market rankings or similar data.
3. You refer to “seven independent scientific clinical studies,” and you supplementally provided us with copies in response to prior staff comment. However, your disclosure does not make clear that in each case you funded the studies, sample sizes were as small as five persons, and some authors specifically referred to the small sample size as a limitation on the particular study. If you retain the assertions regarding the studies, please revise to explain them in context. Also further explain the references to “notable scientific conferences” or “peer-reviewed scientific journals.”

Unaudited Pro forma Financial Statements, page P-1

4. We note you have included pro forma adjustments to eliminate the income tax benefit and expense recorded by iSatori Technologies, Inc. for the recently completed fiscal year and quarter ended March 31, 2012. Please demonstrate to us the rationale for presenting these adjustments, and how such adjustments are consistent with the guidance in Rule 11-02(b)(6) of Regulation S-X.

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You may contact Mark Wojciechowski at (202) 551-3759 or in his absence, Karl Hiller, Branch Chief, at (202) 551-3686 if you have questions regarding comments on the financial statements and related matters. Please contact Sirimal R. Mukerjee at (202) 551-3340 or, in his absence, Timothy S. Levenberg, Special Counsel, at (202) 551-3707 with any other questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director