



DIVISION OF  
CORPORATION FINANCE

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

April 2, 2012

Via U.S. Mail

Corey M. Horowitz  
Chief Executive Officer  
Network-1 Security Solutions, Inc.  
445 Park Avenue, Suite 1020  
New York, New York 10022

**Re: Network-1 Security Solutions, Inc.  
Post-effective amendment No. 5 to Form S-1  
Filed March 23, 2012  
File No. 333-143710**

Dear Mr. Horowitz:

We have reviewed your registration statement 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 by amending your registration statement and providing the requested information. Where 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Cover Page

1. We note that post-effective amendment no. 4 to your registration statement covered the resale of 2,621,365 shares of common stock by your Chairman and Chief Executive Officer and related parties, whereas post-effective amendment no. 5 covers 4,511,425 shares of common stock for the same selling shareholders. Please explain the circumstances that resulted in this increase in the number of shares being registered for resale by these selling shareholders. To the extent this increase in the number of shares represents the registration of transactions in shares not covered by the registration statement when it was initially declared effective, explain why you believe you can include additional shares by means of a post-effective amendment. Refer to Rule 413. For additional guidance, refer to Question 210.01 of Securities Act Rules Compliance and Disclosure Interpretations, available on our website at <http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm>.

Other

2. 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. In addition, as indicated in our May 23, 2011 comment letter, with each post-effective amendment please also file a marked copy showing the changes from the prior post-effective amendment. Such marked copies should conform to the provisions of Rule 310 of Regulation S-T. Marked copies that show changes within paragraphs help expedite our review.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, before we can declare the amended registration statement effective, the company should provide us with a letter, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Ryan Houseal, Attorney-Advisor, at (202) 551-3105 or, in his absence, me at (202) 551-3462 with any questions.

Sincerely,

/s/ Mark P. Shuman

Mark P. Shuman  
Branch Chief

cc: Via Facsimile (212) 355-4608  
Sam Schwartz, Esq.  
Eiseman Levine Lehrhaupt & Kakoyiannis, P.C.