

April 12, 2007

Mail Stop 4561

Geoffrey S. M. Hedrick  
Chief Executive Officer  
Innovative Solutions and Support, Inc.  
720 Pennsylvania Drive  
Exton, PA 19341

**RE: Innovative Solutions and Controls, Inc.  
Amendment No. 1 to Form S-3  
Filed March 28, 2007  
File number 333-140018**

**Form 10-K for September 30, 2006  
Filed December 12, 2006  
File number 0-31157**

Dear Mr. Hedrick:

We have reviewed your above amendment and have the following comments in that regard.

Form S-3

Incorporation of Certain Documents by Reference. Page 10

1. Please see our prior comment 5. We note that your definitive proxy soliciting materials were filed on February 5, 2007. According to General Instruction G(3) to Form 10-K, you may incorporate the Part III information only if the definitive proxy soliciting materials are filed within 120 days of the end of your fiscal year. Please amend your Form 10-K to include the Part III information and then amend your Form S-3 to incorporate that amended Form 10-K by reference.

Geoffrey S. M. Hedrick  
Innovative Solutions and Support, Inc.  
April 12, 2007  
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Please contact Hugh Fuller at (202) 551-3853 or me at (202) 551-3730 with any other questions.

Sincerely,

Barbara C. Jacobs  
Assistant Director

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