ION GEOPHYSICAL CORP Form 10-K/A June 17, 2011

#### **Table of Contents**

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549 Form 10-K/A Amendment No.1

(Mark One)

# **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2010

or

# o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

# Commission file number 1-12691 ION Geophysical Corporation

(Exact Name of Registrant as Specified in Its Charter)

**Delaware** 

22-2286646

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification No.)

2105 CityWest Blvd Suite 400

**Houston, Texas 77042-2839** 

(Address of Principal Executive Offices, Including Zip Code)
(281) 933-3339

(Registrant s Telephone Number, Including Area Code)
Securities registered pursuant to Section 12(b) of the Act:

**Title of Each Class** 

Name of Each Exchange on Which Registered

Common Stock, \$0.01 par value Rights to Purchase Series A Junior Participating Preferred Stock New York Stock Exchange New York Stock Exchange

#### Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes b No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act Yes o No b

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes b No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).\* Yes o No o

<sup>\*</sup> The registrant has not yet been phased into the interactive data requirements.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o

Accelerated filer b

Non-accelerated filer o

Smaller reporting company o

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No be As of June 30, 2010 (the last business day of the registrant is second quarter of fiscal 2010), the aggregate market value of the registrant is common stock held by non-affiliates of the registrant was \$495.25 million based on the closing sale price on such date as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date: common stock, \$0.01 par value, 153,028,861 shares outstanding as of February 18, 2011.

#### DOCUMENTS INCORPORATED BY REFERENCE

**Document** 

**Parts Into Which Incorporated** 

Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held May 27, 2011

Part III

## TABLE OF CONTENTS

Explanatory Note		3
PART IV		4
<u>SIGNATURES</u>		9
EXHIBIT INDEX		10
EX-23.2		
EX-31.1		
EX-31.2		
<u>EX-32.1</u>		
EX-32.2		
EX-99.1		
	2	

#### **Table of Contents**

#### **Explanatory Note**

This Amendment No. 1 to Annual Report on Form 10-K/A amends the Annual Report on Form 10-K for the year ended December 31, 2010 of ION Geophysical Corporation ( ION ), which was filed with the Securities and Exchange Commission on February 24, 2011. This Form 10-K/A is being filed for the purpose of providing separate audited financial statements of INOVA Geophysical Equipment Limited in accordance with Rule 3-09 of Regulation S-X. The INOVA Geophysical Equipment Limited ( INOVA Geophysical ) Audited Financial Statements as of December 31, 2010 and for the period from March 26, 2010 (date of commencement) to December 31, 2010, and Report of Independent Registered Public Accounting Firm, are filed as Exhibit 99.1 and are included as financial statement schedules in Item 15. *Exhibits and Financial Statement Schedules* of this Form 10-K/A. ION owns a minority equity interest (49%) in INOVA Geophysical, which it accounts for under the equity method of accounting, and the financial statements of INOVA Geophysical as of and for the period ended December 31, 2010, were not available at the time that ION filed its Annual Report on Form 10-K in February 2011.

The consent of Ernst & Young LLP, independent registered public accounting firm for INOVA Geophysical Equipment Limited, is also filed as an exhibit to this Amendment No. 1 to Annual Report on Form 10-K/A. In addition, this Form 10-K/A includes an updated exhibit index in respect thereof.

Except as described above, this Amendment No. 1 on Form 10-K/A is not intended to update or modify any other information presented in ION s Annual Report on Form 10-K for the fiscal year ended December 31, 2010, as originally filed. This Amendment No. 1 does not update or modify in any way the financial position, results of operations, cash flows or related disclosures in ION s Annual Report on Form 10-K, and does not reflect events occurring after the Form 10-K s original filing date of February 24, 2011. Accordingly, this Form 10-K/A should be read in conjunction with our other filings made with the SEC subsequent to the filing of our Annual Report on Form 10-K for the year ended December 31, 2010.

3

#### **Table of Contents**

#### **PART IV**

#### Item 15. Exhibits and Financial Statement Schedules

- (a) List of Documents Filed
  - (1) Financial Statements

The financial statements were previously filed with the Annual Report on Form 10-K for the year ended December 31, 2010, filed on February 24, 2011.

(2) Financial Statement Schedules

The following financial statement schedule was previously filed with the Annual Report on Form 10-K for the year ended December 31, 2010, filed on February 24, 2011:

Schedule II Valuation and Qualifying Accounts

The following financial statement schedules are included in this Amendment No. 1 to Annual Report on Form 10-K/A pursuant to Rule 3-09 of Regulation S-K:

INOVA Geophysical Equipment Limited Audited Financial Statements as of and for the period ended December 31, 2010.

All other schedules are omitted because they are not applicable or the requested information is shown in the financial statements or noted therein.

- (3) Exhibits
- 3.1 Restated Certificate of Incorporation dated September 24, 2007 filed on September 24, 2007 as Exhibit 3.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 3.2 Amended and Restated Bylaws of ION Geophysical Corporation filed on September 24, 2007 as Exhibit 3.5 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 3.3 Certificate of Ownership and Merger merging ION Geophysical Corporation with and into Input/Output, Inc. dated September 21, 2007, filed on September 24, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.1 Certificate of Rights and Designations of Series D-1 Cumulative Convertible Preferred Stock, dated February 16, 2005 and filed on February 17, 2005 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.2 Certificate of Elimination of Series B Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.3 Certificate of Elimination of Series C Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.4 Certificate of Designation of Series D-2 Cumulative Convertible Preferred Stock dated December 6, 2007, filed on December 6, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.5 Certificate of Designations of Series A Junior Participating Preferred Stock of ION Geophysical Corporation effective as of December 31, 2008, filed on January 5, 2009 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.6 Form of Senior Indenture, filed on December 19, 2008 as Exhibit 4.3 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.

- 4.7 Form of Senior Note, filed on December 19, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- 4.8 Form of Subordinated Indenture, filed on December 19, 2008 as Exhibit 4.5 to the Company s Registration Statement on

4

#### **Table of Contents**

- Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- 4.9 Form of Subordinated Note, filed on December 19, 2008 as Exhibit 4.6 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- \*\*10.1 Amended and Restated 1990 Stock Option Plan, filed on June 9, 1999 as Exhibit 4.2 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
  - 10.2 Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park II, LP as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.2 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
  - 10.3 Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park District as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.3 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
- \*\*10.4 Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan, filed on June 9, 1999 as Exhibit 4.3 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
- \*\*10.5 Amendment No. 1 to the Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan dated September 13, 1999 filed on November 14, 1999 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 1999 and incorporated herein by reference.
- \*\*10.6 Employment Agreement dated effective as of May 22, 2006 between Input/Output, Inc. and R. Brian Hanson, filed on May 1, 2006 as Exhibit 10.1 to the Company s Form 8-K, and incorporated herein by reference.
- \*\*10.7 First Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and R. Brian Hanson, filed on August 21, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.8 Second Amendment to Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and R. Brian Hanson, filed on January 29, 2009 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.9 Input/Output, Inc. Employee Stock Purchase Plan, filed on March 28, 1997 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-24125), and incorporated herein by reference.
- \*\*10.10 Fifth Amended and Restated 2004 Long-Term Incentive Plan, filed as Appendix A to the definitive proxy statement for the 2010 Annual Meeting of Stockholders of ION Geophysical Corporation, filed on April 21, 2010, and incorporated herein by reference.

10.11

Registration Rights Agreement dated as of November 16, 1998, by and among the Company and The Laitram Corporation, filed on March 12, 2004 as Exhibit 10.7 to the Company s Annual Report on Form 10-K for the year ended December 31, 2003, and incorporated herein by reference.

- \*\*10.12 Input/Output, Inc. 1998 Restricted Stock Plan dated as of June 1, 1998, filed on June 9, 1999 as Exhibit 4.7 to the Company s Registration Statement on S-8 (Registration No. 333-80297), and incorporated herein by reference.
- \*\*10.13 Input/Output Inc. Non-qualified Deferred Compensation Plan, filed on April 1, 2002 as Exhibit 10.14 to the Company s Annual Report on Form 10-K for the year ended December 31, 2001, and incorporated herein by reference.
- \*\*10.14 Input/Output, Inc. 2000 Restricted Stock Plan, effective as of March 13, 2000, filed on August 17, 2000 as Exhibit 10.27 to the Company s Annual Report on Form 10-K for the fiscal year ended May 31, 2000, and incorporated herein by reference.
- \*\*10.15 Input/Output, Inc. 2000 Long-Term Incentive Plan, filed on November 6, 2000 as Exhibit 4.7 to the Company s Registration Statement on Form S-8 (Registration No. 333-49382), and incorporated by reference herein.
- \*\*10.16 Employment Agreement dated effective as of March 31, 2003, by and between the Company and Robert P. Peebler, filed on March 31, 2003 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.17 First Amendment to Employment Agreement dated September 6, 2006, between Input/Output, Inc. and Robert P. Peebler, filed on September 7, 2006, as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.18 Second Amendment to Employment Agreement dated February 16, 2007, between Input/Output, Inc. and Robert P. Peebler, filed on February 16, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated

5

#### **Table of Contents**

herein by reference.

- \*\*10.19 Third Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and Robert P. Peebler, filed on August 21, 2007 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.20 Fourth Amendment to Employment Agreement, dated as of January 26, 2009, between ION Geophysical Corporation and Robert P. Peebler, filed on January 29, 2009 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.21 Employment Agreement dated effective as of June 15, 2004, by and between the Company and David L. Roland, filed on August 9, 2004 as Exhibit 10.5 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
- \*\*10.22 Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and James R. Hollis, filed on January 29, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.23 GX Technology Corporation Employee Stock Option Plan, filed on August 9, 2004 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
  - 10.24 Concept Systems Holdings Limited Share Acquisition Agreement dated February 23, 2004, filed on March 5, 2004 as Exhibit 2.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
  - 10.25 Registration Rights Agreement by and between ION Geophysical Corporation and 1236929 Alberta Ltd. dated September 18, 2008, filed on November 7, 2008 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q and incorporated herein by reference.
- \*\*10.26 Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. Concept Systems Employment Inducement Stock Option Program, filed on July 27, 2004 as Exhibit 4.1 to the Company's Registration Statement on Form S-8 (Reg. No. 333-117716), and incorporated herein by reference.
- \*\*10.27 Form of Employee Stock Option Award Agreement for ARAM Systems Employee Inducement Stock Option Program, filed on November 14, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-155378) and incorporated herein by reference.
  - 10.28 Agreement dated as of February 15, 2005, between Input/Output, Inc. and Fletcher International, Ltd., filed on February 17, 2005 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.29 First Amendment to Agreement, dated as of May 6, 2005, between the Company and Fletcher International, Ltd., filed on May 10, 2005 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.30 Input/Output, Inc. 2003 Stock Option Plan, dated March 27, 2003, filed as Appendix B of the Company s definitive proxy statement filed with the SEC on April 30, 2003, and incorporated herein by reference.

- Amended and Restated Credit Agreement dated as of July 3, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on July 8, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 10.32 First Amendment to Amended and Restated Credit Agreement and Domestic Security Agreement, dated as of September 17, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on September 23, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- Third Amendment to Amended and Restated Credit Agreement dated as of December 29, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- Fourth Amendment to Amended and Restated Credit Agreement and Foreign Security Agreement, Limited Waiver and Release dated as of December 30, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 10.35 Fifth Amendment to Amended and Restated Credit Agreement dated effective as of June 1, 2009 by and among ION

6

#### **Table of Contents**

Geophysical Corporation, ION International S.à r.l., certain other foreign and domestic subsidiaries of the ION Geophysical Corporation, HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, Citibank, N.A., as syndication agent, and the lenders party thereto, filed on August 6, 2009 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

- 10.36 Sixth Amendment and Waiver to Amended and Restated Credit Agreement dated effective as of October 23, 2009 by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent filed on March 1, 2010 as Exhibit 10.36 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- \*\*10.37 Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. GX Technology Corporation Employment Inducement Stock Option Program, filed on April 4, 2005 as Exhibit 4.1 to the Company s Registration Statement on Form S-8 (Reg. No. 333-123831), and incorporated herein by reference.
- \*\*10.38 First Amendment to Consulting Services Agreement dated as of January 5, 2007, by and between GX Technology Corporation and Michael K. Lambert, filed on January 8, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.39 Letter agreement dated October 19, 2006, by and between the Company and Michael K. Lambert, filed on October 24, 2006 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.40 Severance Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.41 Consulting Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.42 Rights Agreement, dated as of December 30, 2008, between ION Geophysical Corporation and Computershare Trust Company, N.A., as Rights Agent, filed as Exhibit 4.1 to the Company s Form 8-A (Registration No. 001-12691) and incorporated herein by reference.
- \*\*10.43 ION Stock Appreciation Rights Plan dated November 17, 2008, filed as Exhibit 10.47 to the Company s Annual Report on Form 10-K for the year ended December 31, 2008, and incorporated herein by reference.
  - 10.44 Canadian Master Loan and Security Agreement dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Rentals Corporation, a Nova Scotia corporation, filed on August 6, 2009 as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

10.45

Master Loan and Security Agreement (U.S.) dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Seismic Rentals, Inc., a Texas corporation, filed on August 6, 2009 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

- 10.46 Term Sheet dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as Exhibit 10.52 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.47 Warrant Issuance Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as Exhibit 10.53 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.48 Registration Rights Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as Exhibit 10.54 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.49 Stock Purchase Agreement dated as of March 19, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- 10.50 Investor Rights Agreement dated as of March 25, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.

′

#### **Table of Contents**

- 10.51 Share Purchase Agreement dated as of March 24, 2010, by and among ION Geophysical Corporation, INOVA Geophysical Equipment Limited and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.3 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- Joint Venture Agreement dated as of March 24, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.4 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- 10.53 Credit Agreement dated as of March 25, 2010, by and among ION Geophysical Corporation, ION International S.À R.L. and China Merchants Bank Co., Ltd., New York Branch, as administrative agent and lender, filed on March 31, 2010 as Exhibit 10.5 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.54 Fifth Amendment to Employment Agreement dated June 1, 2010, between ION Geophysical Corporation and Robert P. Peebler, filed on June 1, 2010 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
  - \*21.1 Subsidiaries of the Company.
  - \*23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
    - 23.2 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
  - \*24.1 The Power of Attorney (included on the signature page of the Form 10-K filed on February 24, 2011).
    - 31.1 Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
    - 31.2 Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
    - 32.1 Certification of Chief Executive Officer Pursuant to 18 U.S.C. §1350.
    - 32.2 Certification of Chief Financial Officer Pursuant to 18 U.S.C. §1350.
    - 99.1 INOVA Geophysical Equipment Limited Audited Financial Statements as of December 31, 2010 and for the period from March 26, 2010 to December 31, 2010.
- \* Filed with ION Geophysical Corporation s Annual Report on Form 10-K for the year ended December 31, 2010, as filed with the Securities and Exchange Commission on February 24, 2011.
- \*\* Management contract or compensatory plan or arrangement.

Filed herewith.

- (b) Exhibits required by Item 601 of Regulation S-K.

  Reference is made to subparagraph (a) (3) of this Item 15, which is incorporated herein by reference.
- (c) Financial statement schedules.

The audited financial statements of INOVA Geophysical Equipment Limited referred to in subparagraph (a) (2) of this Item 15, are being filed herewith as financial statement schedules to this Amendment No. 1 to Annual Report on Form 10-K/A, in accordance with Rule 3-09 of Regulation S-X.

8

#### **Table of Contents**

#### **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Houston, State of Texas, on June 17, 2011.

#### ION GEOPHYSICAL CORPORATION

By /s/ Robert P. Peebler Robert P. Peebler Chief Executive Officer and Director (Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Form 10-K/A (Amendment No. 1 to Annual Report on Form 10-K) has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Capacities	Date
/s/ ROBERT P. PEEBLER	Chief Executive Officer and Director (Principal Executive Officer)	June 17, 2011
Robert P. Peebler	(1 mospus 2 moss)	
* R. BRIAN HANSON	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	June 17, 2011
* MICHAEL L. MORRISON	Vice President and Corporate Controller (Principal Accounting Officer)	June 17, 2011
* JAMES M. LAPEYRE, JR.	Chairman of the Board of Directors and Director	June 17, 2011
* DAVID H. BARR	Director	June 17, 2011
* HAO HUIMIN	Director	June 17, 2011
* MICHAEL C. JENNINGS	Director	June 17, 2011
* FRANKLIN MYERS	Director	June 17, 2011
* S. JAMES NELSON, JR.	Director	June 17, 2011
* JOHN N. SEITZ	Director	June 17, 2011

\* By: /s/ Robert P. Peebler Robert P. Peebler Attorney-in-fact

9

#### **Table of Contents**

#### **EXHIBIT INDEX**

- 3.1 Restated Certificate of Incorporation dated September 24, 2007 filed on September 24, 2007 as Exhibit 3.4 to the Company's Current Report on Form 8-K and incorporated herein by reference.
- 3.2 Amended and Restated Bylaws of ION Geophysical Corporation filed on September 24, 2007 as Exhibit 3.5 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 3.3 Certificate of Ownership and Merger merging ION Geophysical Corporation with and into Input/Output, Inc. dated September 21, 2007, filed on September 24, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.1 Certificate of Rights and Designations of Series D-1 Cumulative Convertible Preferred Stock, dated February 16, 2005 and filed on February 17, 2005 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.2 Certificate of Elimination of Series B Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.3 Certificate of Elimination of Series C Preferred Stock dated September 24, 2007, filed on September 24, 2007 as Exhibit 3.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.4 Certificate of Designation of Series D-2 Cumulative Convertible Preferred Stock dated December 6, 2007, filed on December 6, 2007 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.5 Certificate of Designations of Series A Junior Participating Preferred Stock of ION Geophysical Corporation effective as of December 31, 2008, filed on January 5, 2009 as Exhibit 3.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- 4.6 Form of Senior Indenture, filed on December 19, 2008 as Exhibit 4.3 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- 4.7 Form of Senior Note, filed on December 19, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- 4.8 Form of Subordinated Indenture, filed on December 19, 2008 as Exhibit 4.5 to the Company s
  Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- 4.9 Form of Subordinated Note, filed on December 19, 2008 as Exhibit 4.6 to the Company s Registration Statement on Form S-3 (Registration No. 333-156362) and incorporated herein by reference.
- \*\*10.1 Amended and Restated 1990 Stock Option Plan, filed on June 9, 1999 as Exhibit 4.2 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.
  - Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park II, LP as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.2 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.

- 10.3 Office and Industrial/Commercial Lease dated June 2005 by and between Stafford Office Park District as Landlord and Input/Output, Inc. as Tenant, filed on March 31, 2006 as Exhibit 10.3 to the Company s Annual Report on Form 10-K for the year ended December 31, 2005, and incorporated herein by reference.
- \*\*10.4 Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan, filed on June 9, 1999 as Exhibit 4.3 to the Company s Registration Statement on Form S-8 (Registration No. 333-80299), and incorporated herein by reference.

10

#### **Table of Contents**

\*\*10.5 Amendment No. 1 to the Input/Output, Inc. Amended and Restated 1996 Non-Employee Director Stock Option Plan dated September 13, 1999 filed on November 14, 1999 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 1999 and incorporated herein by reference. \*\*10.6 Employment Agreement dated effective as of May 22, 2006, between Input/Output, Inc. and R. Brian Hanson filed on May 1, 2006 as Exhibit 10.1 to the Company s Form 8-K, and incorporated herein by reference. \*\*10.7 First Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and R. Brian Hanson, filed on August 21, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference. \*\*10.8 Second Amendment to Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and R. Brian Hanson, filed on January 29, 2009 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference. \*\*10.9 Input/Output, Inc. Employee Stock Purchase Plan, filed on March 28, 1997 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-24125), and incorporated herein by reference. \*\*10.10 Fifth Amended and Restated 2004 Long-Term Incentive Plan, filed as Appendix A to the definitive proxy statement for the 2010 Annual Meeting of Stockholders of ION Geophysical Corporation, filed on April 21, 2010, and incorporated herein by reference. 10.11 Registration Rights Agreement dated as of November 16, 1998, by and among the Company and The Laitram Corporation, filed on March 12, 2004 as Exhibit 10.7 to the Company s Annual Report on Form 10-K for the year ended December 31, 2003, and incorporated herein by reference. Input/Output, Inc. 1998 Restricted Stock Plan dated as of June 1, 1998, filed on June 9, 1999 as \*\*10.12 Exhibit 4.7 to the Company s Registration Statement on S-8 (Registration No. 333-80297), and incorporated herein by reference. \*\*10.13 Input/Output Inc. Non-qualified Deferred Compensation Plan, filed on April 1, 2002 as Exhibit 10.14 to the Company s Annual Report on Form 10-K for the year ended December 31, 2001, and incorporated herein by reference. \*\*10.14 Input/Output, Inc. 2000 Restricted Stock Plan, effective as of March 13, 2000, filed on August 17, 2000 as Exhibit 10.27 to the Company s Annual Report on Form 10-K for the fiscal year ended May 31, 2000, and incorporated herein by reference. \*\*10.15 Input/Output, Inc. 2000 Long-Term Incentive Plan, filed on November 6, 2000 as Exhibit 4.7 to the Company s Registration Statement on Form S-8 (Registration No. 333-49382), and incorporated by reference herein. \*\*10.16 Employment Agreement dated effective as of March 31, 2003, by and between the Company and Robert

Table of Contents 20

incorporated herein by reference.

P. Peebler, filed on March 31, 2003, as Exhibit 10.1 to the Company s Current Report on Form 8-K and

**10.17	First Amendment to Employment Agreement dated September 6, 2006, between Input/Output, Inc. and Robert P. Peebler, filed on September 7, 2006, as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.18	Second Amendment to Employment Agreement dated February 16, 2007, between Input/Output, Inc. and Robert P. Peebler, filed on February 16, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
**10.19	Third Amendment to Employment Agreement dated as of August 20, 2007 between Input/Output, Inc. and Robert P. Peebler, filed on August 21, 2007 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.20	Fourth Amendment to Employment Agreement, dated as of January 26, 2009, between ION Geophysical Corporation and Robert P. Peebler, filed on January 29, 2009 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
**10.21	Employment Agreement dated effective as of June 15, 2004, by and between the Company and 11

#### **Table of Contents**

- David L. Roland, filed on August 9, 2004 as Exhibit 10.5 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
- \*\*10.22 Employment Agreement, dated as of December 1, 2008, between ION Geophysical Corporation and James R. Hollis, filed on January 29, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- \*\*10.23 GX Technology Corporation Employee Stock Option Plan, filed on August 9, 2004 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, and incorporated herein by reference.
  - 10.24 Concept Systems Holdings Limited Share Acquisition Agreement dated February 23, 2004, filed on March 5, 2004 as Exhibit 2.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
  - 10.25 Registration Rights Agreement by and between ION Geophysical Corporation and 1236929 Alberta Ltd. dated September 18, 2008, filed on November 7, 2008 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q and incorporated herein by reference.
- \*\*10.26 Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. Concept Systems Employment Inducement Stock Option Program, filed on July 27, 2004 as Exhibit 4.1 to the Company's Registration Statement on Form S-8 (Reg. No. 333-117716), and incorporated herein by reference.
- \*\*10.27 Form of Employee Stock Option Award Agreement for ARAM Systems Employee Inducement Stock Option Program, filed on November 14, 2008 as Exhibit 4.4 to the Company s Registration Statement on Form S-8 (Registration No. 333-155378) and incorporated herein by reference.
  - 10.28 Agreement dated as of February 15, 2005, between Input/Output, Inc. and Fletcher International, Ltd., filed on February 17, 2005 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.29 First Amendment to Agreement, dated as of May 6, 2005, between the Company and Fletcher International, Ltd., filed on May 10, 2005 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.30 Input/Output, Inc. 2003 Stock Option Plan, dated March 27, 2003, filed as Appendix B of the Company s definitive proxy statement filed with the SEC on April 30, 2003, and incorporated herein by reference.
  - Amended and Restated Credit Agreement dated as of July 3, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on July 8, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.32 First Amendment to Amended and Restated Credit Agreement and Domestic Security Agreement, dated as of September 17, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO

Incorporated, as joint lead arranger and joint bookrunner, and CitiBank, N.A., as syndication agent, filed on September 23, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.

- Third Amendment to Amended and Restated Credit Agreement, dated as of December 29, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.3 to the Company s Current Report on Form 8-K and incorporated herein by reference.
- Fourth Amendment to Amended and Restated Credit Agreement and Foreign Security Agreement, Limited Waiver and Release dated as of December 30, 2008, by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent, filed on January 5, 2009 as Exhibit 10.4 to the Company s Current Report on Form 8-K and incorporated herein by reference.

12

#### **Table of Contents**

- Fifth Amendment to Amended and Restated Credit Agreement dated effective as of June 1, 2009 by and among ION Geophysical Corporation, ION International S.à r.l., certain other foreign and domestic subsidiaries of the ION Geophysical Corporation, HSBC Bank USA, N.A., as administrative agent, joint lead arranger and joint bookrunner, ABN AMRO Incorporated, as joint lead arranger and joint bookrunner, Citibank, N.A., as syndication agent, and the lenders party thereto, filed on August 6, 2009 as Exhibit 10.1 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
- 10.36 Sixth Amendment and Waiver to Amended and Restated Credit Agreement dated effective as of October 23, 2009 by and among ION Geophysical Corporation, ION International S.À R.L., the Guarantors and Lenders party thereto and HSBC Bank USA, N.A., as administrative agent filed on March 1, 2010 as Exhibit 10.36 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- \*\*10.37 Form of Employment Inducement Stock Option Agreement for the Input/Output, Inc. GX Technology Corporation Employment Inducement Stock Option Program, filed on April 4, 2005 as Exhibit 4.1 to the Company s Registration Statement on Form S-8 (Reg. No. 333-123831), and incorporated herein by reference.
- \*\*10.38 First Amendment to Consulting Services Agreement dated as of January 5, 2007, by and between GX Technology Corporation and Michael K. Lambert, filed on January 8, 2007 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.39 Letter agreement dated October 19, 2006, by and between the Company and Michael K. Lambert, filed on October 24, 2006 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.40 Severance Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.1 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - 10.41 Consulting Agreement dated as of December 1, 2008, between ION Geophysical Corporation and Charles J. Ledet, filed on December 5, 2008 as Exhibit 10.2 to the Company s Current Report on Form 8-K and incorporated herein by reference.
  - Rights Agreement, dated as of December 30, 2008, between ION Geophysical Corporation and Computershare Trust Company, N.A., as Rights Agent, filed as Exhibit 4.1 to the Company s Form 8-A (Registration No. 001-12691) and incorporated herein by reference.
- \*\*10.43 ION Stock Appreciation Rights Plan dated November 17, 2008, filed as Exhibit 10.47 to the Company s Annual Report on Form 10-K for the year ended December 31, 2008, and incorporated herein by reference.
  - 10.44 Canadian Master Loan and Security Agreement dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Rentals Corporation, a Nova Scotia corporation, filed on August 6, 2009 as Exhibit 10.3 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.

- Master Loan and Security Agreement (U.S.) dated as of June 29, 2009 by and among ICON ION, LLC, as lender, ION Geophysical Corporation and ARAM Seismic Rentals, Inc., a Texas corporation, filed on August 6, 2009 as Exhibit 10.4 to the Company s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, and incorporated herein by reference.
- Term Sheet dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as Exhibit 10.52 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.47 Warrant Issuance Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as Exhibit 10.53 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.48 Registration Rights Agreement dated as of October 23, 2009 by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation filed on March 1, 2010 as

#### **Table of Contents**

- Exhibit 10.54 to the Company s Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference.
- 10.49 Stock Purchase Agreement dated as of March 19, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- 10.50 Investor Rights Agreement dated as of March 25, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.2 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- 10.51 Share Purchase Agreement dated as of March 24, 2010, by and among ION Geophysical Corporation, INOVA Geophysical Equipment Limited and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.3 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- Joint Venture Agreement dated as of March 24, 2010, by and between ION Geophysical Corporation and BGP Inc., China National Petroleum Corporation, filed on March 31, 2010 as Exhibit 10.4 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- 10.53 Credit Agreement dated as of March 25, 2010, by and among ION Geophysical Corporation, ION International S.À R.L. and China Merchants Bank Co., Ltd., New York Branch, as administrative agent and lender, filed on March 31, 2010 as Exhibit 10.5 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
- \*\*10.54 Fifth Amendment to Employment Agreement dated June 1, 2010, between ION Geophysical Corporation and Robert P. Peebler, filed on June 1, 2010 as Exhibit 10.1 to the Company s Current Report on Form 8-K, and incorporated herein by reference.
  - \*21.1 Subsidiaries of the Company.
  - \*23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
    - 23.2 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
  - \*24.1 The Power of Attorney (included on the signature page of the Form 10-K filed on February 24, 2011).
    - 31.1 Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
    - 31.2 Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a).
    - 32.1 Certification of Chief Executive Officer Pursuant to 18 U.S.C. §1350.
    - 32.2 Certification of Chief Financial Officer Pursuant to 18 U.S.C. §1350.
    - 99.1 INOVA Geophysical Equipment Limited Audited Financial Statements as of December 31, 2010 and for the period from March 26, 2010 to December 31, 2010.

- \* Filed with ION Geophysical Corporation s Annual Report on Form 10-K for the year ended December 31, 2010, as filed with the Securities and Exchange Commission on February 24, 2011.
- \*\* Management contract or compensatory plan or arrangement.

Filed herewith.

14