

		<b>ATLAS AGREEMENT</b> 394/2012
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70000 CHF from T577020	To T541500	24 February 2012
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## ATLAS AGREEMENT No. 394 / 12

Pre-production and test of opto-boards for the nSQP project

**BETWEEN**

**The ATLAS Collaboration**

Represented by the ATLAS Resources Coordinator on the one hand,

**AND**

Ohio State University,

Represented by the US ATLAS project manager,

On the other hand

**IT IS AGREED AS FOLLOWS:**

**CONSIDERING THAT:**

- The United States has signed the ATLAS construction MoU (RRB-D 98-44 rev.) and M&O MoU (CERN-RRB-2002-035);
  
- The US contributes to the Inner Detector sub-systems;
  
- Ohio State University contributes to the Pixel sub-detector;
  
- The M&O-B for the Inner Detector includes efforts to upkeep the detector in a good working order. This requires, among other, to prototype and test the replacement of the on-detector optical transmitters (opto-boards);

**IT IS AGREED AS FOLLOWS:**

**ARTICLE 1    SCOPE OF THE AGREEMENT**

- 1.1                    The purpose of the Agreement is to record the financial effort made by  
                              – and within- the Pixel to achieve the above goals.

**ARTICLE 2    OBLIGATIONS OF THE PARTIES**

- 2.1                    Ohio State University (OSU) will purchase parts and build a number of Pixel optical transmitters to finalize the pre-production for the Pixel nSQP project. Ohio State University will produce the boards perform the relevant tests in a controlled environment. In addition will perform irradiation and lifetime tests. The cost of parts, the labor of one technician and one engineer is recognized at 70000 CHF. An M&O credit for that amount will be given to US ATLAS. The tasks described in detail in Annex 1 will be performed in accordance with the schedule and milestones approved by Pixel Project Leader and with ATLAS and CERN safety rules, which are inalienable parts of this

Agreement. The health and accident insurances related to the execution of the work package will be the responsibility of the individuals. Once the Agreement is finished, the engineering personnel will return back to their home institute unless the Agreement is extended beyond the present Addendum.

**ARTICLE 3**      **FUNDING**

3.1                      For producing the work package as described in Article 2, a total amount of 70000 CHF will be paid from the Pixel M&O team account T577020 to US team account T541500 at CERN.

**ARTICLE 4**      **DURATION OF THE AGREEMENT**

4.1                      This Agreement is valid until June 30, 2012. It can be extended by mutual consent using appropriate Addenda.

**ARTICLE 5**      **CO-ORDINATION AND ADDRESSES FOR CORRESPONDENCE**

5.1                      All documents concerning this agreement shall bear the reference:

“ATLAS Agreement No. 394/12”

5.2                      The performance of this agreement shall be co-ordinated by the following persons:

for the ATLAS Collaboration:

ATLAS Pixel Project Leader, CERN – Department PH, CH-1211  
Geneva 23, SWITZERLAND (attn. B. Di Girolamo)

## ANNEX 1

### STATEMENT OF WORK

The ATLAS Pixel is being prepared for maintenance work during the shutdown 2013/14 to refurbish the services and substitute the currently used optical transmitter with a more robust version with higher reliability and also moving them in a serviceable location. The OSU group is organizing the complete production and this agreement covers the pre-production of boards that will undergo the final tests that will give the green light for the production. These tests will include lifetime tests in harsh environmental conditions and irradiation test on particle beams. This agreement covers the procurement and assembly for this pre-production and the work of an engine and a technician for the above mentioned production and tests.

for US ATLAS

US ATLAS Project Manager, MS 510A, Brookhaven National Laboratory, Upton, NY 11973-5000 (Attn: Howard Gordon).

**ARTICLE 6    ARBITRATION**

- 6.1                    Any differences arising during the execution of this agreement will be submitted to the ATLAS Spokesperson which will propose solutions in the best interest of the Collaboration.

Signed in Geneva, 17 April 2012



(B. Di Girolamo)

Pixel Project Leader  
ATLAS Collaboration



(M. Nordberg)

Resources Coordinator  
ATLAS Collaboration



(H. Gordon)

Project Manager  
US ATLAS