Addendum No. 11

to the

Memorandum of Understanding for Collaboration in the Construction of the ATLAS Detector

Construction of the ATLAS New Small Wheel (NSW) Sub-Detector

Considering that:

The construction of the ATLAS Detector is governed by a Memorandum of Understanding, along with its Amendments and Addenda, setting out the responsibilities of the different participating Institutes and Funding Agencies for the construction of the ATLAS Detector[1] (Construction MoU).

Maintenance and Operation of the ATLAS Detector is governed by a Memorandum of Understanding for Maintenance and Operation (M&O MoU)[2].

In order to be able to take full advantage of planned luminosity upgrades of the LHC, the Collaboration has proposed to replace the present Inner layer of the Endcap part of the Muon Spectrometer by the new and more performant New Small Wheel (NSW) detector.

On the basis of a Technical Design Report[3] submitted in June 2013 and a detailed review of the scientific merits, the technological feasibility and estimates of the needed resources, the LHC Committee (LHCC) recommended approval of the NSW Sub-Detector Upgrade to the CERN Research Board.

Based on the recommendation by the LHCC, the Research Board recommended to the Director General of CERN to approve the NSW Sub-Detector Upgrade.

The Director General has accepted the Research Board recommendation and approved the NSW Sub-Detector Upgrade.

It is agreed as follows

Article 1: Purpose

1.1 The purpose of this Addendum and its Annexes is to lay down the terms of participation of the contributing Institutes and Funding Agencies in the construction, installation and commissioning of the NSW Sub-Detector Upgrade in conformity with the Construction MoU along with its amendments and addenda.

1.2 All the Annexes are an integral part of this Addendum.

[1] Memorandum of Understanding for Collaboration in the Construction of the ATLAS Detector (RRB-D 98-44 rev)

[2] Memorandum of Understanding for Maintenance and Operation of in the Construction of the ATLAS Detector (CERN-RRB-2002-035)

[3] NSW Technical Design Report (CERN-LHCC-2013-006)

Article 2: Parties

2.1 The Parties to this Addendum shall be all the Institutes that are contributing to the upgrade of the NSW Sub-Detector (individually the NSW Institutes, jointly the NSW Collaboration) and their Funding Agencies (the NSW Funding Agencies), and CERN as the Host Laboratory. The current list of NSW Institutes is given in Annex 1 and the current list of NSW Funding Agencies is given in Annex 2.

Article 3: Duration

3.1 This Addendum takes effect from the date of signature and shall remain valid until the ATLAS Management declares the end of the NSW Sub-Detector Upgrade project.

3.2 Any NSW Institute may withdraw its support from the NSW construction effort by giving not less than eighteen months' notice in writing. In this event, reasonable compensation to the

NSW Sub-Detector Upgrade project shall be negotiated through the ATLAS Management and endorsed by the RRB.

3.3 Any Institute that joins the Upgrade Collaboration after the start of the Upgrade project shall accept the agreements in force and shall be expected to make an appropriate contribution to the NSW Sub-Detector Upgrade as shall be specified in a corresponding Addendum to this Addendum. This shall be negotiated by the ATLAS Management and endorsed by the RRB.

Article 4: The NSW Sub-Detector Construction

4.1 The NSW Sub-Detector Construction is defined in detail in the Technical Design Report submitted to the LHCC. The NSW Sub-Detector project consists of a number of sub-units as listed in Annex 3.

4.2 The management structure of the NSW Sub-Detector project is described in Annex 4, as well as persons currently holding management positions.

4.3 The technical participation of the NSW Institutes is set out in Annex 3.

4.4 The Collaboration decides for each NSW Sub-Detector Upgrade cost item whether the cost is to be borne at the common expense of the Collaboration or not. The NSW Sub-Detector Upgrade cost items are thereby divided into two categories:

4.4.1 Common Infrastructure Items, comprising those costs that the Collaboration has agreed to bear at its common expense;

4.4.2 Specific items that are the responsibility of the NSW Sub-Detector Institutes or groups of Institutes.

4.5 Annex 5 shows the value of the deliverables, by Funding Agency and Sub-Detector sub-units, to which the NSW Institutes and Funding

Agencies are committed and for which they have foreseen the appropriate funding.

4.6 The schedule for the design, construction, installation and commissioning of the NSW Sub-Detector is given in Annex 6 together with the Payment Profile.

ANNEXES

Annex 1:	List of NSW Institutes and Contact Persons
Annex 2:	List of Funding Agencies and Contact Persons
Annex 3:	List of NSW Sub-Detector Sub-units (systems) and deliverables to be provided by the NSW Institutes and Funding Agencies
Annex 4:	Management structure of the NSW Sub-Detector Upgrade Collaboration and Persons currently holding management positions
Annex 5:	Value of Deliverables, grouped by Funding Agencies and Sub-units of the NSW Upgrade Project
Annex 6:	Construction Schedule and Funding Profile

The European Organization for Nuclear Research (CERN)

and

Comisión Nacional de Investigación Científica y Tecnológica (CONICYT) - Chile

declare that they agree on the Present Addendum to the Memorandum of Understanding for Collaboration in the Construction of the ATLAS Detector

Done in Geneva

27/05/2014

for CERN

Sergio Bertolucci
Director for Research
and Computing

Done in Santiago de Chile

03 JUN. 2014

for CONICYT

Maria Elena Boissier
President