Statement by Ambassador Ravinatha Aryasinha,

Permanent Representative of Sri Lanka at CERN on 03 May 2017

Hon. Susil Premajayantha, Minister of Science, Technology and Research,
Ms. Charlotte Lindberg Warakaulle, the Director for International Relations of CERN and all associates from CERN,
Members of the visiting Sri Lanka delegation and colleagues from the Mission ,

First of all, I would like to thank Ms. Charlotte Lindberg Warakaulle, the Director for International Relations of CERN for hosting the Hon. Minister and delegation of Sri Lankan Physicists on what is **the first scientific delegation from Sri Lanka to visit CERN**. Given that CERN has been in existence since 1954 and a Mission of Sri Lanka has been in Geneva since 1965, it seems unfortunate that we had to wait so long, but as it is said, it is better late than never.

Over time, although CERN has seen a regular flow of visiting dignitaries and delegations from Sri Lanka as part of their itenary in Geneva, and a few expatiate scientists of Sri Lankan origin have done research here through academic institutions of other countries, only one student, Dr. Nadeesha Wickramage attached to the Ruhuna University of Sri Lanka completed her PhD, working with CERN in the CMS experiment through the High Energy Physics Group of Tata Institute of Fundamental Research (TIFR) in India. It is noteworthy that she was enabled this opportunity as a result of the personal contacts her supervisor Prof. W.G.D. Dharmarathne, Senior Professor of Physics, Dean of the Faculty of Technology, University of Ruhuna, who is part of the present delegation, had established with CERN after working in the CMS experiment through Florida State University, following an 'Expression of Interest' that had been signed between CMS experiment and the University of Ruhuna in 2006.

Sri Lanka's cooperation with CERN was initiated about 4 years ago following a visit of Senior Minister for Scientific Affairs Prof. Tissa Witarana to CERN in June 2013. This was built upon during a visit of Minister of Technology and Research Patali Champika Ranawaka to CERN in May 2014.

Dr. Rudiger Voss, the then Head of International Relations of CERN to visit Sri Lanka from 1-4 November 2014, coordinated by the Coordinating Secretariat for Science, Technology and Innovation (COSTI), which marked the first official visit of a CERN official to Sri Lanka. During his visit, Dr. Voss held extensive lectures and talks with academics, researchers

and undergraduates in Colombo and Kandy, officials of the University Grants Commission, the Atomic Energy Authority and the National Institute of Education, as well as several Ministers.

Following discussions held with Dr. Voss in the weeks following his visit to Sri Lanka several areas of cooperation between Sri Lanka and CERN were identified in order to expose Sri Lankan students, teachers, scientists as individuals, as well as universities and research institutes. These were sought to be operationalized through the **signing of an agreement of Expression of Interest (EoI) o**n 25 June 2015, which saw the formalization of cooperation between CERN and the scientific community in Sri Lanka.

- First, the EoI enabled Sri Lankan students and teachers, scientists and research institutes to gain valuable first-hand experience and knowledge in both experimental and theoretical 'particle physics' and related aspects of technologies through the highly-demanded programmes conducted by CERN and also to apply on a competitive basis for the 'Summer Student', CERN's annual 'High-School teacher' and other training programmes;

- Second, for a group of leading physicists, representing the different Universities in Sri Lanka, to visit CERN in order to be exposed to the research work currently underway. This group it was envisaged would create a 'Particle Physics Cluster' in Sri Lanka to engage in scientific cooperation with CERN through networking a virtual institute;

- Third, for Sri Lankan scientists to collaborate with CERN on data analysis projects, for which CERN will donate the computers to Sri Lanka to be used;

- Fourth, CERN to conduct a School of Particle Physics in Colombo, on the lines as it presently does in Bangladesh and several other countries, in order to generate interest on Particle Physics at the high school and university levels;

- Fifth, for Sri Lanka to enter into an International Cooperation Agreement (ICA) to enhance cooperation between Sri Lanka and CERN.

The resulting milestones of tangible delivery have been many;

1. The first tangible achievement in this regard was the participation of Sri Lankan students in the CERN's Sumer Student Programme in 2016, when CERN agreed to accommodate two students from Sri Lanka to participate in

its Summer Student Programme 2016. Following a funding arrangement negotiated by the Mission, CERN provided financial assistance for one student and the Government of Sri Lanka (GoSL) funds the other student (1+1).

Out of 6 students who applied, 2 Sri Lankan students were selected on merit by CERN, (Mr. Gamage Gihan Lakmal from the University of Ruhuna and Mr. Malinda De Silva from University of Colombo).

2. Upon our facing the challenge of meeting the expenses of one student from Sri Lanka to attend the Summer Student Programme, which cost about CHF 6690 per student, Science, Technology and Research Minister Susil Premajayantha, during his first visit to CERN as the new Minister in June 2016, agreed to meet this requirement through support from the National Science Foundation (NSF). The Minister's visit to CERN allowed us to speed up the process of seeking to upgrade GoSL-CERN cooperation by working towards the finalization of the International Cooperation Agreement (ICA).

3. Dr. Rüdiger Voss, Senior Advisor and former Head of International Relations of CERN was invited by the Minister to visit Sri Lanka in September 2016 to attend the Science and Technology for Society Forum (STS Forum) held from 7-10 September 2016. Besides his keynote talk at the Forum, it is recalled that during his visit Dr. Voss engaged in discussions with relevant stakeholders regarding finalizing the International Cooperation Agreement (ICA) between Sri Lanka and CERN.

4. On 08 February 2017 Sri Lanka became the 47th country to sign an **International Cooperation Agreement (ICA) with CERN**. As a follow-up to the implementation of this Agreement, it was agreed that a group of leading scientists representing the different Universities in Sri Lanka would undertake a 'Study visit' to CERN in order to familiarize themselves with the CERN's ongoing research. It was also agreed that a 'Particle Physics Cluster' will be formed in Sri Lanka in order to develop scientific cooperation between Sri Lanka and CERN by networking through a virtual institute. CERN experts will also visit Sri Lanka to engage more closely with the Sri Lankan scientific community and to support the upgrading of teaching of physics in high schools. It was further agreed that CERN would consider donating servers to be used for data analysis projects with CERN.

5. Availing of the close engagement with CERN, Sri Lanka, as the Chair of the Group of Fifteen (G-15) was also able to develop international cooperation between CERN and the Group of Fifteen (G-15) countries and this year marked a significant development in this relation with the signing

of an 'Expression of Interest' between CERN and the G-15 which actively seeks opportunities of cooperation with CERN. The CERN has agreed to host 40 teachers from G- 15 countries this year to participate in a CERN Teacher Programme, which will benefit the science education in the G-15 Member countries. We are hopeful that there will be teachers from Sri Lanka who will participate in this programme.

6. In February 2017, out of 25 Sri Lankans who were among 943 global applicants, CERN selected 4 undergraduate students from Sri Lanka to participate in the 2017 Summer Student Programme. They are

1. Ms. Thenmolie Gnanaguru (Department of Physics, University of Jaffna)
2. Mr. Nimmitha Karunarathna (Department of Physics, University of Colombo)
3. Ms. Kaplanie Madara Liyanage (Department of Physics, University of Ruhuna)
4. Ms. Chamini Shammi Pathiraja Mudiyanselage (Department of Physics, University of Sri Jayewardenepura)

Stepping up from the 2016 1plus1 formula, this year while CERN will fund 2 participants, GOSL has undertaken to fund 2 participants. Ms. Liyanage and Mr. Karunarathna will each receive financial assistance from CERN while GoSL has agreed to fund Ms. Gnanaguru and Ms. Pathiraja. We look forward to welcome the students to Geneva in June and hope that this year also we will be able to see our students perform well in the CERN programme.

7. Although 2 teachers from Sri Lanka were among 312 global applicants to the CERN High School International Teacher Programme 2017, they were not selected by CERN. This remains an area of concern, as it would suggest that our High School teachers might be less competitive, when compared to our undergraduates.

8. The current Study visit to CERN by the Sri Lanka delegation in order to familiarize themselves with the CERN's ongoing research is clearly a crucial step in this process, as it directly brings face to face the point persons between the CERN and Sri Lankan Physicists. We warmly welcome the Sri Lanka delegation consisting of :

- Prof. W.G.D. Dharmarathne, Senior Professor in Physics, Dean of the Faculty of Technology, University of Ruhuna
- Prof. Upul J. Sonnandara, Senior Professor in Physics, University of Colombo
- Prof. P. Ravirajan, Professor in Physics, University of Jaffna
- Prof. S. Rexy Densil Rosa, Professor in Physics, University of Colombo

- Dr. (Mrs) M. L. C. Attygalle, Senior Lecturer, Department of Physics, University of Sri Jayawardenepura

The future

We hope that over the next 3 days, our scientists will be able to discuss further activities to strengthen cooperation with CERN. While I am sure the delegation of scientists from Sri Lanka would have many suggestions, I see two broad axis of action that we should focus on and agree on the way forward.

a) **How Sri Lankan scientists could get more engaged with CERN**, through both, visiting CERN individually and as groups to be exposed to the cutting edge research you conduct, and also the possibility of linking up from Sri Lanka and be participants in CERN projects.

b) **How CERN experts could help on the ground in Sri Lanka**, in the promotion of Particle Physics and Physics in general, among high school students and teachers, undergraduates and scientists.

I wish to thank Dr. Rudiger Voss the former Head of International Relations who remained our main point of contact for the last 3 and half years. He has been a tremendous source of strength to me, as we progressed from an idea of cooperation to signing an agreement and beyond.

Ms. Charlotte Lindberg Warakaulle, the Director for International Relations, who succeeded Dr. Voss a little over a year ago and Prof. Emmanuel Tsesmelis, the Head of Relations with Associate Members and Non-Member States of CERN have also championed cooperation between Sri Lanka and CERNand have helped make this visit a reality. I wish to also thank Ms. Fabiola Gianotti, Director General of CERN, Prof. Rolf-Dieter Heuer, former Director General of CERN and all others in CERN who assisted in their own capacities to foster cooperation between Sri Lanka and CERN.

My Colleague Second Secretary Dilini Gunasekera who will shortly be ending her tenure in Geneva has worked tirelessly on this project, and I am happy that we have been able to fulfill the main tasks the Mission sought to achieve in her time her. Counselor Shashika Somaratne, also a graduate in Science, has worked hard at taking the project forward. Besides the Hon. Minister who has inspired and guided us, from the Colombo end, I must particularly acknowledge the support we received from Prof. Ajith de Alwis, Programme Director, Coordinating Secretariat for Science, Technology and Innovation (COSTI) and Prof. Sirimali Fernando, Chairperson of the National Science Foundation (NSF).

We in the Mission see ourselves as catalysts in a process, of bringing principle actors in this process – the scientific community in Sri Lanka and the scientific community of CERN together. That achieved, this visit should lay the foundation for a Road Map for future Sri Lanka– CERN cooperation, which I hope would lead to exponential growth in this relationship in the years to come, which would benefit future generations in Sri Lanka.

Thank you.