### Joint statement of the Meeting between

### the Italian Minister for Education, Universities and Research, Francesco

## Profumo

and

### the Chinese Minister for Science and Technology, Wan Gang

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The Minister for Education, Universities and Research of Italy, Francesco Profumo and the Minister for Science and Technology of the People's Republic of China, Wan Gang met today in Beijing on the occasion of the official visit of Minister Profumo to China.

The meeting reinforces the strategic partnership between the two Countries in the framework of the bilateral Intergovernmental Committee and further builds on the bilateral cooperation in the areas of research and innovation.

Italy is a traditional important partner of China in the field of science and technology and the two countries recently signed two framework agreements (respectively in October 2010 and June 2011) to enhance cooperation through the creation of three bilateral centers to promote technological transfer and joint activities in the area of design and e-government as well as the establishment of joint research labs.

During today's meeting, the Ministers acknowledged the dynamic role played by research and innovation in the economic and social development of the two Countries and confirmed their commitment to establish a comprehensive, stable and long-term cooperation on a mutually beneficial basis.

In this regard, they commended the efforts made so far for the launch of three new bilateral cooperation centers - the China-Italy Center for Technological Transfer, the China-Italy Design and Innovation Center (CIDIC), and the China Italy e-Gov Center. The two Ministers also welcomed the signature of new agreements: one to establish the first "Joint Laboratory" between IHEP and INFN (named "I2JL") in the areas of high energy physics, astroparticle physics, detector and computing technologies and education and training of young physicists; the other between CNR and CAS for the implementation of a "joint virtual laboratory" on nanotechnologies, which may concentrate on the following research topics: biomedicine, cultural heritage, energy and electrical cars. They appreciated also efforts of ENEA to develop further cooperation in research fields, such as new materials and energy, environment technology, energy saving, with Chinese counterparts.

Finally, the Ministers welcomed the achievements in commercial collaborations between Italian and Chinese companies which are the results of the contacts promoted in the last year under the framework of the China-Italy Center for Technological Transfer and "Italia degli Innovatori" program.

During the meeting the Ministers discussed possibilities of future cooperation and exchanges of researchers in new sectors, including innovation, smart cities, automobile and aerospace. In this last sector, they agreed to implement the "Moon mapping by undergraduates" projects proposed last year. The project will be carried out by ASI from the Italian side and by NRSCC from the Chinese side, according to the attached cooperation document.

It was also decided to reinforce the "China-Italy Innovation Forum" through synergies with other existing bilateral initiatives and platforms, such as the SIEE, in order to strengthen the B2B component of the Forum which already ensures a framework for public-private discussion on goals and priorities of research and innovation cooperation between the two countries. In this regard, the two Ministers agreed to hold a third edition of the Forum in Italy in Autumn 2012.

Beijing, June 18, 2012

<u>Prof. Francesco Profu</u>mo

Prof. Wan Gang

# Sino-Italian Cooperation Program of Moon Mapping by Undergraduates

## 1. Background

On October 24, 2007, Chang'e-1 was successfully launched from the Xichang Satellite Launch Center. Till July 1, 2008, Chang'e-1 has accomplished lunar global data acquisition. Chang'e-1 carries 8 instruments (CCD stereo camera, laser altimeter, Gamma Spectrometers, X-Ray Spectrometers, Low-Energy Ion Detector, High-Energy Solar Particle Detector, Microwave Detector, Interferometer Spectrometer Imager) which have obtained about 1370G of data. These data have been published online at present, available for international planet researchers.

Italy is an important partner of China in EU on science and technology cooperation. Minister Wan Gang accompanied Vice Chairman Xi Jinping to Italy from June 1-4, 2011. During the visit, Minister Wan signed Memorandum of Understanding on Cooperation in Major Research Projects between MOST and the Italian Ministry of Education, University and Research (MIUR) with Deputy Minister Giuseppe Pizza of MIUR and Framework Agreement on Regional Innovation between MOST and Tuscany with Enrico Rossi, President of the Tuscan region. These documents provided frameworks for enhancing cooperation in major science projects, construction of joint labs, connection of hi-tech zones and innovation synergy of industry, university and research institute.

To put the results of VC Xi's visit into effect and to carry out the Memorandum, the Sino-Italian cooperation program of undergraduates mapping the moon together was drafted. Using the data of China's lunar exploration, leading by the well-known lunar scientist Academician Ouyang Ziyuan, undergraduates from the two countries work together to mapping the moon in three dimension, and share the cooperation achievements globally. The cooperation between China and Italy will deepen cooperation in the field of science and education.

# 2. Content of Cooperation

Using the data of Chang'e-1 provided by China, including the data of its eight payload, Chinese and Italian undergraduate students will carry out cooperate research on the lunar surface topography, composition of lunar surface material distribution, characteristics of lunar soil and feature of the space environment. Also they will complete a three-dimensional map of the moon, and publish the results to the world.

During the co-operation study period, students will join the exchange visits and training activities, attend seminars lectured by famous Italian and Chinese scientist for the lunar exploration, visit China's Lunar Exploration Ground Application System and observe the lunar exploration results, and visit the Italian space research institutes.

# 3. Project leaders and Partners

Ministry of Science and Technology, P.R.China (MOST) and the Italian Ministry of Education, University and Research (MIUR) are the sponsor Ministries of this project.

The Italian Space Agency (ASI) and the Chinese National Remote Sensing Center are the project leaders responsible for the organization and implementation of this project.

Chinese universities participating in this project may include China University of Geosciences (Beijing), Peking University, Wuhan University, Nanjing University, Tongji University, Fudan University, Beihang University, etc.

Italian universities participating in this project may include University of Milan Polytechnic University, Turin Polytechnic, the University of Rome, the University of Padova, the University of Pisa, the University of Bologna, etc.

Research and support unit of both sides may include National Astronomical Observatories, CAS (NAOC), the Italian Space Agency (ASI), Italian National Institute for Astrophysics (INAF), etc.

# 4. Funding and Timing

The program is funded By the Chinese Ministry of Science and Technology (MOST) through its relevant schemes and the Italian Ministry of Education, University and Research (MIUR) through the ordinary budget of the Italian Space Agency (ASI). Program implementation period is 2 years.

# PROJECT SCHEDULE

Duration	Project	Content
3 months	Contact of both country	
2 weeks	Visit china	Visit Universities in China
		Visit National Astronomical
		Observatories and scientists'
		lectures
2 weeks	Visit Italy	visit the space agencies and universities in Italy
2 months	develop cooperative research guide, the research team organized	
12 months	collaborative research	
6 months	Organize workshop to discuss the results, publish research papers and results	