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Status of International Lunar Decade

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Abstract

ILD [1] is a global decadal event designed to provide a framework for strategically directed international cooperation for permanent return to the Moon. To be launched July 20, 2019, the 50th anniversary of the giant leap for mankind marked by Neil Armstrong's first step on the Moon, the ILD launch will include events around the world to celebrate space exploration, science, and the expansion of humanity into the Solar System.

The ILD framework links lunar exploration and space sciences with the development of enabling technologies, infrastructure, means of financing, laws and policies aimed at lowering the costs and risks of venturing into space. Dramatically reduced costs will broaden the range of opportunities available in space and widen access to space for more states, companies and people worldwide. The ILD is intended to bring about the efflorescence of commercial business based on space resources from the Moon, asteroids, comets and other bodies in the Solar System.

Broad international collaboration is key to the potential success of ILD. The International Geophysical Year 1957-58 (IGY), that provided the framework for the launch of the space age, engaged over 60 countries - large and small, developed and emerging – in the first global study of the Earth. IGY made possible the understanding of climate change and other global physical processes. ILD addresses the creation of permanent operations beyond the Earth. A decade is necessary because space activities are costly, complex and planning is required for multiple interrelated steps. A decade is also sufficient to demonstrate the feasibility of permanent human presence in space by following a roadmap that drives the emergence of a self-sustaining space economy. The demonstration of feasibility of a self-sustaining space economy will be followed by increasing private investment.

Roadmap

2017 – ILD a topic at multiple conferences

2018 – Endorsement of ILD by G20, UNISPACE+50, UN General Assembly

2019 – July 20 – Launch of ILD at many locations involving international organizations, national organizations, research universities, science museums, space businesses, other in New York, Paris, Moscow, Beijing, Tokyo, Seoul, New Delhi, Istanbul, Brussels, London, Mexico City, Canberra, Berlin, Rome, Kiev, Brasilia, Riyadh, Ottawa, Addis Ababa, Jakarta, Abuja, Abu Dhabi, Copenhagen, Oslo, Stockholm, Helsinki, Tallinn, Riga, Vilnius, Warsaw, Bucharest, Prague, Athens, and many other cities.

2020-2030 The International Lunar Decade

ILD Implementation

Most ILD activities will take place through existing organizations. Overall governance will be provided by the ILD Council that will report to UN COPUOUS and the G20. The Secretariat of the ILD Council will work with national contact points in each participating country. Activities within each state will be funded through state funding but ILD funding will be available on a competitive basis to advance key ILD objectives.

Coordination and secretariat functions including the annual ILD conference and the national contact point system will require funding. Preliminary estimates can be calculated based on funding for programs like the 2015 International Year of Light.

Achieving identified milestones crucial to meeting the strategic goals of ILD will require funding. If the program could be managed through a central function modeled on the EU Horizon 2020 program, then competitive selection of projects could be made involving experts from around the world. Determining budget allocation will require general

agreement on the ILD roadmap with gaps identified. Some gaps could be responded to by national space agencies or programs. Others could engage business, particularly SMEs in competitive tenders. Insofar as many activities in ILD ultimately lead to economic results we can expect most work will be conducted by states and their research organizations and firms. However, some work that involves general infrastructure or capabilities, or the development of standards and policies would benefit all players would be performed by projects funded through competitive tenders.

Coordination and outreach activities. Seminars, workshops, videos, educational materials – preliminary budget estimate $10 million per annum - $100 million over the decade donations sought from governments, foundations, corporations and crowdfunding.

Milestone goals – Designed to engage states with modest space achievements as well as advanced partners. Competitive projects would be structured to promote cooperation among multiple countries as a condition of funding. $1 billion per annum - $10 billion over the decade. National space agencies, ESA and major business would fund own priority projects.

References

[1] https://ildwg.wordpress.com/