

A Proposal for “The [Insert Sponsor Here] L2 Cup” William White, 5330 Main Street #205 Downers Grove IL 60515

Proposal: The L2 Cup would be a crewed spacecraft race modeled on offshore sailing races such as the Rolex Fastnet Race or the Volvo Ocean Race blended with certain financial aspects of the America’s Cup. The proposal is directed at private groups such as Space Adventures, Ltd. that could take a leadership role in organizing an event to facilitate commercial and international synergy on the following objectives:

LEAG Question 3-1: What opportunities are afforded within the current architecture for commercial on ramps and how can these be facilitated?

ILEWG Question 3-2: What are the logical architectures and open implementation to allow effective integration of international elements?

Race Course: The proposed L2 Cup Race would begin in LEO and upon race start the competing spacecraft would proceed to EML-2 where they would perform a mandatory loiter within a specified distance from EML-2. Thereafter, the spacecraft would return to LEO where they would finish the race. The winner would be determined by comparing total elapsed time from the start signal until a successful return to LEO, subject to time adjustments for navigational accuracy or other mission requirements.

Base line competitor: A baseline L2 Cup competitor would consist of one Soyuz spacecraft, one Fregat tug, and two Proton Block D propulsion modules. The configuration upgrades the well-publicized Soyuz lunar circumnavigation mission (lunar free return trajectory) currently marketed by Space Adventures, Ltd. This proposal would seek to encourage deployment of comparable systems by spacefaring (and potentially spacefaring) nations such as China, the European Union and the United States as well as Japan and India, all of which possess the technology base needed to build a configuration functionally equivalent to the Soyuz plus Proton Block DM base-line configuration.

Projected costs: A Soyuz based EML-2 mission would appear to cost somewhere between \$300 million dollars and \$500 million dollars, extrapolating from the \$100 million dollar price suggested for the free return mission currently marketed by Space Adventures, Ltd.

Revenue sources: The L2 Cup proposal contemplates funding packages that blend revenue from paying adventurer/tourist crew members with revenue from media, marketing and sponsorship funding and investment from venture capitalists seeking to share in the prize package awarded to the winner of the first L2 Cup. National governments might also choose to subsidize competitors for purposes of national prestige.

Prize package: The winner of the first L2 Cup would be awarded ownership of media, marketing and merchandizing rights associated with the second L2 Cup. Thereafter the winner of the second L2 Cup would be awarded such rights for third L2 Cup and so on. The America’s Cup sailing event currently uses a similar system of financial incentives potentially creating a self-sustaining recursive economic bootstrap. Media, marketing and merchandizing rights associated with the event would be distinguished from sponsorship and marketing of individual teams.

Foster national pride: Greater media, marketing and sponsorship interest could be achieved by requiring competing vessels “to be substantially constructed within the country in which the Challenger resides” in a manner analogous with the America’s Cup Deed of Gift. The precise definition of “substantially constructed” should be calibrated to encourage entries from as many nations as possible while preserving the national character of each entry. Ideally, the L2 Cup would eventually join the World Cup (soccer) as a source of citizen enthusiasm and national pride.

Supporting lunar exploration objectives: The L2 Cup would facilitate LEAG and ILEWG objectives by:

1. Encouraging the development of redundant systems of spacecraft capable of lunar orbit while funding such development with non-traditional, non-taxpayer based sources; and,
2. Offer synergy with ESA concepts that place greater emphasis on LaGrange Point lunar mission architectures as a supplement to current NASA lunar mission architectures.