LETS Not Start Over on the Human Landing System Program

In April 2021, Appendix N and the Lunar Exploration Transportation Services (LETS) program were announced for the first time. This announcement coincided with a questionable change in Appendix H acquisition strategy. All along, NASA intended to select one Human Landing System (HLS) provider to land first and a second to land 18 months later, however they reversed course by selecting only one. In July, despite lack of Congressional direction and open GAO protests, the agency released a final solicitation – skipping a draft phase – for Appendix N. Appendix N and LETS are advertised as restoring competition to HLS. In reality, they are underfunded, undefined, and duplicate the substantial work done under Appendix H.

Why Appendix N/LETS Won’t Work

- A mission services competition requires having valid competitors. A services contract, by definition, means that a provider is offering a service on something that exists. Without investing in the development of multiple landers – which is what the Appendix H procurement was designed to do – only one competitor can offer services. This will result in only one provider being able to charge whatever they want for future services. Appendix N does not provide comparable development and demonstration funding and is instead only funding low-dollar, duplicative risk reduction studies.

- Appendix N/LETS initial funding is inadequate and has not been authorized or appropriated by Congress. Low millions for Appendix N risk reduction studies in 2022 cannot offset the lack of development funding. Worse yet, it disrupts existing teams and thwarts developmental momentum. In fact, the Appendix H Base Period funding for each team was orders of magnitude higher. Further, LETS would not start until 2023 at the earliest and is unspecified, giving one provider a government-funded two-year head start.

- Appendix N/LETS is tantamount to NASA starting over. The plan requires two new proposal rounds starting from scratch, including evaluations that will take months to complete. This is a wasteful and unnecessary delay. The HLS program held an open competition in 2019 and selected three teams for the Appendix H Base Period. During this time, NASA made more than a $700 million investment in the National Team and Dynetics, including concept development, technology maturation through Preliminary Design Review (PDR), and standards adjudication. Right now, NASA has both open contracts and valid, applicable proposals submitted by the National Team and Dynetics in December 2020.

- NASA’s single award invests in only one HLS competitor, creating an unfair playing field for all future competitions. $3 billion in development funding and a 2-to-3-year head start for SpaceX alone creates an unlevel playing field for LETS services competition.

The Best Way Forward: Award a Second Appendix H Provider Now

- Adding a second provider to the current, open, and valid Appendix H HLS acquisition lowers risk, utilizes the taxpayers’ investment, ensures ongoing competition, and provides the robustness needed to ensure a safe, rapid, and sustainable return to the Moon.

- Adding a second provider to the Appendix H Broad Agency Announcement (BAA) is legal, logical, and feasible. The contracts and proposals are still valid, and the designs have passed PDR.

- Maintaining at least two competitors protects against technical issues encountered by either provider – as happened under both the Commercial Crew and Commercial Cargo programs.

- Starting over will cost more over the life of the program versus selecting a second provider now. For example, the combined price of both SpaceX and the National Team at ~$9 billion is nearly the same as the Commercial Crew program (~$8.3 billion) and only about half of the total NASA request of ~$16 billion for two providers in the September 2020 Artemis Plan.

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