

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***¹ 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.

¹ Chvotkin, Alan, "NASA Can Use Appendix H to Make Additional Awards for its Human Landing System (HLS) Program, accessed <https://spacepolicyonline.com/wp-content/uploads/2021/07/Chvotkin-white-paper.pdf>