## LSIC | MOSA Working Group

## - LSIC Modular Open System Approach (MOSA) Working Group

- Goal:
- Document community feedback on recommended lunar MOSA activities
- Compile existing efforts and identify overlap
- List systems that could benefit from MOSA
- Perform system decompositions to find critical interfaces \& what requirements are needed to ensure interoperability
- Plan
- Each LSIC focus group is participating and has a POC
- Cross focus group participation is encouraged

- Points of Contact
- Lead/Coordinator: James Mastandrea
- Systems Engineer: Kristin Jaburek
- Dust Mitigation: Jorge Núñez
- Excavation \& Construction: Claudia Knez
- In Situ Resource Utilization : Jodi Berdis
- Surface Power: Samantha Andrade
- Extreme Environment: Jamie Porter
- Extreme Access: Angela Stickle


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## Collecting Feedback from the Community

1. What are the existing efforts on standards and interoperability in E\&C? Are they applicable to the moon?
2. Within E\&C what would you designate as a critical interface? What is the boundary that interfaces with the larger system?
3. What do you want to get out of the MOSA working group? Are their any interoperability barriers to your technology development?

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## Updates on Confluence

LSIC Home<br>Created by Andrea Harman, last modified on Mar 12, 2022

Lunar Surface Innovation


Confluence Training Sessions
If you're just getting to know Confluence, please contact @Andrea Harman for support and training.

## Focus Areas

| Dust Mitigation (DM) | Excavation \& Construction (E\&C) | Extreme Access (EA) |
| :---: | :---: | :---: |
| Extreme Environments (EE) | In Situ Resource Utilization (ISRU) | Surface Power (SP) |

Working Groups
mosA
Visit LSIC's external website here: Isic.jhuapl.edu
Visit LSIC's Linkedln site here: https://www.linkedin.com/groups/13861869/
LSIC's code of conduct for members is available here.

Existing Interoperability Standards \& Programs
Existing Interoperability Standards \& Programs
Created by Kristin Jaburek, last modified on Mar 18, 2022
The following existing standards and programs have been collected from LSIC Community through Focus Group and Subgroup meetings. Thank you for your in Anything we missed or understood incorrectly? Drop a comment on this page and let us know.
Existing Interoperability Standards \& Programs

| Category | Existing Standards \& Programs | Link |
| :--- | :--- | :--- |

Communications

Existing Standards \& Programs
International Deep Space
Interoperability Standards
Interoperability Standards

- International Communication
System Interoperability Standards
(ICSIS)
Interoperability Plenary (IOP) https://www.interoperabilityplenary.org/home.aspx


## Focus Group Suggested Items for MOSA

## Focus Group Suggested Items for MOSA

eated by kristin Jaburek on Mar 21, 2022

The following suggested items to consider for MOSA efforts were gathered from the Surface Power Focus Group during the February 24, 2022 Telecon. | Category | Focus Group Suggested Items to Consider for MOSA Efforts |
| :--- | :--- |
| Valta |  |

Voltage/Frequency/Current
AC Frequencies, Rated Power Levels, Standard Voltage Power Sets for Different Applications, Long
Distance Power Transmission Voltage Standards, Acceptable Power Losses, Cell Voltage Monitoring Distance Power Transmission Voltage Standards, Acceptable Power Losses, Cell Voltage Monitoring,
Power Management, Power Electronics, Interfaces to High voltage Arrays, Tolerance to Multiple Power Management, Power Electronics, Interfaces to
Power Sources, Customer Power Delivery Standards

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## Upcoming Telecon

Artemis' Graphical User Interface Standards

- Chad Thrasher

NASA's Artemis Campaign Development Division Systems Interoperability Lead

- Date: April $6^{\text {th }}$ at $11: 00 \mathrm{AM}$ ET

