**IEEE *P1937.1* Working Group**

**Writing team meeting (teleconference)**

**Meeting Minutes**

***August 30, 2019***

***9:00 to 10:50, Tencent Meeting***

*Haiying Lu, CESI*, Working Group Chair

Recorded by Ying Mai, Working Group Secretary

1. The infrared draft was further improved by *Pingyuan* Liu*, China Southern Power Grid Co. Ltd* and submitted to editor *Yang* *Zhang* before September 6. The main improvements are as follows:

- Upwardly compatible with the interface content of mainframe (such as 4.2.1), which need not be reflected in the standard again;

- Reorganize the draft structure according to the outline and interface types (mechanical, power supply and data) summarized in the last meeting.

2. The LiDAR payload in the draft was further improved by *Guangcai Xu, GreenValley Inetrnational*, and submitted to editor *Yang* *Zhang* before September 6. The main improvement contents are as follows:

- Further supplement the current version and improve phrases and phrases into more complete and normative statements;

- The description of power consumption in 5.2 is wrong, so it is best to give the interval;

- Communication data format and protocol, further communicate and improve with DJI;

- Provide more detailed information related to load interface such as pictures and detailed rules.

3. P1937.1 Draft and Outline Improvement:

1. Added chapters and contents of architecture and general requirements in the outline of 1937.1.
* Refer to T/CEC 159-2018 Technical Specification for Extended Interface of Substation Robot Patrol System (*Pingyuan Liu*'s suggestion)
	+ *Liangliang Yang,DJI* will write the first draft of the interface system architecture diagram, explaining the relationship between .1 and .n，introducing the standard SCOPE. These need to be completed before September 6 and summarized to Zhang Yang;
* In this draft, general requirements, such as safety, reliability and stability, shall be described in 1.1 scope.
1. **E**nvironmental adaptability, such as humidity, salt spray, vibration, waterproof and other general performance requirements, is recommended to be described as a separate chapter (pending);
* *Liangliang* *Yang* will sort out and provide a general template/outline, send it to *Yang Zhang*, and submit it before September 6;
1. Unified content of communication data format and protocol in data interface requirements (pending);
* DJI provides the list of communication data formats and communication protocols, which will be discussed by members of each group, and whether it can meet the needs of various load applications, and shall be submitted before September 6;
1. Scalability, whether it is an interface performance requirement, and which part is more appropriate (pending);
2. Chapter VI: How to Compile Evaluation and Test Methods (pending)
* Liu Pingyuan: including the list of framework requirements and experimental methods, refer to the implemented IEC standards
* **Note:** IEEE standard can only quote the published English standard content. If you want to quote the national standard or line standard, how to deal with it (to be discussed)
1. Yang Zhang will refine the Chinese guidance, such as power interface, and delete the contents that are not needed.

4, submit documents and materials list summary:

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| --- | --- | --- |
| Deadline | Submission of materials | Responsible units and personnel |
| September 6th | Draft infrared load interface | Liu Pingyuan, Southern Power Grid |
| September 6th | Draft LiDAR payload interface | Xu Guangcai, Beijing GreenValley |
| September 6th | Architecture block diagram | Yang liangliang, DJI |
| September 6th | Universal template for environmental adaptability |
| September 6th | Communication data format and protocol list |

 5. Others

 *Ying* *Mai,* *IGSNRR* will contact China TOPRS Technology Co., Ltd, set the time, hold a group meeting, and discuss optics and Beidou outline (next Wednesday or Thursday).

 The WG adjourned at 10:50

* **Attachment**

List of participants:

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|  | **Participants** | **Affiliations** |
| 1 | Haiying Lu卢海英 | CESI（中国电子技术标准化研究院） |
| 2 | Liangliang Yang 杨亮亮 | DJI (大疆) |
| 3 | Guangcai Xu 徐光彩 | GreenValley Inetrnational 北京数字绿土科技有限公司 |
| 4 | Ying Mai买莹 | IGSNRR（中国科学院地理科学与资源研究所） |
| 5 | Pingyuan Liu刘平原 | China Southern Power Grid Co. Ltd(中国南方电网) |
| 6 | Yang Zhang张阳 | China Energy Engineering Corporation Limited(Energy China) 中国能建集团 |