**IEEE *P1939.1* Working Group**

**Meeting Minutes**

***March 11, 2019***

***09:00 AM to 17:00 PM BEIJING***

***Chengdu, China***

Xiaohan Liao IGSNRR, Working Group Chair

Recorded by Ziyang Liu, Working Group Secretary

and Chenchen Xu, Working Group Editor

Before the general meeting started, *Alexzander Gelman*, the *Sponsor* (dial in) and *Meng Zhao* from *IEEE China* gave presentations to introduce the IEEE structures, functions and the processes of standard development.

1. Call to Order
   * Introduction and Declarations of Affiliations
   * Introduction to member entities

Chair *Xiaohan Liao* called the meeting to order at 10:40 a.m. All the present participants (include dial in ones) introduced themselves and their entities in turn.

* + Goal of this meeting

Chair *Xiaohan Liao* presented the goal of the Meeting: *Establishment of the1939.1 Working Group* and *Making a Working Plan*

* + Establishment of WG Membership (applicable for the first meeting)

The member status is showed at attachment.

* + A sign in sheet captured attendance.

1. Approval of the Agenda

Chair *Xiaohan Liao* presented the agenda document of P1939.1 agenda.

Motion #1: Move to approve the of Agenda, *IEEE\_PlenarySchedule\_P1936-1\_P1937-1\_1939-1\_FM.docx*

* + Moved by: *Xiandong Dong*, *Xiaomi*
  + Seconded by: *Chunhai Hao, Hebei Tianhai surveying and Mapping*

Motion passed unanimously.

1. Review/Approval of WG Policies and Procedures (P&P)

Chair *Xiaohan Liao* presented the WG P&P document of P1939.1.

Motion #2: Move to approve the WG P&P*1939-1 IPDD WG\_P&P\_unapproved.docx to 1939-1 IPDD WG\_P&P\_approved.docx .*

* + Moved by: *Xiandong Dong, Xiaomi*
  + Seconded by: *Shuangli Han, Tianjin Wanmao Science and Technology Co., Ltd*.

Motion passed unanimously.

1. IEEE Patent Policy

Chair *Xiaohan Liao* presented [the Patents](https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf) slide to the WG and made a call for patents at 11:40 am.

No potentially essential patent claims were declared, and no holders of potentially essential patents were identified.

1. Introduction of WG

Chair *Xiaohan Liao* presented a PPT to introduce the general information and working plan of P1939.1 WG.

1. Election of Officers

Motion #3: Move to elect/appoint of Vice-Chair: nominate *Wei Hong* from *Xiaomi*, as WG Vice-Chair. If no objection received by March 26th 2019, *Wei Hong* from *Xiaomi* will be the WG Vice-Chair.

* + Moved by: *Haiying Lu, CESI*
  + Seconded by: *Chenchen Xu, IGSNRR*

Motion passed unanimously

Motion #4: Move to elect/appoint of Secretary: nominate *Ziyang Liu* from *China Mobile Chengdu Institute of Research and Development* as WG Secretary. If no objection received by March 26th 2019, *Ziyang Liu* from *China Mobile Chengdu Institute of Research and Development* will be the WG Secretary.

* + Moved by: *Xiandong Dong, Xiaomi*
  + Seconded by: *Ning Li, Huawei*

Motion passed unanimously

Motion #5: Approve *Chenchen Xu* from *IGSNRR*, as WG Editor.

* + Moved by: *Haiying Lu, IGSNRR*
  + Seconded by: *Ning Li, CESI*

Motion passed unanimously

Motion #6: Approve *Xiandong Dong* from *Xiaomi*, as WG Co-Editor.

* + Moved by: *Haiying Lu, IGSNRR*
  + Seconded by: *Chenchen Xu, IGSNRR*

Motion passed unanimously

1. Task Assignment Discussion

Chair *Xiaohan Liao* presented a grouping blue print to the P1939.1 WG. The details will be able to discussed at the next meeting.

Motion #7: Approve to

* form **IEEE 1939.1.1**: Gridding subgroup to lead the discussion on gridding technology standards, prepare the content and report to P1939.1 while *Fuhu Ren* from *Collaborative Innovation Center For Geospatial Big Data, Peking University* is appointed as chair. Participants of interest to date include *IGSNRR.*
* form **IEEE 1939.1.2**: Remote sensing subgroup to lead the discussion on remote sensing data acquirement, prepare the content and report to P1939.1 while *Xiaohan Liao* from *IGSNRR* is appointed as chair. Participants of interest to date include *GreenValley International/ Tianjin Wanmao Science and Technology Co., Ltd./China Southern Power Grid Co., Ltd/China TOPRS Technology Co. Ltd.*
* form **IEEE 1939.1.3**: Communication & Networking subgroup to lead the discussion on Communication and Networking at low altitude, prepare the content and report to P1939.1 while *Yu Su* from *China Mobile Chengdu Institute of Research and Development* is appointed as chair. Participants of interest to date include *Huawei*
* form **IEEE 1939.1.4**: Identification & Authentication subgroup to lead the discussion on Identification and Authentication for UAVs, prepare the content and report to P1939.1 while *Haiying Lu* from *CESI* is appointed as chair.Participants of interest to date include *China Mobile Chengdu Institute of Research and Development/Huawei/Xiaomi*
* form **IEEE 1939.1.5**: Path planning subgroup to lead the discussion on planning of the air routes for UAVs, prepare the content and report to P1939.1 while *Xiaohan Liao* from *IGSNRR* is appointed as chair.Participants of interest to date include*Collaborative Innovation Center For Geospatial Big Data, Peking University/Xiaomi/Honeywell/ CAP/China Southern Power Grid Co., Ltd/Huawei/China Mobile Chengdu Institute of Research and Development*
* form **IEEE 1939.1.6**: Operation & Management subgroup to lead the discussion on UAVs’ operation and management in air routes, prepare the content and report to P1939.1 while *Jianping Zhang* from *the 2ed Institute of CAAC* is appointed as chair.Participants of interest to date include *IGSNRR/Xiaomi/CAP/Tianjin Wanmao Science and Technology Co., Ltd./Sense Global*
  + Moved by: *Chenchen Xu, IGSNRR*
  + Seconded by: *Xiang Tan, IGSNRR*

Motion passed unanimously

1. New Business

Next meeting:

* + IEEE P1939.1 1st Teleconference May, 2019 -
  + IEEE P1939.1 2nd face-to-face meeting July 30, 2019 Suzhou China
  + IEEE P1939.1 3rd face-to-face meeting November , 2019 Chengdu China
  + IEEE P1939.1 4th face-to-face meeting March, 2020 Guangzhou China

1. Meeting to adjourn

Motion #8: Move to adjourn

* + Moved by: *Haiying Lu, CESI*
  + Seconded by: *Bin Ren, JOUAV*

Motion passed unanimously.

The WG adjourned at 12:30 pm.

**Attachment**

List of participants：

a. IEEE staff present:

Vitoria Wang, IEEE-SA

Meng Zhao, IEEE China

Zhongkai Deng, IEEE China

Alexander D. Gelman(Dial in), IEEE-SA

b. Voting Members present:

|  |  |  |
| --- | --- | --- |
| **Participants** | **Affiliations** | **Voting status** |
| Xiaohan Liao廖小罕 | IGSNRR（中国科学院地理科学与资源研究所） |  |
| Xiang Tan谭翔 | IGSNRR（中国科学院地理科学与资源研究所） |  |
| jianli Liu刘见礼 | IGSNRR（中国科学院地理科学与资源研究所） |  |
| Chenchen Xu徐晨晨 | IGSNRR（中国科学院地理科学与资源研究所） | V |
| Ying Mai买莹 | IGSNRR（中国科学院地理科学与资源研究所） |  |
| Xuemei Yu余雪梅 | CESI（中国电子技术标准化研究院） |  |
| Zhang Zhang张璋 | CESI（中国电子技术标准化研究院） |  |
| Wenfeng Wang王文峰 | CESI（中国电子技术标准化研究院） |  |
| Haiying Lu卢海英 | CESI（中国电子技术标准化研究院） | V |
| Ning Li李宁 | Huawei (华为) | V |
| Chigang Peng彭炽刚 | China Southern Power Grid Co., Ltd(中国南方电网) | V |
| Zhihai Xu许志海 | China Southern Power Grid Co., Ltd(中国南方电网) |  |
| Yilong Chen陈义龙 | China Southern Power Grid Co., Ltd(中国南方电网) |  |
| Wenjun Han韩文军 | State Grid Corporation of China (SGCC) (国家电网) | V |
| Bin Ren任斌 | Chengdu JOUAV （成都纵横） | V |
| Xiaoyan Li李小燕 | Chengdu JOUAV （成都纵横） |  |
| Xuejun Duan段学军 | Chengdu JOUAV （成都纵横） |  |
| Wei Hong 洪伟(Dial in) | Xiaomi, Inc.（小米） |  |
| Xiandog Dong董贤东 | Xiaomi, Inc.（小米） | V |
| Xianding He 何先定 | Chengdu Aeronautic Polytechnic(CAP)（成都航空职业技术学院） | V |
| Bin Tang唐斌 | Chengdu Aeronautic Polytechnic(CAP)（成都航空职业技术学院） |  |
| Shulin Yu余姝霖 | Chengdu Aeronautic Polytechnic(CAP)（成都航空职业技术学院） |  |
| Yu Yuan 袁昱(Dial in) | Senses Global Corporation | V |

c. Non-Voting Members present (Promise to join IEEE entity membership):

|  |  |  |
| --- | --- | --- |
| **Participants** | **Affiliations** | **Voting status** |
| Tao Liu刘涛 | CAAC (Chengdu) UAV system Co., Ltd.（中航（成都）无人机系统股份有限公司） |  |
| Pengxin Ding丁鹏欣 | The Second Research Institute of Civil Aviation Administration of China（中国民航局第二研究所） |  |
| Honglian Ding丁洪亮 | KEWEITAI （深圳科卫泰） |  |
| Qinghua Guo郭庆华 | GreenValley Inetrnational （北京数字绿土科技有限公司） |  |
| Hong Liu刘红 | Chengdu UAV Industry Association （成都市无人机产业协会） |  |
| Liangliang Yang杨亮亮 | DJI（大疆） |  |
| Minrui Zhang张敏睿 | DJI（大疆） |  |
| ChunHai Hao郝春海 | Hebei Tianhai surveying and Mapping（河北天海测绘） |  |
| Yu Su苏郁 | China Mobile Chengdu Institute of Research and Development（中国移动（成都）产业研究院） |  |
| Jian Zhou 周剑 | China Mobile Chengdu Institute of Research and Development（中国移动（成都）产业研究院） |  |
| Ziyang Liu 刘子扬 | China Mobile Chengdu Institute of Research and Development（中国移动（成都）产业研究院） |  |
| Zhiyun Zhai 翟智云 | CTRS ENTERTAINMENT （中交遥感载荷科技有限公司） |  |
| Huang Tan谭晃 | HAWR EYE TECHNOLOGY（鹰眼电子科技有限公司） |  |
| Fuhu Ren任伏虎 | Collaborative Innovation Center For Geospatial Big Data, Peking University（北京大学时空大数据协同创新中心） |  |
| Shuangli Han韩双立 | Tianjin Wanmao Science and Technology Co., Ltd.（天津市万贸科技有限公司） |  |
| Xinlei Xu徐鑫磊 | Guangzhou Hopong Co., Ltd（广州市红鹏直升机遥感科技有限公司） |  |
| Yanli Xue薛艳丽 | China TOPRS Technology Co., Ltd.（中测新图） |  |
| Jie Bai白洁 | China TOPRS Technology Co., Ltd.（中测新图） |  |
| Xueli Zhan詹学丽 | Institute of Electronics CAS(中国科学院电子学所) |  |
| Yanfei Wang 王岩飞 | Institute of Electronics CAS(中国科学院电子学所) |  |
| Shifang Wu 巫世芳 | TTA （北方天途航空技术发展（北京）有限公司） |  |
| Yi Tang杨苡 | TTA （北方天途航空技术发展（北京）有限公司） |  |

d. Observers:

|  |  |  |
| --- | --- | --- |
| **Participants** | **Affiliations** | **Remarks** |
| Xiaohang Wen文小航 | CUIT（成都信息工程大学） |  |
| Yajun Mei 梅亚军 | JXTD（北京捷翔天地信息技术有限公司） |  |
| Yufeng Liu刘宇丰 | HoneyWell（霍尼韦尔） |  |
| Yong Liu刘镛 | China Civil Aviation Emergency Rescue Alliance（中国民用航空应急救援联盟 ） |  |
| Ramdas Chandrashekar(Dial in) | Advantrak Technologies P Ltd. | Participated less than 50% of meeting’s duration |
| Celeste Barnes(Dial in) | University of Lethbridge | Participated less than 50% of meeting’s duration |