

# G3-PLC Alliance



## INFOLETTER No. 01/18

### I. Technology & References

#### Electrical grid characterization as a PLC channel

Using the existing electrical grid infrastructures as a communication channel is definitely a real opportunity for a fast and affordable deployment of smart grid or smart city projects. But how to be sure that the grid will support powerline communication? Based on a three decades experience on PLC researches, TRIALOG has engineered and released a powerful field tool allowing to automatically evaluate the ability of an electrical grid to support PLC. This tool performs fundamental electrical measurements such as complex access impedance, noise spectrogram and channel transfer function between two points of the electrical grid up to 3 phases simultaneously. The field measurements execution is fully automated, is controlled through Wi-Fi, and can easily be performed by non-PLC experts. Thanks to its long-standing expertise and experience, TRIALOG post-processes the collected data and extracts the relevant KPIs for PLC-related decision-making.

More information at [http://upload.trialog.com/PLC\\_channel\\_charac.pdf](http://upload.trialog.com/PLC_channel_charac.pdf).



#### Latest G3-PLC specification accepted by ITU

Last August the latest G3-PLC specification (the march 2017 revision) has been approved and released by ITU. This latest version of G.9903 (08/17) can be found on the ITU website at <https://www.itu.int/rec/T-REC-G.9903-201708-1/en>.

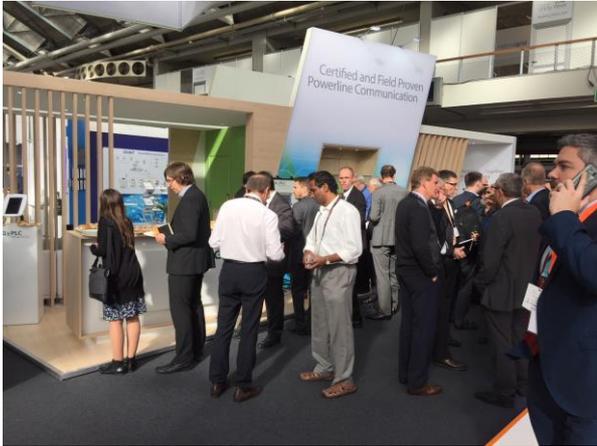
From July 2017, the reference for certification already was G3-PLC revision March 2017, but from now we can simply refer to ITU G.9903 (08/17).

Thank you to all members participating in Workshop 1 for all your contributions and reviews!

## II. Events & Fairs

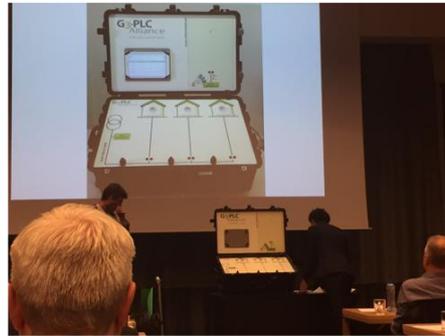
### G3-PLC in European Utility Week (EUW17) in Amsterdam

Amsterdam hosted last year's European Utility Week on Oct. 3-5, 2017. The G3-PLC Alliance booth had a central presence with very visible branding throughout the exhibition floor. The Alliance showcased G3-PLC certified products and met many local DSOs and industry partners.



The exhibition was a complete success exceeding the goals set, demonstrating to the industry and the customers that G3-PLC is a proved mature solution for smart grid markets and services. As a membership organisation, it is our members that contribute to G3-PLC. Thanks to our many active members in Amsterdam, the Alliance had a significant presence that contributed to the high level of visitors at the booth.

The second of two General Assemblies in 2017 was held during the EUW in Amsterdam. Here, members were informed about the latest changes to the specifications, activities within the alliance, ongoing deployments and new members. Additionally, the portable Linky demonstration suitcase was also introduced to members of the Alliance.



Placed in a carry-on luggage, the demonstration suitcase is a marketing tool to demonstrate the reality of G3-PLC connectivity. It may be used during exhibitions and meetings with potential G3-PLC customers. Alliance members can integrate their devices to the demonstration suitcase. Furthermore, the interoperability between the Linky meters can also be demonstrated.



### IEEE SmartGridComm 2017 in Dresden

The 8th IEEE International Conference on Smart Grid Communications (SmartGridComm 2017) was held in Dresden, Germany from October 23rd to 26th. The event was sponsored by G3-PLC Alliance. [IEEE SmartGrid 2017](#) brought together researchers and practitioners from academia, industry, and government institutions, with backgrounds in communications, energy, control, signal processing and information systems to exchange ideas, explore enabling technologies and share experiences. One of the main features of SmartGridComm is strong industry participation. The conference had a series of keynote and experts' panel talks including a keynote speech from G3-PLC Alliance, as well as an Industry Exhibit centered for Smart Grids.



### G3-PLC present at six key industry events in 2018

In the light of successful appearances at leading international events in 2017, G3-PLC Alliance has decided to expand its presence at key conferences and fairs across the globe this year: While the alliance presented itself at five events last year, it will visit at least six events in 2018.

As in 2017, the starting point will be the Indian Smart Grid Week from 5 to 9 March 2018 in New Delhi. In the following month, G3-PLC Alliance will be present at ISPLC 2018 in Manchester from 8 to 11 April, at China Utility Week from 18 to 19 April in Shanghai and at the Istanbul Smart Grid Congress from 25 to 26 April. Moreover, experts from the Alliance will present the advantages of G3-PLC at African Utility Week from 15 to 17 May 2018 in Cape Town. In winter 2018, the European Utility Week from 6 to 8 November in Vienna marks the final entry in this year's schedule of trade fairs and events.

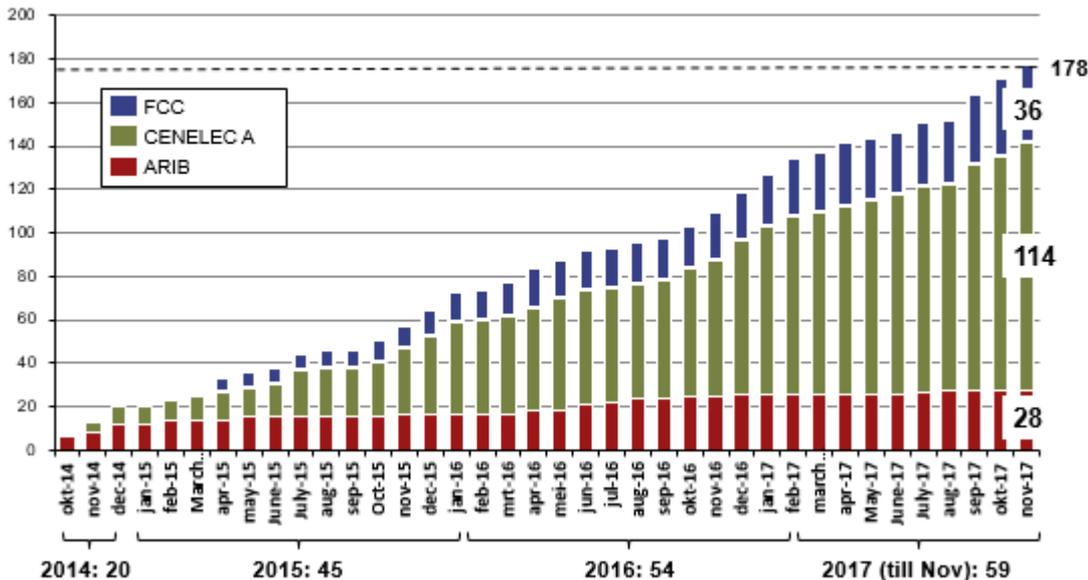
## III. Administration & Organization

### Number of certified devices continues to increase steadily

In total, we now (December 1st 2017) have 178 certified devices consisting of 28 devices for Arib, 114 for CENELEC A and 36 for FCC. These 178 certified devices consist of 109 platforms and 69 products from a total of 30 different

vendors. New certifications are ongoing at both certified labs (TÜV in Japan and LAN in France). A detailed overview of all certified G3-PLC devices is available on the G3-PLC website: <http://g3-plc.com/content/g3-plc-certified-products>.

**Number of certified devices for G3-PLC (cumulative)**



**Five new international members and 45 newly certified devices**

The G3-PLC Alliance further expands its footprint as it welcomes new members from across the globe: Zhejiang Reallin Electron and Yantai Dongfang Wisdom Electric from China, NIK-Elektronika and Energo Control from the Ukraine and NXP from the USA. The Alliance now comprises 88 companies, jointly promoting the use of G3-PLC in smart grid applications. All members are important stakeholders in the smart grid ecosystem – utility companies, equipment and semiconductor manufacturers, system integrators, IT vendors as well as automotive companies. Not only the ongoing increase of its members underlines the success of G3-PLC and the G3-PLC Alliance, also the number of certified products: In 2017 alone, so far 45 new devices have passed the process. In total, 164 certified devices from 30 different vendors are available now.