



#### **INFOLETTER - SPECIAL EDITION**

### New reference version for G3-PLC certification

In April this year, the latest release of the G3-PLC specification was announced. This new release considers all the contributions which have been approved by the WS1 team over the last two years. A total of 23 contributions (so called CCTT's) have been integrated in a consolidated version of the G3-PLC specification dated March 2017. The Alliance Reference Version includes all approved contributions and can be found on the website (please login to g3-plc.com before opening link): http://www.g3-plc.com/what-is-g3-plc/g3-plc-specifications.

## This new revision brings:

- New functionalities for new intended use cases (charging station to EV communications, building
- Better performance (robust modulation try before a route repair, new neighbor table, maxCSMA Window in case of broadcast, a route is established after association...) that brings more bandwidth for your applications
- Enhanced interoperability (various clarifications for a common understanding).

Reference

As illustrated in the figure below, for CENELEC and for FCC, the new reference for our certification program will be the March 2017 updated specification. The certification program for ARIB (Japan Route B) market will keep using the August 2014 version as the reference.

#### G3-PLC Macro versions Published by SDO's Alliance Reference (ITU, IEEE) CENELEC ARIB Route B FCC /USA, Europe, other) [Japan] (Europe, other) (10-2012) Interim certifi-(05-2013)G.99.03 (05-2013) +CCTTs 121/122/171 Backward compatibilit + ETTs DLL30/DLL32?PHY14 (02-2014) Macro version B (Aug 2014) + 26 CCTT's Updated 10/2014 Macro version C (Oct 2014) (Oct 2014) G.9903 (02-2014 + 26 CCTT's +8 CCTTs +8 CCTTs + 8 CCTT's Updated 04/2015 Macro version C Macro version A (Apr 2015) (Apr 2015) + 23 CCT's + 23 CCTTs + 23 CCTT's Updated 03/2017 Macro version / (March 2017) Macro version ( (March 2017) G 9903 Reference version for G3-PLC certification

G3-PLC specification profiles - overview

The contributions which were approved by WS1 have also been submitted to the ITU Working Group so that the upcoming version of the G.9903 standard will be aligned with this G3-PLC Alliance reference version. We expect ITU to publish the updated G.9903 standard at the end of this summer.

#### New release certification test tools for CENELEC/ARIB/FCC has been issued

Together with Trialog and our certification test labs in France (LAN) and Japan (TÜV) we have been working on a new release of the test tools for certification. This new release of the test tools includes new tests covering the changes in the G3 specification as explained above and further improves the scope of certification.

For example, a performance test has been added that validates the computation of the LQI (Link Quality Indicator) value based on the SNR of the received frame. Also, specific timings measurements have been improved so we now can expand use of bootstrap and relaying performance tests to FCC/ARIB which were so far limited to CENELEC certification.

We are pleased to inform you we have now issued the new release of the certification test tools for CENELEC/ARIB/FCC to our test labs LAN and TÜV. The labs are using this new release as from July 1<sup>st</sup> 2017. With the old certification test tools, the labs are allowed to start certification testing until August 1<sup>st</sup> for platforms and until October 1<sup>st</sup> for products. After this one month grace period for platforms and three months for products, the old test tools can no longer be used for certification testing to avoid maintaining multiple test tools and because the old reference version will be obsolete.

Of course, all issued certificates remain valid and listed on the G3-PLC website. Certificates issued on basis of the new test tools will reference, for CENELEC A and FCC, the new release of the G3 specification.

#### Adapted performance thresholds for CENELEC/FCC products

With this new release of the G3-PLC specification the technology has become even more mature and also the chips have become more efficient. Therefore, it has been agreed that several of the performance thresholds used in the product certification have been adapted. The performance thresholds can be found in the Performance Test Specification (chapter 1.4.1 List of PICS related to performance) which is available on the website for members of the G3-PLC Alliance: <a href="http://www.g3-plc.com/what-is-g3-plc/g3-plc-certification/">http://www.g3-plc.com/what-is-g3-plc/g3-plc-certification/</a>.

#### Status of certification

Since we opened certification in September 2014, nearly 150 devices have been certified by our test labs in France and in Japan. This total includes 96 platforms and 52 products from 28 different vendors. On our website, you can find details of all certified devices as well as further information about the certification program: <a href="http://www.g3-plc.com/certified-products-platforms/">http://www.g3-plc.com/certified-products-platforms/</a>.

# Number of certified devices (cumulative)

