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Reference: Documents 1/39, 1B/37 and 6A/159,  
Annexes 1 and 2 to Document 1A/135  
and Annex 5 to Document 1C/135

**Document 1A/170-E**  
**Document 1C/65-E**  
**10 September 2009**  
**English only**

## **North American Broadcasters Association (NABA)**

### **NEW INFORMATION ON MEASUREMENT GUIDELINES FOR BROADBAND PLT**

#### **1 Introduction**

The North American Broadcasters Association (NABA, [www.nabanet.com](http://www.nabanet.com)) is an association of broadcasters in Canada, Mexico, and the United States. NABA is, thus, in a position to present the technical viewpoints of the most authoritative association of professional North American Broadcasters in television and sound programme production, post-production, and distribution for terrestrial, satellite, and cable broadcasting.

NABA is a Sector Member of ITU-R and a long-time participant in ITU-R Study Groups, Working Parties, Task Groups, Rapporteur groups, etc. NABA numbers among its members Chairmen, Vice-Chairmen and members of the above groups. NABA also participates widely in the ITU work on radio, television and multimedia services and has a strong interest in ITU-R studies on spectrum management and engineering and, in particular, the technical aspects of spectrum sharing and interference management.

#### **2 Scope**

The aim of this contribution is to draw the attention to recent documentation relied on by the FCC in its decision to adopt PLT systems (also known as BPL in the United States).

The remand by the Court<sup>1</sup> states, in part, that the FCC:

“shall make available for notice and comment the unredacted “technical studies and data that it has employed in reaching [its] decisions,”

“shall either provide a reasoned justification for retaining an extrapolation factor of 40 dB per decade for Access BPL systems sufficient to indicate that it has grappled with the 2005 studies, or adopt another factor and provide a reasoned explanation for it.”

<sup>1</sup> The previously unpublished studies conducted by FCC technical staff were released by the FCC in response to the American Radio Relay League Freedom of Information Act (FOIA) request as part of their appeal opposing the FCC’s adoption of PLT (BPL) service rules the ARRL believed certain to harm amateur radio operations. The ARRL in its outline of events (see <http://www.arrrl.org/tis/info/HTML/plc/BPLredactions.pdf>) notes that it filed a notice of appeal with the US Court on 10 October 2006. The ARRL made oral arguments before a three-judge panel of the Court on 23 October 2007. The subsequent U.S. Court of Appeals Decision was made on 25 April 2008 (see <http://pacer.cadc.uscourts.gov/common/opinions/200804/06-1343-1112979.pdf>).

NABA notes that the FCC's unredacted test results and conclusions are particularly valuable for ascertaining the potential for interference to the Broadcasting Service and other radiocommunication services allocated frequencies below 80 MHz and critical to understanding the unredacted information of interest. The new information included the facts that:

1. Strong fields follow the power line for 0.5 mile (805 meters).
2. Emission from the PLT device does not act as a point source; virtually no decay 230 meters from the injection point.
3. ARINC interference distance is at least 5 miles (8 km).
4. In ITU Residential noise, PLT increases the noise floor in the 15 and 25 MHz bands by 30 dB in more than 58 percent of locations and by 40 dB in some locations.
5. The conclusion by the FCC laboratory that BLT/PLT should be banned in HF bands on overhead MV lines to protect HF land mobile and to eliminate the risk of sky wave interference.

### **3 Conclusions**

NABA continues to believe that it is an essential to devise and to specify interference criteria for all devices operating in the radiocommunication bands, including the broadcast bands, which are without an allocation in the Radio Regulations as outlined in NABA ITU-R Documents 1/39, 1B/37 and 6A/159.

It should be noted that broadcasting services have many commonalities with the radio amateur services as regards reception in bands below 80 MHz where broadcasting bands are interleaved with radio amateur frequency allocations. NABA believes that many conclusions included in the annexed documents are also relevant to the broadcasting interference case, and thus there is a need to specify a BPL/PLT interference criterion to ensure quality broadcast service performance in bands below 80 MHz.

In this regard NABA thanks the FCC for conducting its PLT interference test and looks forward to receiving any improvements in its results to help the ITU-R determine an appropriate interference criteria for ITU-R Recommendation(s) on PLT operations. NABA further notes that the FCC has recently released a further 800 megabytes of previously unreleased technical data<sup>2</sup> as part of this proceeding that should shed further light on the most appropriate power levels in issuing revised service rules on shared spectrum PLT (BPL) operations.

### **4 Proposal**

In view of the above unredacted test results and the new recently released data<sup>2</sup>, NABA recommends that the referenced FCC rules in WP 1A Document 1A/135, Annex 1, Attachment 2 and Document 1A/135, Annex 2, section 5.2.1, and in WP 1C Document 1C/135, Annex 5 be put in square brackets pending further submissions from the United States (see section 3) to suitably correct the existing PLT documentation and to amend the related text.

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<sup>2</sup> The collection of 800 megabytes of newly released technical information and studies is available at <http://www.fcc.gov/oet/info/bpl/> in a single zip file (indicated by "download the collection of files here").