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To: Dr. Roger B. Marks

Chair, IEEE 802.16 Working Group on Broadband Wireless Access

Email: r.b.marks@ieee.org

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Dear Roger,

ETSI BRAN would like to inform that the ETSI Board has approved in May 2004 a revision of the BRAN ToRs (Terms of Reference). Some of the major changes are emphasized below.

- The status of BRAN was converted from an EP (ETSI Project) to a TC (Technical Committee).
- The description of HiperMAN was updated to include nomadic applications.
- A Regulatory Competence Working Group (RC-WG) was established to concentrate the expertise and the development of technical and essential regulatory specifications into a single working group.

The new BRAN ToRs are attached to this letter.

Yours faithfully,

Bernd Friedrichs

Chairman of ETSI Project BRAN (Broadband Radio Access Networks)

# **Terms of Reference**

# Technical Committee Broadband Radio Access Networks (BRAN)

# Responsibility

BRAN is the core competence centre within ETSI for broadband radio access networks. BRAN is responsible for all aspects of standardization for present and future broadband radio access networks, including:

- · radio and regulatory aspects,
- lower layer protocol aspects,
- architectures, transmission and inter-working aspects of access networks,
- · aspects of transport network interfaces,

utilizing both existing and emerging technologies. BRAN is responsible for ETSI deliverables addressing base specifications and the appropriate test specifications required to achieve interoperability of BRAN-compliant access technologies. This work is in line with, and driven by, the commercial objectives of the ETSI membership.

BRAN is structured as a single technical body, with several vertical working groups providing core competence areas that are responsible for a programme of activities to meet the overall objectives of BRAN. In addition to these core areas, there is a horizontal competence working group addressing spectrum regulatory issues across the core vertical working groups.

# Areas of activity

### Overview

BRAN has the primary responsibility for the production and the approval of deliverables falling into the following broad technical competence areas, including related standards intended to be used for regulatory purposes:

- HiperLAN (High Performance Local Area Networks)
- HiperACCESS (High Performance Access Networks)
- HiperMAN (High Performance Metropolitan Area Networks)

The primary focus of the work carried out in the above competence areas is on the standardization of the lower layers whereas core network issues, user and service issues and higher layer protocol aspects are not part of the prime work areas of BRAN. The list of BRAN competence areas may be extended in future if required.

In addition to the above-mentioned vertical working groups for the competence areas, a further horizontal working group addresses essential regulatory issues:

RC-WG (Regulatory Competence Working Group)

Generally, BRAN closely follows the standardisation work in other bodies, in order to avoid unnecessary duplication and, when appropriate, collaborates with relevant other bodies to create world-wide unique standards.

The work on all ETSI deliverables falling within the scope of BRAN shall be carried out in one of the following working groups, however each of the deliverables shall be approved by BRAN.

### HiperLAN (HL)

HiperLAN is a short-range variant of a broadband radio access network and is intended for complementary access mechanism for UMTS™ systems as well as for private use as a wireless LAN type system. HiperLAN will offer high speed (up to 54 Mb/s) access to a variety of networks including the UMTS™ core networks, ATM networks and IP based networks.

## Responsibilities

- The role of this WG is to produce technology specific ETSI deliverables related to HiperLAN systems.
- To provide maintenance of the above ETSI deliverables after publication and throughout their useful life.
- The development of Harmonized Standards as well as their maintenance is deferred to BRAN RC-WG.

# **HiperACCESS (HA)**

HiperACCESS is intended for point-to-multipoint, high speed (up to 120 Mb/s) and high-QoS fixed wireless access. One of the most important applications will be backhauling within cellular networks like GSM<sup>TM</sup> and UMTS<sup>TM</sup>. Other applications include broadband access for residential and small business users to a wide variety of networks including ATM and IP based core networks.

HiperACCESS standardization focuses on solutions optimized for frequency bands above 11 GHz (e.g., 26, 28, 32, 42 GHz) with high spectral efficiency under LOS (Line Of Sight) conditions.

#### Responsibilities

- The role of this WG is to produce technology specific ETSI deliverables related to HiperACCESS systems.
- To provide maintenance of the above ETSI deliverables after publication and throughout their useful life.
- The development of Harmonized Standards as well as their maintenance is deferred to BRAN RC-WG.

# **HiperMAN (HM)**

HiperMAN is aiming principally for providing broadband Wireless DSL, while covering a large geographic area. The standardization focuses on broadband solutions optimized for access in frequency bands below 11 GHz (mainly in the 3.5 GHz band). HiperMAN is optimised for packet switched networks, and supports fixed and nomadic applications, primarily in the residential and small business user environments.

#### Responsibilities

- The role of this WG is to produce technology specific ETSI deliverables related to HiperMAN systems.
- To provide maintenance of the above ETSI deliverables after publication and throughout their useful life.
- The development of Harmonized Standards as well as their maintenance is deferred to BRAN RC-WG.

# **Regulatory Competence Working Group (RC-WG)**

The aim of this group is to increase overall efficiency of BRAN by concentrating the expertise and the development of technical and essential regulatory specifications into a single working group.

## Responsibilities:

- To develop in close cooperation with the other Working Groups of BRAN Harmonised Standards covering essential requirements under article 3.2 of the R&TTE directive and related ETSI deliverables for broadband radio access networks including wireless LAN/MAN systems. Close liaison should be maintained with other ETSI bodies (e.g. ETSI WG TM4) which might be affected by the harmonised standards produced within BRAN RC-WG.
- To provide maintenance of the above ETSI deliverables after publication and throughout their useful life.
- To liaise with ETSI ERM concerning the regulatory issues related to the development and maintenance of these standards.
- Aspects related to EMC and radio spectrum matters are deferred to ETSI ERM EMC and ETSI ERM RM respectively.

If decided by BRAN, the development of a Harmonised Standard can be deferred to another ETSI Technical Body outside BRAN.

## Collaboration

BRAN closely follows the standardisation work in other bodies, and will maintain active liaison arrangements with several external bodies as required for ongoing work. This applies notably to the ITU-R, IEEE 802.11 and 802.16 committees and the WiMAX forum. The following full list may change as required.

- CITEL (Comision Interamericana de Telecomunicaciones)
- ETSI ERM (EMC and Radio Spectrum Matters)
- ETSI TM (Transmission and Multiplexing)
- H2GF (HiperLAN/2 Global Forum)
- IEEE-SA (Institute of Electrical and Electronic Engineers Standards Association), especially 802.11 and 802.16
- IETF (Internet Engineering Task Force)
- ITU-R (International Telecommunications Union Radio Sector)
- WiMAX Forum (Worldwide Interoperability for Microwave Access)