Source: **UK Radiocommunications Agency**

Title: **Call for Experts to Assist in Identify the Spectrum Requirements for Broadband Nomadic Wireless Access Systems**

Agenda item: **BRAN Plenary**

Document for:

Decision	**X**
Discussion	**X**
Information	**X**

Decision/action requested

Identify experts to assist in the work of the ITU-R JRG 8A-9B DG-Task 4

1. INTRODUCTION

ITU-R JRG 8A-9B is seeking experts from regional standardisation organisations to contribute to their DG-Task 4 work to identify the spectrum requirements for broadband Nomadic Wireless Access (NWA) systems.

2. BACKGROUND

At the February '99 meeting of ITU-R JRG 8A-9B work was completed on a draft new Recommendation (Doc. 8A/110 (Rev.1)) on broadband RLAN characteristics, and a new subject was identified (from Question 212/8) within DG-Task 4 to study the spectrum need for broadband NWA systems including RLANs.
At the July '99 meeting, the JRG nominated Mr. S. Bond (UK RA) as editor for this topic, and Mr. J. Nixon (UK RA) as vice-editor. A short report (Doc. 8A-9B/TEMP/52 – attached) was produced summarising the future work plan and technical items to be studied, such as calculating the spectrum requirement for generic NWA models, identifying candidate frequency bands, performing sharing studies, and analysing interference mitigation techniques.
It was decided that DG-Task 4 would form a small correspondence group through e-mail to efficiently carry out the work.

3. INITIAL WORK

The first task of DG-Task 4 is to define some generic models of NWA systems, for both public and private networks, and then identify the baseline spectrum required assuming clear spectrum. It is noted that section 5 of TR 101 031 contains some useful calculations for HIPERLAN deployments that could be revised and expanded upon in a contribution to ITU-R.

4. REQUEST

It is request that EP BRAN:

- identifies two experts within BRAN willing to assist in the work of the ITU-R, and that work on a contribution is begun;

- send a liaison statement to IEEE 802.11 and the MMAC to call for two experts from each of these organisations to contribute to the work of the ITU-R {ideally the three organisations should work together to develop generic NWA system models required by the ITU-R}.

International Telecommunication Union

RADIOCOMMUNICATION STUDY GROUPS

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Joint Rapporteurs Group 8A-9B

DRAFT WORKPLAN FOR SPECTRUM REQUIREMENTS FOR BROADBAND NOMADIC WIRELESS ACCESS SYSTEMS

1. Definition

1.1 Broadband Nomadic Wireless Access – encompasses service applications with a net bit rate ≥ 10 Mbit/s that use RLAN technology for low mobility public and private networks .

2. Items for consideration

2.1. Ascertain the required amount of frequency spectrum for generic broadband NWA networks assuming maximum deployment scenarios in clear spectrum:

- technical RLAN and network experts from standardisation organisations required to contribute on generic NWA models
- need to consider both public and private network deployments
- timescale for when (public/private) spectrum required also a factor
- does public and private spectrum partitioning need to be addressed?

2.2. Identify candidate bands that require study:

- are bands without an MS or FS Table Allocation candidates?
- are harmonised bands across all regions feasible/necessary?
- is contiguous spectrum necessary/desirable?
- bands other than 5 GHz (Annex 1) should be considered

2.3. Undertake sharing studies between NWA and incumbent services in candidate bands including analysing mitigating factors that may facilitate sharing, and assess their impact on the amount of required spectrum identified in 2.1.

3. Initial steps

- Appoint ITU-R liaison officers to regional broadband NWA standardisation organisations (i.e. ETSI BRAN, US IEEE 802.11 and the Japanese MMAC) to call for their expertise and contribution to the work in identifying spectrum requirements for NWA systems;
- Establish a small correspondence group through e-mail to efficiently carry out the work.

Annex 1

CURRENT POSITION REGARDING RLANS IN THE 5 GHz BAND

	Frequency Bands (MHz)		
Proposed CEPT (HIPERLANs)	5150 – 5350	5470 – 5725	
USA (U-NII)	5150 – 5250	5250 – 5350	5725 – 5825
JAPAN	5150 – 5250		
Proposed for Consideration	5250 – 5350	5470 – 5850	5850 – 5925