IEEE P802.11 Wireless LANs

LIAISON - ETSI STC RES-10

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Introduction

This liaison paper reports on progress in radio LAN standardisation within ETSI since the last IEEE 802 plenary (November 1991). For the benefit of those members attending only plenary meetings, some of the information is repeated from IEEE 802.11/92-06, originally presented at the intermediate meeting in January at Chapel Hill.

In its report to the November meeting of TC RES, the ETSI RES ad-hoc group studying wireless LANs recommended the creation of a Sub-Technical Committee tasked specifically with the creation of a high performance radio LAN standard — HIPERLAN, an acronym for High Performance European Radio LAN. It also recommended that radio LANs intended to use the ISM bands be treated as generic wideband low-power devices.

At the meeting of TC RES on 20-23rd November, the establishment of a new Sub-Technical Committee (STC RES-10) to work on the HIPERLAN standard was approved. Andrew Bud (Olivetti Sixtel) — the Chairman of the ad-hoc group — was nominated as interim Chairman of RES-10. The work on HIPERLAN is scheduled for completion in late 1994.

Furthermore, it was decided that STC RES-2 would be responsible for the activities necessary to define the approval test specifications for devices using wideband modulation techniques in the 2.4–2.5GHz ISM band — radio LANs in these bands to be considered as generic low-power devices.

STC RES-10 — HIPERLAN

The Terms of Reference of RES-10 are:

- to specify the Services and Facilities of standards for high performance radio local area networking, including the appropriate degree of standardisation;
- to undertake and support technical investigations preparatory to the creation of such standards;
- to draft an open standard for high performance radio local area networking, offering at least 10Mbits/s at the terminal and supporting at least 100Mbits/s/ha/floor, including a radio specification and any necessary associated standards;

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- to liaise with appropriate bodies including CEPT, ECMA, IEEE and CCIR to achieve the greatest co-ordination with related standards activities;
- to liaise with relevant research bodies and programmes;
- to draft standards consistent with agreements reached with CEPT on spectrum allocations for radio LANs.

The first meeting of STC RES-10 took place on 5th December, hosted by Symbionics in Cambridge. At the meeting it was decided that the initial work on HIPERLAN would be carried out within two working groups — RES-10S and RES-10R.

RES-10S will be a services and requirements group and will work to:

- define the requirements of actual and potential markets for HIPERLAN;
- draft a 'Services and Facilities' document defining the functional requirements of the HIPERLAN standard;
- draft a RES-10 operating glossary; and
- identify key issues associated with functional conformance.

The group will be chaired by Jan Kruys (NCR). A first draft of the Services and Facilities document is scheduled for June 1992.

RES-10R will be a radio group and will:

- study and provide guidance on the technological feasibility of the functional requirements;
- identify and review alternatives for topology, modulation, protocols, etc.;
- draft technical inputs to be used in spectrum allocation studies; and
- evaluate the implications of spectrum sharing.

RES-10R will be chaired by Tom Freeburg (Motorola). The group is scheduled to complete its work by November 1992. Both groups will report to RES-10.

Progress since January

RES-10S has met twice since January and RES-10R once. Progress in the working groups was reviewed at the STC RES-10 meeting hosted by IBM in Paris on 5-6th March.

RES-10S has studied contributions in the areas of security, mobility, interworking, network management and level of specification. These inputs have provided direction for more specific study work. Some time was spent reviewing the IEEE 802.11 requirements document (IEEE 802.11 92/20). Progress has been made in deciding the structure of the draft Services and Facilities document.

While RES-10R has engaged in a initial review of issues, progress has been limited primarily due to the absence of Services and Facilities input resulting from the phasing of the sub-group meetings. RES-10R has been urgently tasked with the development of technical inputs for use in the spectrum allocation studies being undertaken within the CEPT.

Despite administrative uncertainty regarding the liaison with IEEE 802.11 within ETSI, notwithstanding the ETSI TA approval, the call for Project Team experts was issued on 14th February. It is expected that the two project team members will begin work after Easter. One of the first tasks for the Project Team will be to assist RES-10S in generating the draft Services and Facilities document

Based on initial work completed in RES-10S, STC RES-10 prepared a document outlining the service justifications for HIPERLAN spectrum and presenting a view of the regulatory regime acceptable to the market. This will be sent to the CEPT.

The schedule of meetings for RES-10 and its working groups is as follows:

RES-10S 5/6th May RES-10R 6/7th May

The venue of both meetings to be confirmed as ETSI Sophia Antipolis (France).

RES-10S16/17th JuneRES-10R17/18th JuneVenue to be decided

RES-10 29/30th June, 1st July Hosted by Telia Research, Sweden.

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Annex

The officers of ETSI RES-10 are:

Chairman

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