QUESTION ITU-R 212-4/5[[1]](#footnote-1)\*, [[2]](#footnote-2)\*\*

Nomadic wireless access systems including radio local area networks

(1995-1998-2000-2007-2012)

The ITU Radiocommunication Assembly,

considering

*a)* that there is a need to provide effective communication for moveable, portable and mobile computer based equipment not only within the workplace but also in many public spaces;

*b)* that ITU-R has defined nomadic wireless access in Recommendation ITU‑R F.1399 on vocabulary of terms for wireless access;

*c)* that it is desirable to identify operational and technical characteristics for nomadic wireless access (NWA) systems including radio local area networks (RLAN) applications;

*d)* that NWA systems including RLANs use frequency allocations designated for fixed and/or mobile services dependant on the application;

*e)* that there are RLANs currently in operation and also in development for operation in various frequency bands (e.g. the frequency bands used for ISM applications);

*f)* that in the broadband wired networks basic signal transfer methods based on and internet protocol (IP) are in use;

*g)* that the IP-based LAN using the high clock frequency may impact the design of NWA systems including RLANs as well as utilization of the radio-frequency spectrum;

*h)* that there is a need to identify appropriate frequency bands for NWA systems;

*i)* that technical constraints on NWA systems including RLANs may be needed to facilitate sharing with other services;

*j)* that the standardization works of NWA systems including RLANs concerning architecture, technical features and spectrum needs are being studied by regional standardization bodies,

decides that the following Questions should be studied

1 What are the operational and technical requirements of NWA systems?

2 What specifications may be recommended for NWA systems?

3 What are the relationships of NWA systems including those based on IP with other radio systems to provide for multiple system operation?

4 What types of system techniques, including multi-hop relay stations, provide for reliable area coverage for NWA applications?

5What are the frequency sharing or compatibility criteria between NWA systems including RLANs and other radio services?

6 What frequency bands are suitable for operation of NWA systems including RLANs considering the required operational and technical characteristics, and sharing compatibility with other services?

7 What amount of frequency spectrum is needed for NWA systems in particular for broadband applications higher than 10 Mbit/s ensuring wireless access from public spaces?

further decides

1 that the results of the above studies should be included in one or more Recommendations, Reports, or Handbooks;

2 the above studies should be completed by 2027.

Category: S2

1. \* This Question should be brought to the attention of Radiocommunication Study Groups 1, 4 and 7, and to the Telecommunication Standardization Sector. [↑](#footnote-ref-1)
2. \*\* In the year 2019, Radiocommunication Study Group 5 extended the completion date of studies for this Question. [↑](#footnote-ref-2)