

QUESTION ITU-R 205-4/5*

Intelligent transportation systems

(1995-1996-2002-2003-2007)

The ITU Radiocommunication Assembly,

considering

- a) that there is a need to integrate new technologies including radiocommunications into land transportation systems;
- b) that many new land transportation systems use intelligence in the land vehicles coupled with advanced management techniques to improve traffic management;
- c) that the technologies planned for intelligent transportation systems (ITS) can be applied to public transportation (transit) systems to make them more efficient and to enhance the integrated use of all forms of surface transport;
- d) that ITS are being planned and implemented in various Regions by Administrations;
- e) that a wide variety of applications and services, including automatic vehicle location (AVL), are defined;
- f) that international standards would facilitate the world-wide applications of ITS and provide for economies of scale in bringing ITS equipment and services to the public;
- g) that early international harmonization of ITS would have several benefits;
- h) that world-wide compatibility of ITS may be dependent on common radio spectrum allocations;
- j) that radio is an essential component of ITS;
- k) that the International Organization for Standardization (ISO) is standardizing ITS(non-radio aspects) in ISO/TC204;
- l) that the ITU Radiocommunication Assembly has approved Recommendation ITU-R M.1453 “Transport information and control systems – Dedicated short range communications at 5.8 GHz”,

decides that the following Questions should be studied

- 1 What are the various elements of ITS?
- 2 What are the overall objectives for ITS with respect to:
 - radiocommunication requirements: radio interfaces, reliability, grade of service, etc.;
 - improvement factors; congestion reduction, safety, control, quality of life, etc.;
 - type of services?
- 3 What radio-based ITS services and functions might benefit from international standardization?

* Former Question ITU-R 205-4/8.

- 4 What are the spectrum requirements for each element of ITS including:
 - suitable bands;
 - spectrum bandwidth needed?
- 5 What are the interconnect requirements of ITS with the switched telecommunication networks?
- 6 What are the technical factors that affect sharing between ITS and other users?
- 7 To what extent can the evolving mobile telecommunications systems be used to deliver ITS services?
- 8 What are the radiocommunication requirements and technical specifications necessary for the global or regional harmonization of next generation ITS radiocommunications?
- 9 What is the definition of “telematics” in the context of ITS? In such a context, what are the systems and application requirements of telematics? What are the land mobile communications requirements of telematics?
- 10 What are the technical and operational characteristics of AVL in the land mobile service?
further decides
 - 1 that the results of the above studies should be included in one or more Recommendations, Reports or Handbooks;
 - 2 that the above studies should be completed by 2010.

Category: S2