

RECOMMENDATION ITU-R F.592-4*

Vocabulary of terms for the fixed service

(1982-1986-1990-2002-2007)

Scope

This Recommendation provides vocabulary of basic terms used in other ITU-R Recommendations or Reports in relation to the fixed service. These terms are arranged in several categories with their definitions. Important acronyms and abbreviations that appear frequently in many Recommendations are also listed.

The ITU Radiocommunication Assembly,

considering

a) that there is a need for clear definition of terminology, used in ITU-R Recommendations and other texts, in order to use them in an unambiguous way,

noting

a) that Recommendation ITU-R F.1399 also contains vocabulary of terms for wireless access (WA);

recommends

that the following definitions be used in the texts relating to the fixed service:

1 Terms relating to radio transmission**1.1 Fixed wireless system (FWS)**

A: (FWS) نظام لاسلكي ثابت

C: 固定无线系统 (FWS)

F: Système hertzien fixe

R Фиксированная беспроводная система (ФБС)

S: Sistemas inalámbricos fijos

Telecommunication systems operating in the fixed service including, for example, radio-relay systems, HF systems, and systems using high altitude platform stations (HAPS), and which support a range of applications such as access and core transport (see Note 1).

NOTE 1 – The Radio Regulations (RR) indicate that the fixed service uses electromagnetic waves arbitrarily limited up to 3 000 GHz; however it is anticipated that the term “fixed wireless system” could also include the use of optical signals without artificial guide.

* This Recommendation should be brought to the attention of the Coordination Committee for Vocabulary (CCV).

1.2 Radio-relay system

A: نظام مرسل راديوي

C: 无线接力系统

F: *Faisceau hertzien*

R: *Радиорелейная система*

S: *Sistema de radioenlaces*

Radiocommunication system in the fixed service operating at frequencies above about 30 MHz which uses propagation in the atmosphere and which may include one or more intermediate stations (see Note 1).

NOTE 1 – The term “radio-relay system”, found in a number of ITU-R Recommendations, can refer, in certain cases, to both radio-relay systems, as defined above, and other types of systems in the fixed service. The more general term of fixed wireless system (FWS) as given in *recommends* 1.1 will be used in future. The process to amend, where appropriate, the terminology in ITU-R Recommendations will be undertaken in an evolutionary manner.

1.3 High-density applications in the fixed service (HDFS)

A: (HDFS) تطبيقات عالية الكثافة / خدمة الثابتة

C: 固定业务高密度应用 (HDFS)

F: *Applications haute densité dans le service fixe (HDFS)*

R: *Применения высокой плотности в фиксированной службе (ВП-ФС)*

S: *Aplicaciones de alta densidad en el servicio fijo (HDFS)*

A significant level of deployment of point-to-point (P-P) and/or multipoint (MP) systems within a given area.

NOTE 1 – These systems are generally intended to support broadband applications.

NOTE 2 – MP systems cover either point-to-multipoint (P-MP) or multipoint-to-multipoint (MP-MP) systems.

1.4 High altitude platform station (HAPS)

A: (HAPS) منصة عالية الارتفاع

C: 高空平台台站 (HAPS)

F: *Station placée sur une plate-forme à haute altitude (HAPS)*

R: *Станция на высокой платформе (HAPS)*

S: *Estación en plataforma a gran altitud (HAPS)*

A station located on an object at an altitude of 20 to 50 km and at a specified, nominal, fixed point relative to the Earth.

(See RR No. 1.66A.)

1.5 Fixed wireless access (FWA)

- A: *نفاذ لا سلکي ثابت (FWA)*
- C: *固定无线接入 (FWA)*
- F: *Accès hertzien fixe (AHF)*
- R: *Фиксированный беспроводной доступ (ФБД)*
- S: *Acceso inalámbrico fijo (FWA)*

Fixed wireless system application in which the location of the *end-user termination* and the network access point to be connected to the end-user are fixed.

(See Recommendation ITU-R F.1399.)

1.6 Trans-horizon radio-relay system

- A: *نظام مرحل راديويء الأفق*
- C: *超视距无线接力系统*
- F: *Faisceau hertzien transhorizon*
- R: *Тропосферная радиорелейная система*
- S: *Sistema de radioenlaces transhorizonte*

Radio-relay system using *trans-horizon* tropospheric *propagation*, mainly forward scatter.

NOTE 1 – Recommendation ITU-R P.310 gives a definition for *trans-horizon* (tropospheric) *propagation*.

1.7 Point-to-point communication

- A: *اتصال من نقطة إلى نقطة*
- C: *点对点通信*
- F: *Communication point à point*
- R: *Связь пункта с пунктом*
- S: *Comunicación punto a punto*

Communication provided by a single connection, for example, a radio-relay link between two stations located at specified fixed points or multiple cascaded links made by a number of intermediate repeaters with or without partial payload drop-insert.

1.7.1 Terminal station (point-to-point)

A: *طَـة طرفية (من نقطة / نقطة)*

C: *终端站 (点对点)*

F: *Station terminale (point à point)*

R *Оконечная станция (при связи пункта с пунктом)*

S: *Estación terminal (punto a punto)*

A station where the payload is assembled (disassembled) with (from) radio-system specific control and service channels and sent on a single or multiple channel radio connection. The connection can be unprotected or protected by a radio channel protection switching on a 1:1 or n:m basis.

1.7.2 Repeater station (point-to-point)

A: *طَـة مكررات (من نقطة / نقطة)*

C: *中继站 (点对点)*

F: *Station de répéteur (point à point)*

R *Ретрансляционная станция (при связи пункта с пунктом)*

S: *Estación repetidora (punto a punto)*

A station where the payload is passed through mainly transparently.

Repeaters could be “non-regenerative” when the signal is only filtered and amplified, with or without down and up conversions (e.g. in some analogue FDM systems) or “regenerative” when, in digital applications, the signal is demodulated and re-modulated before transmission to the next radio hop.

Passive repeaters implemented without any active radio component (e.g. two-directional antenna connected back-to-back, reflector, etc.) are also utilized.

1.7.3 Drop-insert (of a payload)

A: *إسقاط - إدراج (حالة نافذة)*

C: *插入/分出 (净荷)*

F: *Extraction-insertion (d'une charge utile)*

R *Ввод-вывод (передаваемой информации)*

S: *Extracción-inserción (de una carga útil)*

A functionality provided in analogue and digital repeaters, where only radio-system specific control and service channels and possibly part of the payload is made available for local traffic and system management and maintenance.

1.8 Point-to-multipoint communication

- A: اتصال من نقطة إلى عدة نقاط
- C: 点对多点通信
- F: Communication point à multipoint
- R: Связь пункта со многими пунктами
- S: Comunicación punto a multipunto

Communication provided by multiple links in the same geographical area, for example, radio links between a single station located at a specified fixed point and a number of stations located at fixed points within the coverage area of the central station.

1.8.1 Digital radio concentrator (system)

- A: (نظام) مركز راديوي رقمي
- C: 数字无线集中器 (系统)
- F: Concentrateur en radiocommunications numériques (système)
- R: Цифровой радиоконцентратор (система)
- S: Sistema concentrador de radiocomunicaciones digitales

Point-to-multipoint radio systems using multiple access techniques between a central station and several remote stations, in which the central station allocates the resources (e.g. time, frequencies and codes) to be shared among terminal stations on demand.

1.8.2 Central station

- A: محطة مركزية
- C: 中心站
- F: station centrale
- R: центральная станция
- S: estación central

See Recommendation ITU-R F.1399.

1.8.3 Terminal station (point-to-multipoint)

- A: محطة مركزية (من نقطة إلى عدة نقاط)
- F: station terminale (point-à-multipoint)
- C: 终端站 (点对多点)
- R: оконечная станция (при связи пункта со многими пунктами)
- S: estación terminal (punto a multipunto)

See Recommendation ITU-R F.1399.