5. An HF band communication system comprising at least one HF transmitter for transmitting a HF waveform signal and at least one HF receiver for receiving a HF waveform signal:

- said HF receiver comprising means configured for determining a payload subband S that is available for a transmission in the HF band, depending on at least one of the following two criteria:
  - the number of frequencies allocated to the user included in the payload subband S according to said frequency allocation plan,
  - the physical availability of the payload subband S evaluated as a function of a prediction of the interference induced on the signal by the reflections on the ionospheric layers
- and for selecting, in the payload subband S, a set of n frequency channels of identical width according to a frequency allocation plan and the quality of the link of each of said channels
- and transmitting to said HF transmitter said set of n selected frequency channels,
- said HF transmitter comprising means for receiving a set of n selected frequency channels and simultaneously transmitting over the n frequency channels a signal complying with said HF waveform,

wherein the quality of the link of each of said channels is estimated at least on the basis of the following substeps:

- the measurement (311) of the power of the received signal, in the absence of communication, in each frequency channel contained in the payload subband S,
- the attribution (311) of a quality score to each of said frequency channels as a function of the comparison of said power with one or