CLAIMS

1.- A method for transmitting a video sequence from a transmitting terminal (1) including at least one short-range radio interface (14) and one long-range radio interface (13) towards at least one receiving terminal (5), characterized in that it comprises the following steps:

- segmenting (20) said video sequence into a base layer making it possible to obtain a low-quality video sequence and at least one improvement layer, complementary to said base layer, and making it possible to obtain a better quality video sequence in combination with the base layer,

- transmission (33), by said long-range radio interface (13) of the transmitting terminal (1), of at least the entire base layer towards said receiving terminal (5),

- transmission (29), by said short-range radio interface (14) of the transmitting terminal (1), of at least the entire improvement layer towards at least one cooperation terminal (2) comprising at least one short-range radio interface (14) and one long-range radio interface (13),

- transmission (31), by said long-range radio interface (13) of said cooperation terminal (2), of at least the entire improvement layer towards said receiving terminal (5),

- and transmission (33) by said long-range radio interface (13) of the transmitting terminal (1) of at least the entire base layer towards said receiving terminal (5) and the transmission (31), by said long-range radio interface (13) of said cooperation terminal (2), of at least all of the improvement layer towards said receiving terminal (5) are done concomitantly.

2.- The transmission method according to claim 1, characterized in that it also comprises a step (25) for initiating cooperation, comprising:

- the broadcast by said short-range radio interface (14) of the transmitting terminal (1) of a cooperation request, and

- the transmission by the short-range radio interface (14) of said cooperation terminal (2) to said transmitting terminal (1) of a cooperation acceptance message.

3.- The transmission method according to one of the preceding claims, characterized in that it also comprises a step (27) for initiating the transmission, comprising the sending by said short-range radio interface (14) of the transmitting terminal (1) to the cooperation terminal (2) of a message comprising connection parameters for opening, by the cooperation terminal (2), of a long-range connection, and connection

identifiers comprising the source and destination port numbers, and an address of the transmitting terminal (1) and the receiving terminal (5).

4.- The transmission method according to one of the preceding claims, wherein said long-range radio interface (13) of the transmitting terminal (1) communicates according to communication frames successively comprising descending frames and ascending frames, and characterized in that said transmission (29) by the short-range radio interface (14) of the transmitting terminal (1) of the improvement layer towards said cooperation layer (2) comprises a step (29) for transmitting data towards said cooperation terminal (2) during at least one of said descending frames, and in that said transmission (33) by the long-range radio interface (13) of the transmitting terminal (1) of the base layer and said transmission (31), by the long-range radio interface of said cooperation terminal (2), of the improvement layer comprise steps for transmitting data from said base and improvement layers, respectively, during at least one of said ascending frames

5.- The transmission method according to one of the preceding claims, characterized in that it also comprises a step for receiving said base and improvement layers by a network access point (3), and a step for transmission from said network access point (3), towards said receiving terminal (5), of said base and improvement layers.

6.- A system for transmitting a video sequence to at least one receiving terminal (5), comprising a transmitting terminal (1) including at least one short-range radio interface (14) and one long-range radio interface (13), and at least one cooperation terminal (2) including at least one short-range radio interface (14) and one long-range radio interface (13), characterized in that said transmitting terminal (1) also comprises:

- means (10) for segmenting said video sequence into a base layer making it possible to obtain a deteriorated video sequence and at least one improvement layer, complementary to said base layer,
- means (11, 12) for ordering the transmission (33) by said long-range radio interface (13) of the transmitting terminal (1) of at least the entire base layer towards said receiving terminal (5), and
- means (11, 12) for ordering the transmission (29) by said short-range radio interface (14) of the transmitting terminal (1) of at least the entire improvement layer towards said cooperation terminal (2),

and in that said cooperation terminal (2) comprises means (11, 12) for ordering the transmission (31), by the long-range radio interface (13) of the cooperation terminal (2), of at least the entire improvement layer towards said receiving terminal (5).

7.- The system for transmitting a video sequence according to claim 6, characterized in that the transmitting terminal (1) also comprises means for determining the possible throughput between the long-range radio interface (13) of the transmitting terminal (1) and the receiving terminal (5).

8.- The system for transmitting a video sequence according to one of claims 6 to 7, characterized in that said transmitting terminal (1) also comprises means (11) for generating a cooperation request and for ordering the broadcast of said request via its short-range radio interface (14), and in that said cooperation terminal (2) comprises means (11) for generating a cooperation acceptance message and for ordering transmission of said cooperation acceptance message to said transmitting terminal (1).

9.- The system for transmitting a video sequence according to one of claims 6 to 8, characterized in that said transmitting terminal (1) also comprises means (11) for generating an information message containing the communication parameters necessary for the transmission (31) by said cooperation terminal (2) of said improvement layer and to order the transmission of said information message to said cooperation terminal (2).

The invention claimed is:

1. A method for transmitting a video sequence from a transmitting terminal including at least one short-range radio interface and one long-range radio interface towards at least one receiving terminal, characterized in that it comprises the following steps:

segmenting said video sequence into a base layer making it possible to obtain a low-quality video sequence and at least one improvement layer, complementary to said base layer, and making it possible to obtain a better quality video sequence in combination with the base layer,

transmission, by said long-range radio interface of the transmitting terminal, of at least the entire base layer towards said receiving terminal,

transmission, by said short-range radio interface of the transmitting terminal, of at least the entire improvement layer towards at least one cooperation terminal comprising at least one short-range radio interface and one long-range radio interface,

transmission, by said long-range radio interface of said cooperation terminal, of at least the entire improvement layer towards said receiving terminal;

wherein said long-range radio interface of the transmitting terminal communicates according to communication frames successively comprising descending frames and ascending frames, and characterized in that said transmission by the short-range radio interface of the transmitting terminal of the improvement layer towards said cooperation terminal layer comprises a step for transmitting data towards said cooperation terminal during at least one of said descending frames, and in that said transmission by the long-range radio interface of the transmitting terminal of the base layer and said transmission, by the long-range radio interface of said cooperation terminal, of the improvement layer comprise steps for transmitting data from said base and improvement layers, respectively, during at least one of said ascending frames.

2. The transmission method according to claim 1, characterized in that the transmission by said long-range radio interface of the transmitting terminal of at least the entire base layer towards said receiving terminal and the transmission, by said long-range radio interface of said cooperation terminal, of at least all of the improvement layer towards said receiving terminal are done concomitantly.

3. The transmission method according to one of claim 1 or 2, characterized in that it also comprises a step for initiating cooperation, comprising:

the broadcast by said short-range radio interface of the transmitting terminal of a cooperation request, and

the transmission by the short-range radio interface of said cooperation terminal to said transmitting terminal of a cooperation acceptance message.

4. The transmission method according to claim 1 or 2, characterized in that it also comprises a step for initiating the transmission, comprising the sending by said short-range radio interface of the transmitting terminal to the cooperation terminal of a message comprising connection parameters for opening, by the cooperation terminal, of a long-range connection, and connection identifiers comprising the source and destination port numbers, and an address of the transmitting terminal and the receiving terminal.

5. The transmission method according to claim 1 or 2, characterized in that it also comprises a step for receiving said base and improvement layers by a network access point, and a step for transmission from said network access point, towards said receiving terminal, of said base and improvement layers.

6. A system for transmitting a video sequence to at least one receiving terminal, comprising a transmitting terminal including at least one short-range radio interface and one long-range radio interface, and at least one cooperation terminal including at least one short-range radio interface and one long-range radio interface, characterized in that said transmitting terminal also comprises:

means for segmenting said video sequence into a base layer making it possible to obtain a deteriorated video sequence and at least one improvement layer, complementary to said base layer,

means for ordering the transmission by said long-range radio interface of the transmitting terminal of at least the entire base layer towards said receiving terminal,

means for ordering the transmission by said short-range radio interface of the transmitting terminal of at least the entire improvement layer towards said cooperation terminal, and in that said cooperation terminal comprises means for ordering the transmission, by the long-range radio interface of the cooperation terminal, of at least the entire improvement layer towards said receiving terminal;

means for generating a cooperation request and for ordering the broadcast of said request via its short-range radio interface, and in that said cooperation terminal comprises means for generating a cooperation acceptance message and for ordering transmission of said cooperation acceptance message to said transmitting terminal; and

means for generating an information message containing the communication parameters necessary for the transmission by said cooperation terminal of said improvement layer and to order the transmission of said information message to said cooperation terminal.

7. The system for transmitting a video sequence according to claim **6**, characterized in that the transmitting terminal also comprises means for determining the possible throughput

between the long-range radio interface of the transmitting terminal and the receiving terminal.

8. The system for transmitting a video sequence according to claim **6** or **7**, characterized in that said transmitting terminal also comprises means for generating an information message containing the communication parameters necessary for the transmission by said cooperation terminal of said improvement layer and to order the transmission of said information message to said cooperation terminal.

9. The transmission method according to claim **3**, characterized in that it also comprises a step for initiating the transmission, comprising the sending by said short-range radio interface of the transmitting terminal to the cooperation terminal of a message comprising connection parameters for opening, by the cooperation terminal, of a long-range connection, and connection identifiers comprising the source and destination port numbers, and an address of the transmitting terminal and the receiving terminal.