CLAIMS

1. A method to signal training sequence set information to a remote station, comprising:

receiving signaling from a remote station signaling indicating if a new set of training sequences is supported; and

using a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

2. The method according to claim 1, wherein said channel description has a channel type field and a TDMA offset field.

3. The method according to claim 2, wherein said channel type field and said TDMA offset field is:

8 7 6 5 4	
S 0 0 0 1	TCH/F + ACCHs
S 0 0 1 T	TCH/H + ACCHs
S 0 1 T T	SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)
S 1 T T T	SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8),

wherein an S bit indicates the training sequence set to use.

4. The method according to claim 3, wherein said S-bit is 0 if a legacy traing sequence set is to be used and said S-bit is 1 if a new training sequence set is to be used.

5. An apparatus for signaling training sequence set information to a remote station, comprising:

means for receiving signaling from a remote station signaling indicating if a new set of training sequences is supported; and

means for using a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

6. The apparatus according to claim 5, wherein said channel description has a channel type field and a TDMA offset field.

7. The apparatus according to claim 6, wherein said channel type field and said TDMA offset field is:

8 7 6 5 4

S 0 0 0 1 TCH/F + ACCHs

S 0 0 1 T TCH/H + ACCHs

S 0 1 T T SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)

S 1 T T T SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8), wherein an S bit indicates the training sequence set to use.

8. The apparatus according to claim 7, wherein said S-bit is 0 if a legacy training sequence set is to be used and said S-bit is 1 if a new training sequence set is to be used.

9. A base station 920, comprising:

a controller processor 960;

an antenna 925;

a duplexer switch 926 operably connected to said base station antenna 925;

a receiver front end 924 operably connected to said duplexer switch 926;

a receiver demodulator 923 operably connected to said receiver front end 924;

a channel decoder and de-interleaver 922 operably connected to said receiver demodulator 923 and said controller processor 960;

a base station controller interface 921 operably connected to said controller processor 960;

a coder and interleaver 929 operably connected to said controller processor 960;

a transmitter modulator 928 operably connected to said coder and interleaver 929;

a transmitter front end module 927 operably connected to said transmitter modulator 928 and operably connected to said duplexer switch 926;

a data bus 970 operably connected between said controller processor 960 and said channel decoder and de-interleaver 922, said receiver demodulator 923, said receiver front end 924, said transmitter modulator 928 and said transmitter front end 927; and

software 961 stored in said memory 962, wherein said software comprises instructions to signal training sequence set information to a remote station, comprising:

receive signaling from a remote station signaling indicating if a new set of training sequences is supported; and

use a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

10. The base station 920 according to claim 9, wherein said channel description has a channel type field and a TDMA offset field.

11. The base station 920 according to claim 10, wherein said channel type field and said TDMA offset field is:

8 7 6 5 4

S 0 0 0 1 TCH/F + ACCHs

S 0 0 1 T TCH/H + ACCHs

S 0 1 T T SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)

S 1 T T T SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8), wherein an S bit indicates the training sequence set to use.

12. The base station 920 according to claim 11, wherein said S-bit is 0 if a legacy training sequence set is to be used and said S-bit is 1 if a new training sequence set is to be used.

CLAIMS

Claim 1. A method to signal training sequence set information to a remote station, comprising:
receiving signaling from a remote station signaling indicating if a new set of training sequences is supported; and
using a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

Claim 2. The method according to claim 1, wherein said channel description has a channel type field and a TDMA offset field.

Claim 3. The method according to claim 2, wherein said channel type field and said TDMA offset field is defined as follows:

8 7 6 5 4	
S 0 0 0 1	TCH/F + ACCHs
S 0 0 1 T	TCH/H + ACCHs
S 0 1 T T	SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)
S 1 T T T	SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8),

wherein 8 7 6 5 4 indicates a location of bits configuring said channel type field and said TDMA offset filed, each row indicates predetermined bit array and corresponding information, and an S bit indicates the training sequence set to use.

Claim 4. The method according to claim 3, wherein said S-bit is 0 if a legacy traing sequence set is to be used and said S bit is 1 if a new training sequence set is to be used.

Claim 5. An apparatus for signaling training sequence set information to a remote station, comprising:
means for receiving signaling from a remote station signaling indicating if a new set of training sequences is supported; and
means for using a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

Claim 6. The apparatus according to claim 5, wherein said channel description has a channel type field and a TDMA offset field.

Claim 7. The apparatus according to claim 6, wherein said channel type field and said TDMA offset field is defined as follows:

8 7 6 5 4

S 0 0 0 1 TCH/F + ACCHs

S 0 0 1 T TCH/H + ACCHs

S 0 1 T T SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)

S 1 T T T SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8),

wherein 8 7 6 5 4 indicates a location of bits configuring said channel type field and said TDMA offset filed, each row indicates predetermined bit array and corresponding information, and an S bit indicates the training sequence set to use.

Claim 8. The apparatus according to claim 7, wherein said S-bit is 0 if a legacy training sequence set is to be used and said S bit is 1 if a new training sequence set is to be used.

Claim 9. A base station, comprising:

a controller processor;

an antenna;

a duplexer switch operably connected to said base station antenna;

a receiver front end operably connected to said duplexer switch;

a receiver demodulator operably connected to said receiver front end;

a channel decoder and de-interleaver operably connected to said receiver demodulator and said controller processor;

a base station controller interface operably connected to said controller processor;

a coder and interleaver operably connected to said controller processor;

a transmitter modulator operably connected to said coder and interleaver;

a transmitter front end module operably connected to said transmitter modulator and operably connected to said duplexer switch;

a data bus operably connected between said controller processor and said channel decoder and de-interleaver, said receiver demodulator, said receiver front end, said transmitter modulator and said transmitter front end; and

software stored in a memory, wherein said software comprises instructions to signal training sequence set information to a remote station, comprising:

receive signaling from a remote station signaling indicating if a new set of training sequences is supported; and

use a channel description to signal the training sequence set to be used by the remote station for a communication channel being established.

Claim 10. The base station according to claim 9, wherein said channel description has a channel type field and a TDMA offset field.

Claim 11. The base station according to claim 10, wherein said channel type field and said TDMA offset field is defined as follows:

8 7 6 5 4

S 0 0 0 1 TCH/F + ACCHs

S 0 0 1 T TCH/H + ACCHs

S 0 1 T T SDCCH/4 + SACCH/C4 or CBCH (SDCCH/4)

S 1 T T T SDCCH/8 + SACCH/C8 or CBCH (SDCCH/8),

wherein 8 7 6 5 4 indicates a location of bits configuring said channel type field and said TDMA offset filed, each row indicates predetermined bit array and corresponding information, and an S bit indicates the training sequence set to use.

Claim 12. The base station according to claim 11, wherein said S-bit is 0 if a legacy training sequence set is to be used and said S bit is 1 if a new training sequence set is to be used.