A hearing aid according to a third aspect of the invention has ~~a signal processor processing an electric input signal according to audio processing parameters of the hearing aid. The~~ a hearing aid ~~includes~~ including a short range data transceiver for communication with a personal communication device via a short range data communication link~~, and for receiving a notification when an auxiliary classifier component detects a change of the environment or use of the personal communication device~~, a signal processor processing an electric input signal according to audio processing parameters of the hearing aid, a signal processing sub-system with at least two modes of operation, and said sub-system being adapted for applying respective sets of audio processing parameters for each of said at least two modes of operation, a program selector component having a classifier analyzing the electric input signal and classifying an auditory environment of the hearing aid, wherein the short range data transceiver is adapted for receiving a notification when an auxiliary classifier component detects a change of the environment or use of the personal communication device ~~where~~ and the program selector component ~~being~~ is adapted for applying automatically selecting one of said at least two modes of operation for the signal processing sub-system according to the classifiers classification and the notification received from the personal communication device.

In a fourth aspect of the invention, a computer-readable storage medium having computer-executable instructions, which when executed in a personal communication device provides an auxiliary classifier component characterized in that the auxiliary classifier component is adapted for: monitoring the use of said personal communication device, generating a notification when detecting a change of environment or use; and transmitting the notification to a hearing aid via a short range data communication link. ~~monitor the use of said personal communication device, provide a notification when deeming environment or use of the personal communication device to change, and transmit the notification to a hearing aid via a short range data communication link~~.

In a fifth aspect of the invention, there is provided a personal communication device comprising a computer-readable storage medium having computer-executable instructions, which when executed provides an auxiliary classifier component adapted to monitor the use of said personal communication device, generate a notification when

detecting a change of environment or use, and transmit the notification to a hearing aid via a short range data communication link.

~~personal communication device having a short range data transceiver for providing a short range data communication link for communication with a hearing aid, and a wireless receiver for communication with the internet, said personal communication device including an auxiliary classifier component monitoring the use of said personal communication device, generating a notification when detecting a change of environment or use, and transmitting the notification to a programs selector of said hearing aid via said short range data communication link, wherein the auxiliary classifier component is adapted to access reverberation characteristics for a location and to extract relevant parameters and transfer these parameters to the programs selector via said short range data communication link.~~

The invention will be described in further detail with reference to preferred aspects and the accompanying drawing, in which:

fig. 1 illustrates schematically a hearing aid system according to an embodiment of the invention;

fig. 2 shows four categories of an audio signal observed in a hearing aid – illustrated as amplitude versus time;

fig. 3 illustrates program selection according to the first aspect of the invention;

7. The method according to claim 6, wherein the personal communication device includes an auxiliary classifier component, an comprising steps of:
   - monitoring of the use of the personal communication device, and
   - deeming the personal communication device to be at a predefined position based on a recognized use pattern.

8. The method according to claim 7, comprising in the auxiliary classifier component notifications when use at home, in car, at office, or at an unknown place is detected.

9. A hearing aid ~~having a signal processor processing an electric input signal according to audio processing parameters of the hearing aid, and~~ including:
   - a short range data transceiver for communication with a personal communication device via a short range data communication link~~, and for receiving a notification when an auxiliary classifier component detects a change of the environment or use of the personal communication device,~~;
   - a signal processor processing an electric input signal according to audio processing parameters of the hearing aid;
   - a signal processing sub-system with at least two modes of operation, said sub-system being adapted for applying respective sets of audio processing parameters for each of said at least two modes of operation; and
   - a program selector component having a classifier analyzing the electric input signal and classifying an auditory environment of the hearing aid;
   - wherein the short range data transceiver is adapted for receiving a notification when an auxiliary classifier component detects a change of the environment or use of the personal communication device; and
   - ~~said~~ the program selector component ~~being~~ is adapted for automatically selecting one of said at least two modes of operation for the signal processing sub-system according to the classifiers classification and the notification received from the personal communication device.

10. A computer-readable storage medium having computer-executable instructions, which when executed in a personal communication device provides~~:~~

an auxiliary classifier component characterized in that the auxiliary classifier component is adapted for:

- ~~monitor~~ monitoring the use of said personal communication device,
- generating a notification when detecting a change of environment or use; and transmitting ~~provide a notification when deeming environment or use of the personal communication device to change, and~~
- ~~transmit~~ the notification to a hearing aid via a short range data communication link.

11. The computer-readable storage medium having computer-executable instructions according to claim 10, wherein the monitoring of the use of said personal communication device includes extracting position data from a navigation component, radio telephone component, or a short range radio component in the personal communication device, and deeming the device to be at a predetermined position.

~~12. The computer-readable storage medium having computer-executable instructions according to claim 10, wherein the monitoring of the use of said personal communication device includes extraction of position data from a radio telephone component in the personal communication device, and deeming the device to be at a predetermined position.~~

~~13. The computer-readable storage medium having computer-executable instructions according to claim 10, wherein the monitoring of the use of said personal communication device includes extraction of position data from a short range radio component in the personal communication device, and deeming the device to be at a predetermined position.~~

~~14.~~12. The computer-readable storage medium having computer-executable instructions according to claim 10, wherein the monitoring of the use of said personal communication device includes identification of connected additional devices based on short range radio connections, and deeming the personal communication device to be adjacent to the additional device.

~~15.~~13. The computer-readable storage medium having computer-executable instructions according to claim 10, wherein an auxiliary classifier component is adapted for monitoring the use of the personal communication device, and wherein the auxiliary classifier component is adapted for deeming the personal communication device to be at a predefined position based on a recognized use pattern.

~~16.~~14. The computer-readable storage medium having computer-executable instructions according to claim 15, wherein an auxiliary classifier component is adapted for creating notifications when use at home, at car, at office, or at an unknown place is detected.

~~17.~~15. A personal communication device comprising a computer-readable storage medium having computer-executable instructions, which when executed provides an auxiliary classifier component adapted to~~having a short range data transceiver for providing a short range data communication link for communication with a hearing aid, and a wireless receiver for communication with the internet, said personal communication device including an auxiliary classifier component~~

- monitor~~ing~~ the use of said personal communication device,
- ~~generating~~generate a notification when detecting a change of environment or use, and
- transmit~~ting~~ the notification to a ~~programs selector of said~~ hearing aid via ~~said~~ a short range data communication link~~, wherein the auxiliary classifier component is adapted to access reverberation characteristics for a location and to extract relevant parameters and transfer these parameters to the programs selector via said short range data communication link~~.