

```
1 -----
2 --
3 -- GNAT RAVENSCAR for NXT --
4 -- Copyright (C) 2010, AdaCore --
5 --
6 -----
7
8 -- High-level bluetooth driver. The package is a state machine representing
9 -- the onboard Bluetooth hardware, in other words, that of the local NXT.
10
11 with System;
12 with Interfaces; use Interfaces;
13
14 package NXT.Bluetooth is
15
16     type BT_Address is array (0 .. 6) of Unsigned_8;
17
18     type Friendly_Name is array (0 .. 15) of Unsigned_8;
19
20     type Class_Service is array (0 .. 3) of Unsigned_8;
21
22     type Pin_Code is array (0 .. 15) of Unsigned_8;
23
24     type Device is
25         record
26             Addr : BT_Address;
27             Name : Friendly_Name;
28             Class : Class_Service;
29         end record;
30
31     type Device_List is array (Natural range <>) of Device;
32
33     -- Note: all procedures are blocking (ie they use delay).
34
35     procedure Initialize;
36     -- Must be done before any other operation.
37
38     procedure Convert_To_Friendly_Name
39         (Input : String;
40          Name : out Friendly_Name);
```

```
41  -- Appends necessary NUL byte.    (always ???)
42  -- Input may be truncated if too long.
43
44  procedure Set_Friendly_Name (Name : Friendly_Name);
45
46  procedure Get_Known_Peers (Peers : out Device_List; Length : out Natural);
47
48  procedure Find_Discoverable_Devices
49    (Timeout_Sec : Natural;
50     Discovered  : out Device_List;
51     Length      : out Natural);
52
53  procedure Set_Discoverable (On : Boolean);
54
55  procedure Add_Known_Device (Dev : Device; Success : out Boolean);
56  -- Add a device to the known peer list.
57
58  procedure Accept_Connection
59    (Pin      : Pin_Code;
60     Addr     : out BT_Address;
61     Success  : out Boolean);
62
63  procedure Connect (Target : BT_Address; Success : out Boolean);
64
65  -- a generic communication package for application-specific messages
66  generic
67    type Message (<>) is limited private;
68  package IO is
69    procedure Send (This : access Message);
70    procedure Receive (This : access Message);
71  end IO;
72
73 end NXT.Bluetooth;
74
```