jSh.Radio is a system for transmitting split times from orienteering controls to the finish area through a self-configuring mesh radio network.
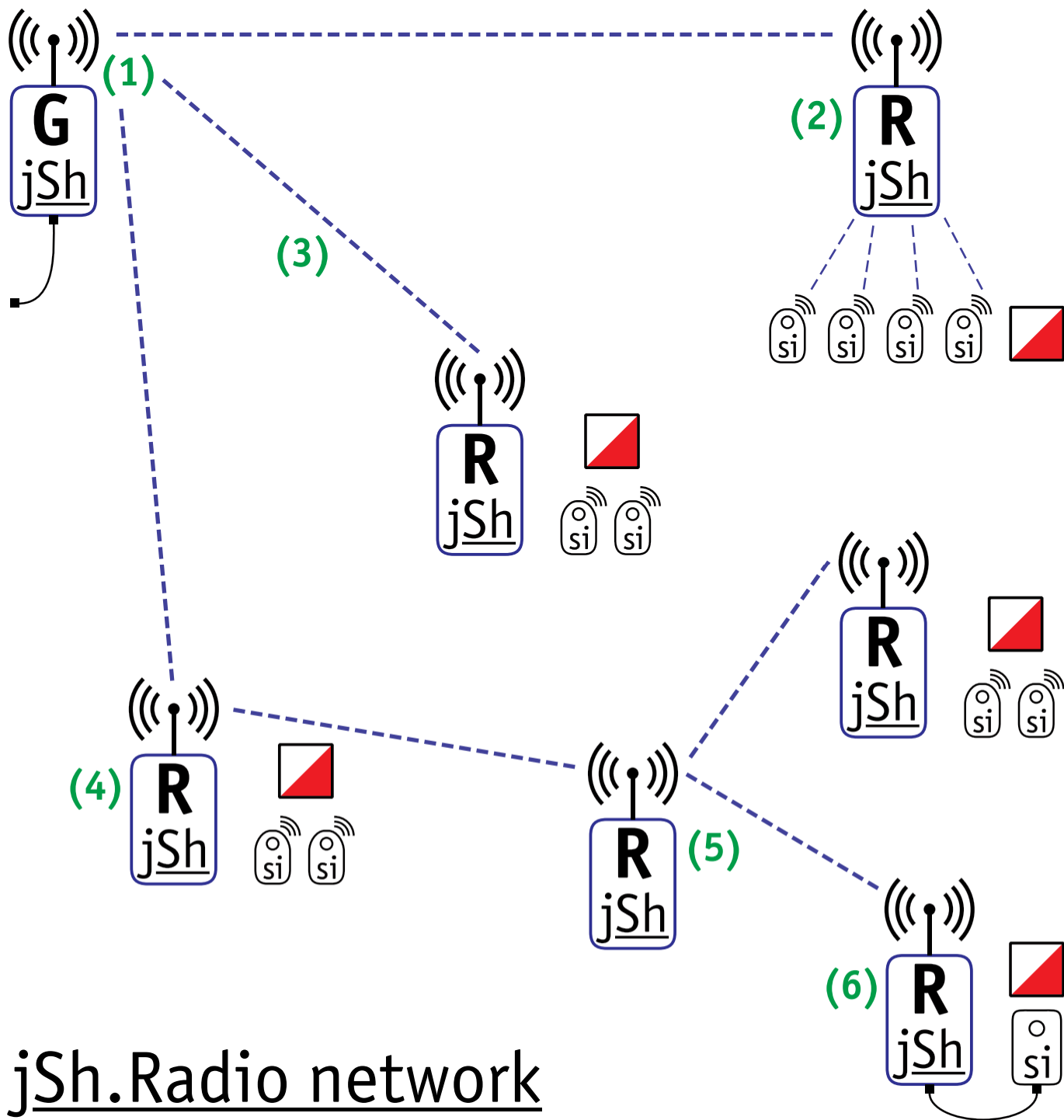
Transmission takes place on 869.525 MHz. This frequency may be used licence-free in the entire European Union by short-range radio devices (SRD).

jSh.Radio
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Radio controls for orienteering

jSh.Radio
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jSh.Radio network

(1) jSh.Radio / Gateway device, connected to the speaker PC via USB or RS232 cable. Data output is in standard SPORTident AutoSend format (understood by OE2003/OE2010, OS, MT etc.).

(2) jSh.Radio / Router device fitted with a SPORTident SRR1 drop-in module. Up to 8 SPORTident BS8-SRR control stations can be received when placed within a range of approx. 8 metres.

(3) Any number of jSh.Radio / Router devices can be received by the Gateway device. Approximate radio ranges:
- line of sight: over 2 kilometres,
- open park, scattered trees: ca. 1 km,
- open forest: up to 500 m,
- dense forest: around 250 m.
Note that dense forest and hills will dampen the radio transmissions very much, so to reach control sites behind these obstacles, jSh.Radio / Router devices acting as repeaters will be required.

(4) jSh.Radio / Router device with local control stations connected using SPORTident SRR1, but also acting as a repeater to forward messages from other control sites further away.

(5) jSh.Radio / Router device without any local control stations, used only as a repeater to extend radio range from remote sites. This device might for instance be placed on the top of a hill.

(6) jSh.Radio / Router device connected to the Gateway device through up to 20 »network hops«. In this example, a single SPORTident BSM7-RS232 control station is plugged into the jSh.Radio device.