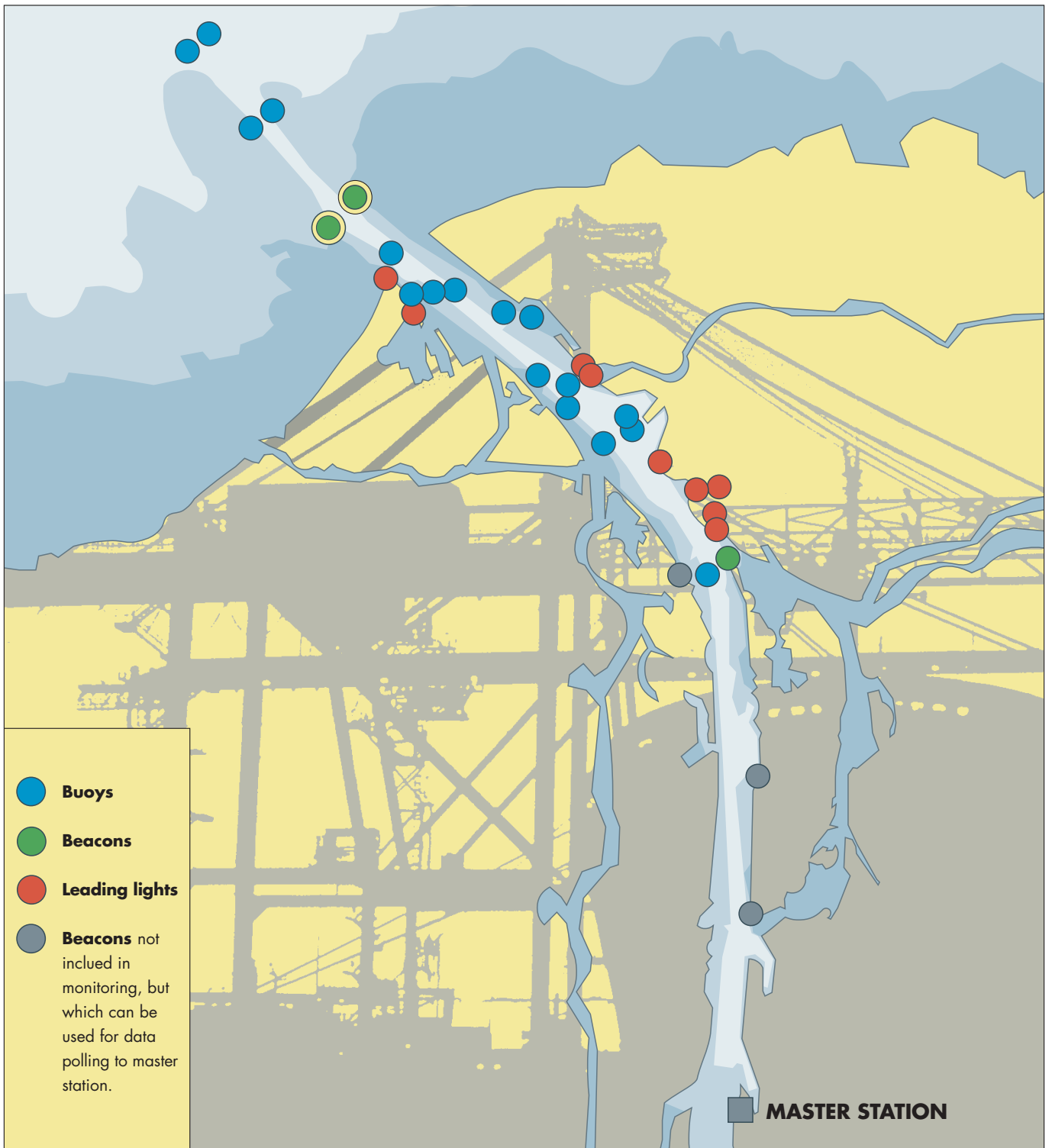




APPLICATION NOTES FOR SATEL RADIO MODEMS

SATELLINE ENHANCES MARINE SAFETY



SABIK Oy in Porvoo, Finland specialises in designing and producing safety enhancing signal lighting for railway, road traffic and marine sectors – wherever dependable, efficient and durable signal lighting is needed. The marine products often operate on solar power and in difficult conditions, which sets strict requirements to the quality of the components used. This is why the well-proven SATELLINE radio modems were chosen for installation into SABIK's Flasher Communicator UHF products.

Efficient monitoring and control with the Flasher Communicator

The Flasher Communicator UHF, based on SATELLINE, is a radio modem for the SmartFlasher electronic flashers. It is typically used locally in harbour areas to monitor the status of the lights in order to prevent light failures and to optimise maintenance. The operational parameters monitored include battery charge level, condition of the lamp, temperature and the power output of the solar panels. The system has an inbuilt diagnostic program with seven different criteria for the alarm, which the modem automatically transmits. The SATELLINE radio modem integrated in the Flasher Communicator has a range of about 7 nautical miles, but by using the built-in repeater function the range can be increased.

The information from the Flasher is transmitted through the Flasher Communicator UHF to the base station, where it is received by a SATELLINE radio modem connected to the customer's server. The data is processed in either the NavSCADA or the web-SCADA monitoring program. NavSCADA is the basic program that collects information from the flasher network and provides presentation of the data as tables, graphs or process diagrams. WebSCADA is a variation that can be used on-line from any computer with an Internet connection.

Polling ensures full operating condition

The base station keeps polling the operational parameters of the Flashers continuously. In case remote Flasher stations are out of radio modem network range they can be polled with the SABIK RCT-2000 Mobile Programmer. The Mobile Programmer can also be used for maintenance or configuration of the Flasher or the Flasher Communicator. When used in an automatic polling mode, the RCT-2000 enables remote stations to be polled through radio from a passing ship in accordance with a pre-set polling sequence. Close-range wireless checking of flashers is an easy and quick way of verifying normal operating conditions.

Impeccable quality and proven reliability

The SmartFlasher electronic flashers can be used in a range of applications from beacons to single buoys, wherever marine guiding lights are needed. Equipped with the SATELLINE-based Flasher Communicator radio modem and a solar panel the flasher is self-supporting. The power consumption is extremely low despite of the wide range of functions available. The SABIK marine products are used in an environment that is probably the most challenging in the world. A proof of their high and even quality is the fact that the SmartFlasher is today used in more than 10 000 lights. SABIK and SATEL are continuously developing together new solutions for the demanding marine applications.



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