Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Office of Communications OFCOM

Zukunftstrasse 44
Postfach
CH-2501 Biel-Bienne
E-mail: kf-fk@bakom.admin.ch

USE OF PERSONAL LOCATION BEACONS (PLB) IN SWITZERLAND AND IN THE PRINCIPALITY OF LIECHTENSTEIN

A factsheet compiled by the Federal Office of Communications OFCOM
The abbreviations used in this factsheet are explained at the end.

What are PLB?

PLB are small, portable transmitters which can be activated in an emergency to transmit distress signals. The distress signals are received by polar orbiting and/or geostationary satellites and relayed via a ground receiving station to a rescue coordination centre (RCC).
A PLB can only function reliably in open terrain.

How does the alert process work?

The distress signals are received by polar orbiting and/or geostationary satellites and are then relayed via the receiving ground station and the FMCC Toulouse to the relevant RCC.

How long does it take for the RCC to receive the alert?

Once a satellite has received the signal, the information is relayed to the RCC within minutes.

How accurate is the position in the alert?

If the PLB is equipped with GPS, a geostationary satellite can receive the alert and the current position of the PLB and relay this information to the RCC. The Doppler method is used to determine the position of PLB without GPS. The accuracy of the measurement increases with the number of operational satellites.

Who operates the RCC in Switzerland and for the Principality of Liechtenstein?

The RCC Zurich which is operated under the supervision of the Federal Office of Civil Aviation (FOCA).

What options does the RCC have when it receives an alert from a PLB?

PLB are devices that are subject to mandatory registration. The PLB must be registered by the holder. The internationally accessible database provides the rescue organisations with access to the information stored 24h/365 days a year. The RCC cannot establish a connection via a PLB unless the PLB has a return link service (RLS) through which receipt of the alert can be acknowledged. If network coverage exists, a mobile phone should be used, if possible, to send the distress alert via the emergency telephone numbers.

Do PLBs have a test function?

Yes, every PLB has a test function. The self-tests should be carried out according to the manufacturer's instructions. PLBs with built-in GPS (GNSS) should be updated by carrying out the self-test described according to the manufacturer's instructions. This ensures that the GPS position can be identified and relayed quickly when an alert is activated. **Actual alert activation** for test purposes is prohibited and puts unnecessary strain on the system.

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How much do PLBs cost?
Prices vary depending on the manufacturer. The devices are available from specialist shops from CHF 300.

Are there any alternatives to PLBs?
In view of the well-developed emergency network in Switzerland and the Principality of Liechtenstein, OFCOM recommends the use of:

- a mobile telephone
- the emergency radio network available to the public
- an emergency telephone (e.g. a mobile telephone equipped with a GPS receiver and an alert button)
- a satellite telephone

When can a PLB be carried?
As soon as the PLB has been registered with COSPAS-SARSAT in the IBRD (International 406 MHz Beacon Registration Database), it can be carried worldwide in accordance with the country-specific requirements: https://www.406registration.com.

Can I buy a PLB anywhere in the world?
If a PLB is purchased abroad it must be correctly programmed by the dealer – depending on the intended use – with the country code 269 for Switzerland or 252 for the Principality of Liechtenstein. Devices should not be purchased from online auction sites. They are often coded incorrectly.

How do I register my PLB?
- To ensure the rescue chain has all relevant information, a PLB must be registered with COSPAS-SARSAT as a personal rescue transmitter in the holder's name. **This registration is free of charge.**
- The designation of a contact person who can be reached around the clock is essential to ensure the RCC can check information about the holder if the PLB is activated. This means the contact person cannot be the holder for obvious reasons. The contact person should be able to provide information about where the holder can be reached in the event of an alert (number of the mobile telephone, satellite telephone or emergency telephone carried) or where the PLB is being used or whether the holder is carrying an emergency radio for public use.

Can a PLB registered in Switzerland also be used abroad?
Not all countries permit PLB alerts. Check the COSPAS-SARSAT homepage for information before departure. Please note that the infrastructure required for search and rescue operations is only available in certain countries. Find out beforehand whether the use of a PLB is of any benefit, otherwise you may be lulled into a false sense of security.

Can a PLB registered in Switzerland also be carried on a charter ship at sea?
Yes, in principle. Authorisation must be obtained beforehand from the authorities of the country under whose flag the ship is registered.

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Can a PLB be used on a yacht under the Swiss flag at sea?
Yes, but only if the PLB can be programmed with a MMSI. The PLB is regarded as an EPIRB and is only approved for use on the ship for which the MMSI is valid. PLBs must be registered with COSPAS-SARSAT https://www.406registration.com.

Can a PLB be carried on a domestic flight in a Swiss-registered aircraft?
If a PLB is carried on board a Swiss-registered aircraft, it should be coded as an ELT with a "Standard Location / Aircraft 24-bit Address" and registered with the FOCA at elt@bazl.admin.ch. The use of a PLB instead of a mandatory ELT is only permitted for small aircraft in accordance with NCO (Non Commercial Operation). The FOCA recommends carrying the PLB only as an extra device in addition to the automatically triggered ELT (flights in mountainous areas, mounting on parachute, etc.). PLBs must always be triggered manually; ELTs trigger automatically.

Can a PLB be carried on an international flight in a Swiss-registered aircraft?
Yes, subject to permission from the foreign authorities and taking account of the previous section.

How and where can a false distress alert be cancelled?
The RCC Zurich must be notified immediately by telephone in the event of any false distress alerts within Switzerland or Liechtenstein. RCC telephone number for Switzerland: +41 58 484 10 00. False distress alerts abroad should be immediately reported to the RCC concerned. Contact details can be found on the COSPAS-SARSAT homepage.

Abbreviations used in this factsheet:

OFCOM Federal Office of Communications

FOCA Federal Office of Civil Aviation

ELT (*Emergency Locator Transmitter)*. Emergency transmitter which automatically transmits a distress signal in the event of an aircraft accident.

EPIRB (*Emergency Position Indicating Radio Beacon)*. Maritime emergency radio buoy, which transmits a distress signal, which is received by satellites and relayed via a ground station to a maritime emergency rescue centre.

GPS (*Global Positioning System)*. Navigation system which uses several orbiting satellites to determine the exact position on the Earth's surface.

MMSI (*Maritime Mobile Service Identity)*. Unique identification for the radio communications equipment on a ship.

REGA Swiss Air Rescue

RCC Rescue Coordination Centre

SAR Search and Rescue