+ 1 Appendix

This Note supersedes Safety Note 2002/05

ALARM PROTECTION FOR

ISOLATED WORKERS

Distribution: B

All Scientists

	Revision	Date	Observations	Author	Director
E	E				
d	D				
i	C				
t	B				
i	A	05.08.2013	Update of appendix (inclusion of 3 additional zones)	J. TRIBOLET	A. HARRISON
o n	O	09.03.2005	First edition	H. SCHWEITZER	C. CARLILE
	Revision	**Date**	**Observations**	**Author**	**Director**

Although working in isolated conditions does not present a risk in itself, it is a factor which aggravates other occupational hazards by increasing the likelihood that they will occur and/or the seriousness of their consequences.

Isolated working must therefore remain an exception and be limited, as far as possible, to risk-free duties. The specificity of research work, however, often requires scientists to work on instruments or in laboratories outside normal working hours. In addition, certain duties may be carried out by ILL staff in isolated or remote parts of the site. In such cases, the staff concerned MUST carry a portable alarm known as a PTI (*Protection de travailleur isolé*).

This device makes it possible to raise the alarm if the user is in difficulty (see description in appendix) and to identify his/her geographical location.

It should be noted, however, that the localisation system does not cover the offices, making localisation more difficult if the alarm is raised from an office.

PTI devices are available from the site security staff at the reactor entrance on the Level C and must be returned to the same place before the user leaves the site.

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ALARM PROTECTION FOR ISOLATED WORKERS
DESCRIPTION

The alarm protection system for isolated workers consists primarily of:

- UHF receivers capable of picking up alarm signals, which are then relayed to a PC at the security post at the reactor entrance on level C in ILL 4;

- location beacons with infrared emitters installed at various points around the premises;

- portable PTI devices (with unique IDs), comprising an infrared receiver for locating the user and a UHF emitter for raising the alarm (see enclosed Figures 1 and 2).

The zones currently covered by the system are: _CIBB_, ILL 1, ILL 4 basement, ILL 5, ILL 7, _ILL 17 basement, ILL20_, ILL 21, ILL 22, the pipe galleries, ILL 19 basement, ILL 8 pumping and catchment installations.

1) Alarms

a) Push button alarm:

In case of need, press the alarm button twice; the alarm is transmitted silently.

b) Ripcord alarm:

If the ripcord is pulled, a silent alarm is transmitted.

It should be noted that the ripcord alarm is designed primarily for use in the event of an assault and is of little relevance to the ILL. This function is intended to prevent ill-intentioned persons from stealing the device and was originally created for security staff working in the Paris metro.

c) "Man-down" alarm

If the portable PTI device is titled at an angle of more than 60° off the vertical, a warning tone is triggered after 7 seconds. After a further 7 seconds the red LED blinks once and an alarm is transmitted. A continuous two-tone signal sounds to help locate the person.

2) Using the PTI device

a) When you are given the portable PTI device, you must check that the switch is set to position 3.

b) The device must be worn in a visible position: the infrared receiver is at the top of the device together with the red LED.

Figure 1: PTI device (for protection of isolated workers) *(Protection de Travailleur Isolé)*

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Commutateur

Cordon d'arrachement

Antenne