

Guidance No.1 of 2005

**A Guidance issued by the
Telecommunications Regulatory Authority
concerning**

Free Space Optics (FSO) Type Approval Guidance

1 December 2005



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تنظيم
الاتصالات
Telecommunications
Regulatory
Authority

FSO Type Approval Guidance

This Guidance is issued by the Authority to all applicants for type approval of FSO Equipment (as defined below) to explain the terms under which it will grant such type approvals under section 38 of the Telecommunications Law.

Definitions

Unless otherwise defined in this Guidance, any word, phrase or expression shall, unless the context so requires, have the meaning given to it in the Telecommunications Law, and the terms below shall have the following meaning:

“FSO Equipment” means Telecommunications Equipment that consists of or includes free space optics whereby transmission of messages, sound, visual images or signals is achieved by using modulated optical radiation produced by a laser;

“Guidance” means this FSO Type Approval Guidance;

“Safety Standards” means the standards set out in the International Electrotechnical Commission Standard IEC 60825-12 (Safety of laser products – Part 12: Safety of free space optical communications systems used for transmission of information); and

“Telecommunications Law” means the Legislative Decree No. 48 of 2002 promulgating the Telecommunications Law of the Kingdom of Bahrain.

Article 1 - Scope

- 1.1 Under the terms of section 38(a)2 of the Telecommunications Law, the Authority may approve Telecommunications Equipment for connection to a Telecommunications Network in the Kingdom by issuing a certificate in respect of any type of Telecommunications Equipment upon application by a Licensed Operator, or by the manufacturer or supplier of the equipment.
- 1.2 Under the terms of section 38(b) of the Telecommunications Law, the Authority may designate technical standards issued by international standard-setting bodies with which the Telecommunications Equipment must comply.
- 1.3 Under the terms of section 38(c) of the Telecommunications Law, the Authority may set additional requirements on Persons applying for a certificate under section 38(a) as it considers appropriate.

Article 2 – FSO Type Approval Certificates

- 2.1 The Authority shall grant Licensed Operators a certificate for FSO Equipment under the conditions that the Licensed Operator:
- (a) certifies in any application for any FSO Equipment that the FSO Equipment which is the subject of the application:
 - (i) fully complies with or is manufactured in accordance with the Safety Standards; and
 - (ii) contains a Class 1, 1M, 2 or 2M laser only;
 - (b) provides the Authority with full details of the location of all installed FSO Equipment before it becomes operational; and
 - (c) ensures that its Chief Technical Officer or one of its directors certifies to the Authority that the FSO Equipment has been properly installed and tested in accordance with the Safety Standards, by providing the Authority with a signed certificate, in the form of the installation certificate attached to this Guidance in Annex A, prior to use of the Equipment.
- 2.2 Where a laser in any FSO Equipment is repaired or replaced, or where the laser is otherwise disturbed (whether by natural causes or otherwise), the Licensed Operator shall ensure that a new installation certificate is obtained for that FSO Equipment, as if the FSO Equipment were a new installation, in accordance with Article 2.1(c).

Article 3 – Other Approvals

Nothing in this Guidance should be understood to relieve any Person from obtaining any approvals required:

- 3.1 under section 38 of the Telecommunications Law for any Telecommunications Equipment used in connection with any FSO Equipment; and
- 3.2 by any other authority of the Kingdom of Bahrain with regard to the importation of Telecommunications Equipment or permits for the installation of such equipment.

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Annex A – FSO Equipment Installation Certificate

To: Licensing Directorate
Telecommunications Regulatory Authority
P.O. Box 10353
Kingdom of Bahrain

Date:

FSO Equipment Details

Name of Licensed Operator	
Description of FSO Equipment	
Type	
Serial No.(s)	
Class of laser (Class 1, 1M, 2 or 2M)	
Installation details	
Address	
Location at address (including approx. height from the ground)	
Type of location (unrestricted, restricted or controlled)	
Installation Date	
Ready for Use Date	

I hereby certify that the above FSO Equipment was installed on the Installation Date in full compliance with the installation requirements set out in IEC 60825-12, and that its use from the Ready for Use Date will be in accordance with all restrictions and conditions set out in IEC 60825-12.

Signature: _____

Chief Technical Officer/Director (*delete as appropriate*)
for and on behalf of the Licensed Operator