

Table 31A-3—GATE MAC Control indications

GATE (opcode 0x0002)		
indication_operand_list element	Value	Interpretation
start	32 bit	Time when transmission should be initiated.
length	16 bit	Interval of time during which transmission is allowed.
status	arrive	Indicates that a grant has been received for future activation.
	active	Indicates that the GATE function is allowing transmission of frames.
	deactive	Indicates that the GATE function is inhibiting transmission of frames.
force_report	true	The OLT expects the ONU to transmit a REPORT message during the transmission opportunity identified by start and length fields.
	false	The OLT does not request the ONU to transmit a REPORT message during the transmission opportunity identified by start and length fields.
discovery	true	This grant is reserved for use during discovery.
	false	This grant is not reserved for use by the discovery process, and is available for use by all traffic.
discoveryInformation ^a	16 bits	See Table 77-3 for the internal structure of the discoveryInformation field.

^aonly present in 10G-EPON GATE MAC Control indication (Clause 77).

Table 31A-5—REGISTER_REQ MAC Control indications

REGISTER_REQ (opcode 0x0004)		
indication_operand_list element	Value	Interpretation
status	incoming	Indicates that a station is requesting recognition.
	retry	Indicates that the station should reattempt registration.
flags	register	Indicates that the station is requesting to register.
	deregister	Indicates that the station is requesting to deregister.
pending_grants	Integer	Indicates the maximal number of future GATES that can be stored by the GATE function.
RTT	32 bit	Indicates the calculated round trip time for the station, as calculated following the REGISTER_REQ message reception.
laserOnTime ^a	8 bits	Indicates the Laser On Time characteristic for the given ONU transmitter, expressed in the units of time_quanta.
laserOffTime ^a	8 bits	Indicates the Laser Off Time characteristic for the given ONU transmitter, expressed in the units of time_quanta.
discoveryInformation ^a	16 bits	See Table 77-7 for the internal structure of the discoveryInformation field.

^aonly present in 10G-EPON REGISTER_REQ MAC Control indication (Clause 77).

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Table 31A-6—REGISTER MAC Control indications

REGISTER (opcode 0x0005)		
indication_operand_list element	Value	Interpretation
SA	48 bit	MAC address of OLT to which registration is being performed.
ID	16 bit	LLID assigned by the OLT for use by the ONU.
status	accepted	Indicates that the requested registration is successful.
	denied	Indicates that the requested registration attempt is denied by the higher-layer-entity.
	deregistered	Indicates that the ONU has been deregistered, i.e., the associated LLID has been deallocated.
	reregistered	Indicates that the ONU is explicitly asked to re-register.
laserOnTime ^a	8 bits	Indicates the Laser On Time characteristic for the given ONU transmitter, expressed in the units of time_quanta.
laserOffTime ^a	8 bits	Indicates the Laser Off Time characteristic for the given ONU transmitter, expressed in the units of time_quanta.

^aonly present in 10G-EPON REGISTER MAC Control indication (Clause 77).

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