5. Medium Access Control (MAC) reference and service model

5.0.1 Overview of the interactions

Four service primitives are defined for the client interfaces.

- MA_DATA.request
- MA_DATA.indication
- MA_CONTROL.request
- MA_CONTROL.indication

The primitives MA_DATA.request, MA_DATA.indication service, MA_CONTROL.request and MA_CONTROL.indication described in this subclause are mandatory.

5.0.2 MA_DATA.request

```
MA_DATA.request (ringlet_id (optional),
         destination_address,
         source_address (optional),
         mac_service_data_unit,
         size,
         service_class,
         wrap_eligibility)
```

Editors' Notes: *To be removed prior to final publication.*

Parameters not in the list subject to comments (not approved in current draft)

- Flooding indicator (bridging)
- Frame_type (bridging)

Fairness elegible (not relevent)

5.0.3 MA_DATA.indication

```
MA_DATA.indication (ringlet_id,
         service_class,
         time_to_live (optional),
         destination_address,
         source_address (optional),
         mac_service_data_unit,
         size,
         reception_status)
```

Editors' Notes: *To be removed prior to final publication.*

TTL (comments to remove it?)
Parameters not in the list subject to comments (not approved in current draft)

- Flooding indicator (bridging)
- Frame_type (bridging)

5.0.4 MA_CONTROL.request

```
MA_CONTROL.request (
         destination_address,
         opcode,
         request_operand_list)
```

The opcode indicates the control operation requested by the MAC client entity. The operations are described in Table 5—1.

Table 5—1—Control request opcodes

Opcode (informative only)	Operand	Meaning
0	none	No Request
1	none	Fairness Single Choke Stats
2	none	Fairness Multi-choke Stats
3	none	Request FCU to decrease add rate
all others	TBD	TBD

5.0.5 MA_CONTROL.indication

5.0.5.1 Semantics of the service primitive

```
MA_CONTROL.indication (
         source_address,
         opcode,
         request_operand_list)
```

The elements of the indication_operand_list are opcode-specific, and specified in Table 5—2.

Table 5—2—Control Indication Opcodes

Opcode (informative only)	Operand	Meaning
0	none	no indication
1	network topology data structure	network topology change
2	configuration_parameter_list	request station configuration
3	paused/not paused	Stop A, requests that recipient stop transmitting class A traffic
4	paused/not paused	Stop B, requests that recipient stop transmitting class B traffic
5	paused/not paused	Stop C, requests that recipient stop transmitting class C traffic
6	Fairness Stats	Single choke/General info (ttl_to_congestion, current advertise rate, current allow rate, current fair rate)
7	Fairness Stats	Multi choke info (control word, with source address parameter set to originating node)
other	TBD	TBD