

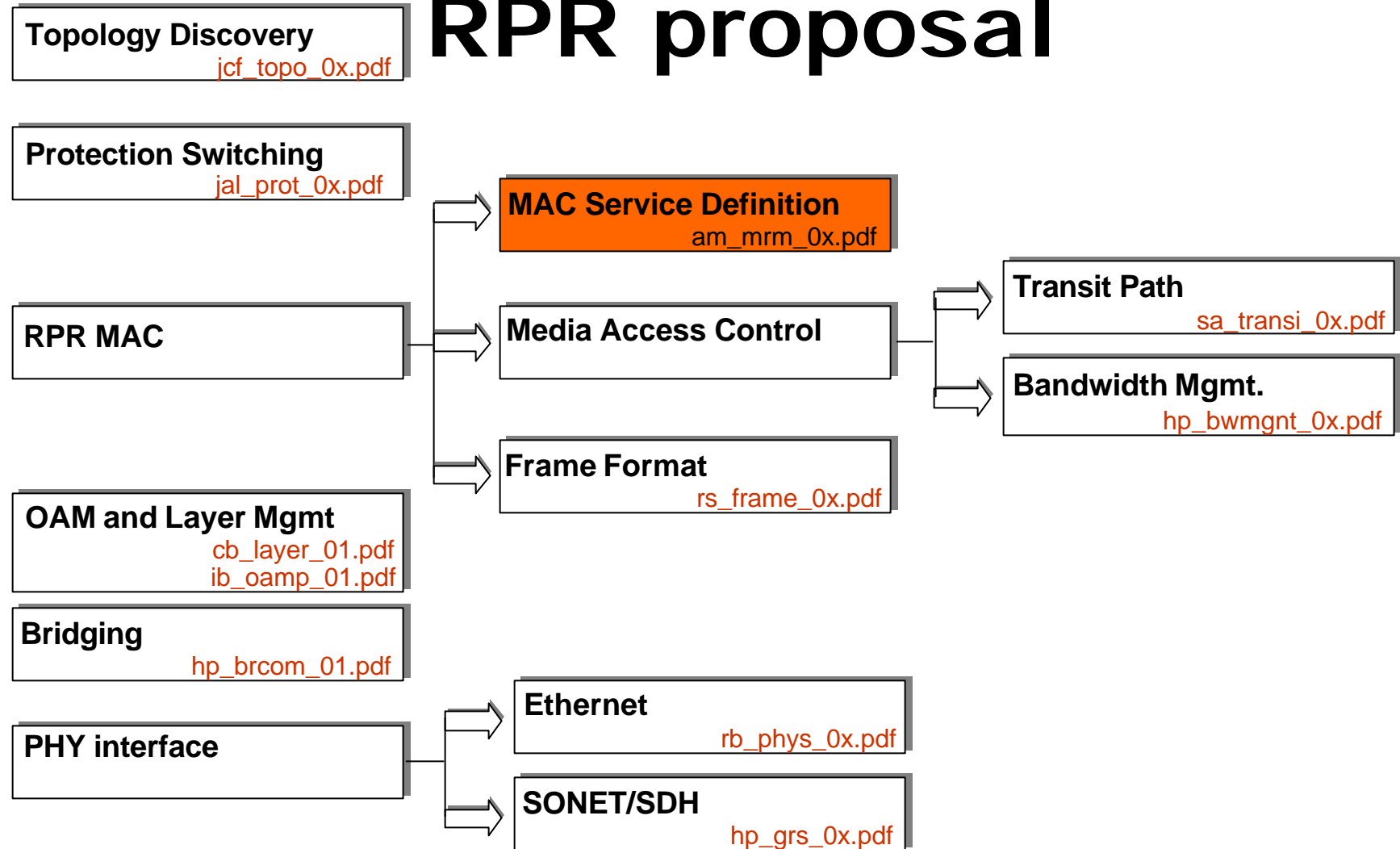


MAC Service Definition

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Components of a complete RPR proposal





Objectives

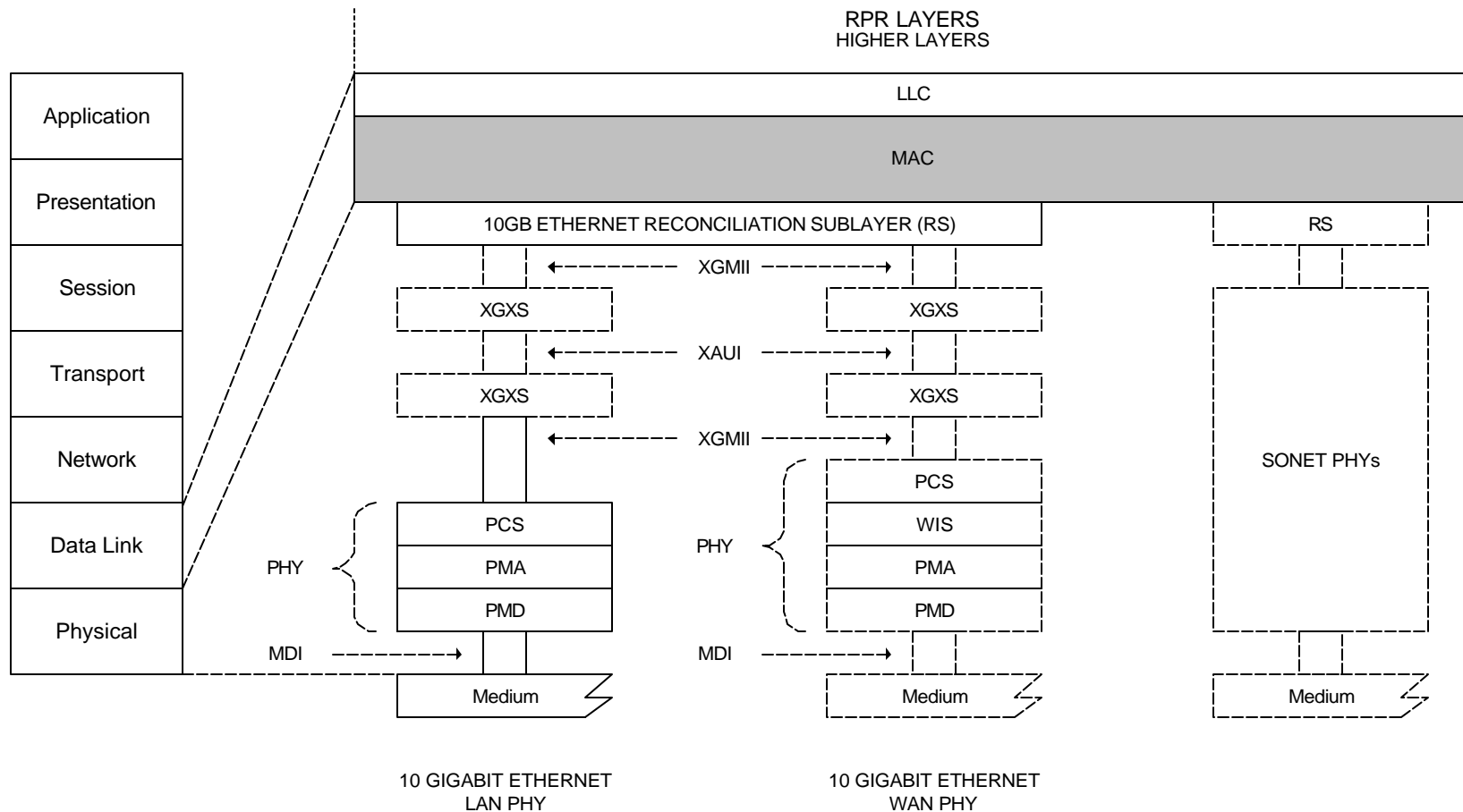
- Provide a uniform interface between RPR MAC and clients
- Allow a broad range of queueing disciplines on the client: FIFO, priority, VOQ
- Maintain compatibility with LLC sublayer defined in 802.2
- Leverage Existing Models: 802.3, 802.11, etc
 - Necessary primitives to construct media access rate control are already defined in 802.3



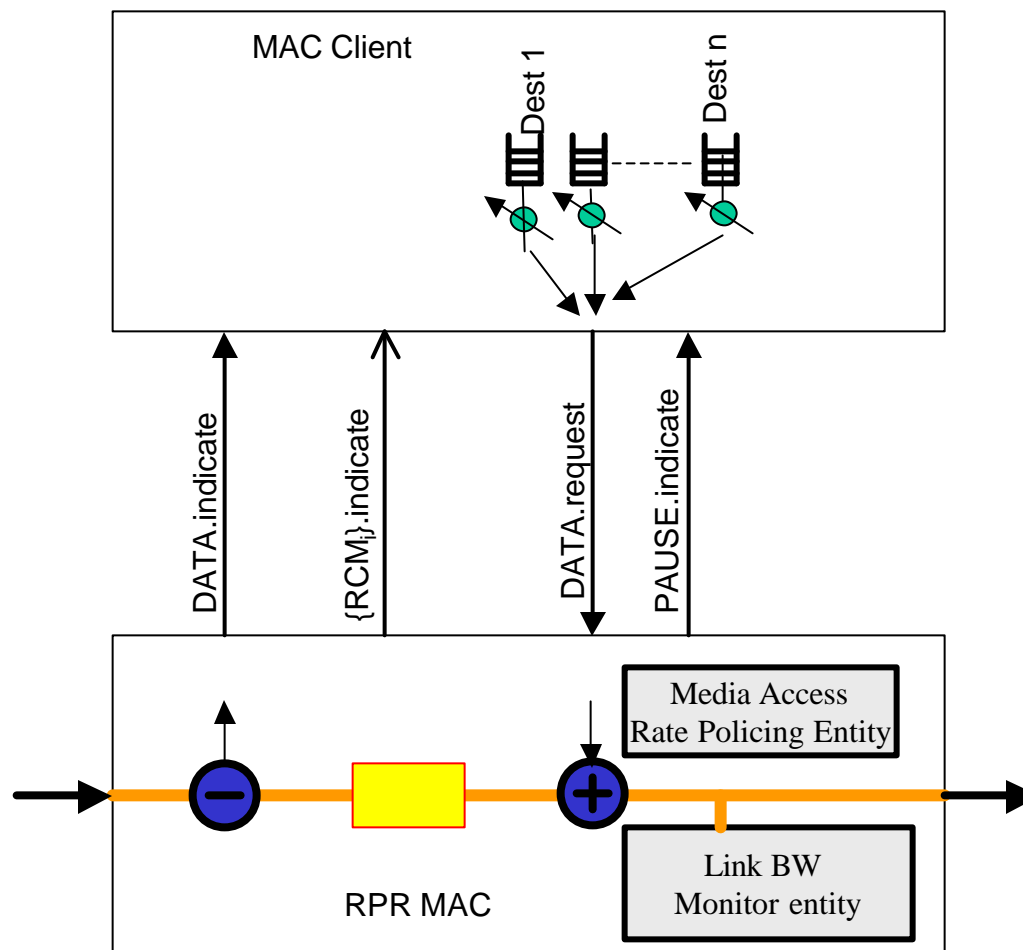
OSI Reference Model



OSI REFERENCE
MODEL LAYERS

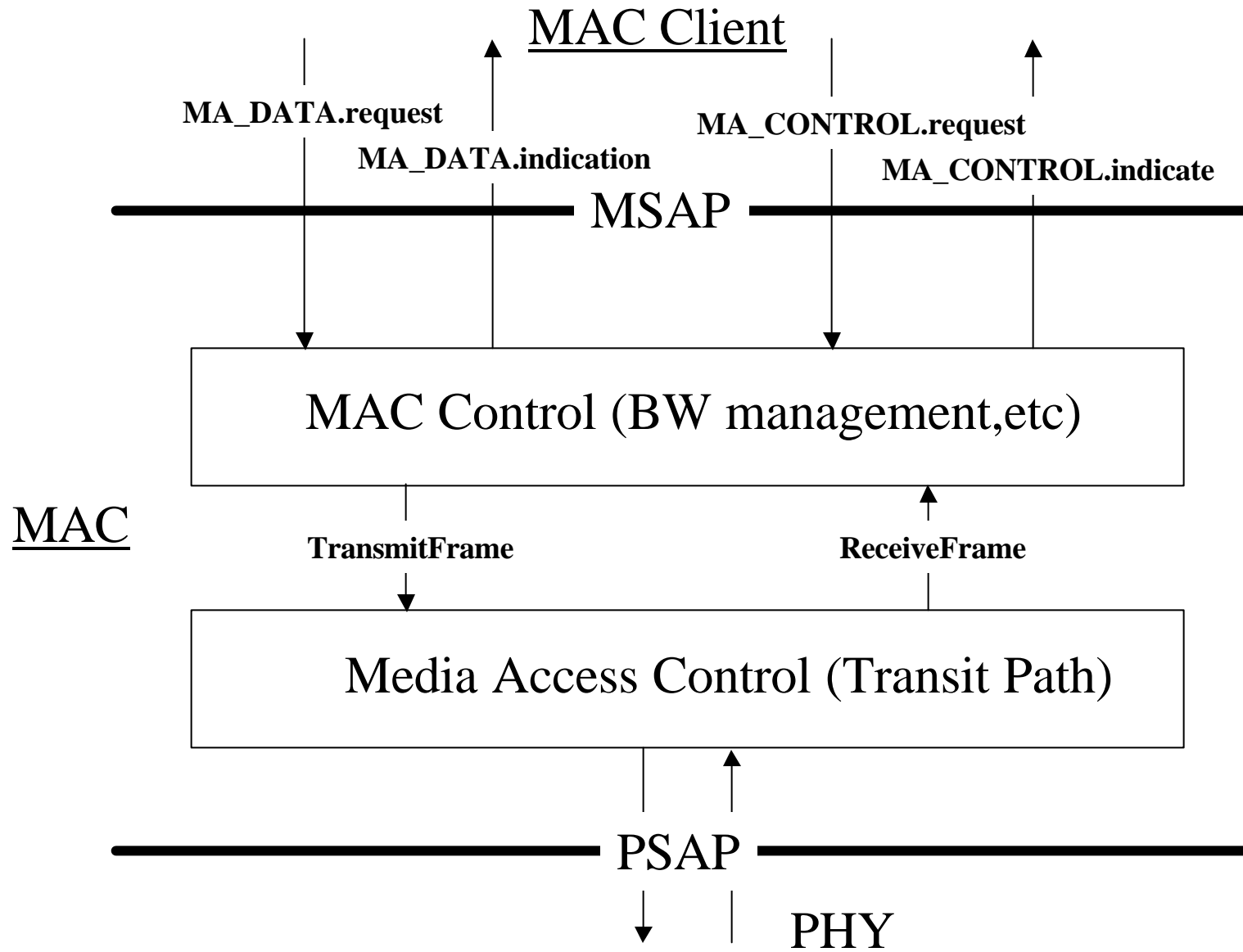


VoQ MAC-Client Interface





RPR Service Definition





Service Primitive



```
MA_DATA.request (  
    Protection_request (optional),  
    Ringlet_id (optional),  
    destination_address,  
    source_address,  
    m_sdu,  
    service_class,  
    customer_id  
)
```



Service Primitive



```
MA_DATA.indication (  
    destination_address,  
    source_address,  
    m_sdu,  
    service_class,  
    customer_id  
)
```




Service Primitive



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



Service Primitive



```
MA_CONTROL.indication (  
    opcode,  
    indication_operand_list  
)
```



Opcode Assignment

Opcode (Hexadecimal)	MAC Control function	Value/comment
00-00	Reserved	
00-01	PAUSE	Requests that the client stop transmitting
00-02 through 00-FF	Reserved	
01-00	RCF update	Notifies a newly received RCF value
01-01	Protection Event	Notifies a point of failure
01-02	TBD	
01-03 through FF-FF	Reserved	



PAUSE Message Format



opcode (2 bytes)
Ringlet_ID and segment



RCF Message Format



opcode (2 bytes)
ringlet ID and segment
RCF upper 2 bytes
RCF lower 2 bytes