



**What do we mean by “UNI port”?**

# Where is UNI?

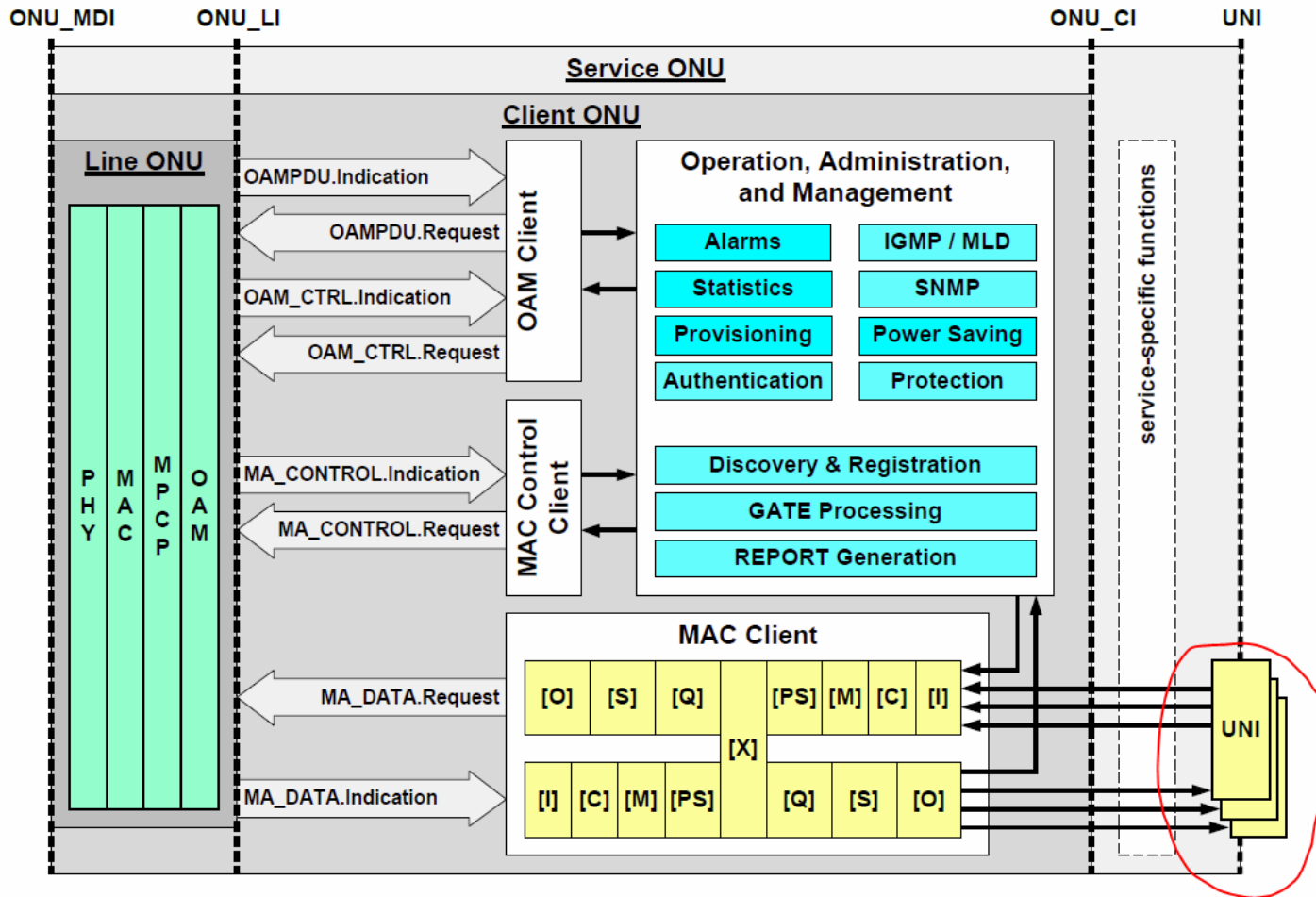


Figure 5-3—ONU architecture with single L-ONU (sL-ONU)

- ❑ **Problem statement:** In 1904.4, there is a number of attributes that refer to “UNI port” when they don’t really mean UNI port
  - ❑ Classical definition: User-Network Interface (UNI) is a physical demarcation point between operator’s domain and user domain
- ← In the context of DPoE and SIEPON, UNI port always was a user-facing physical port on an ONU box

# Example of mis-named attribute



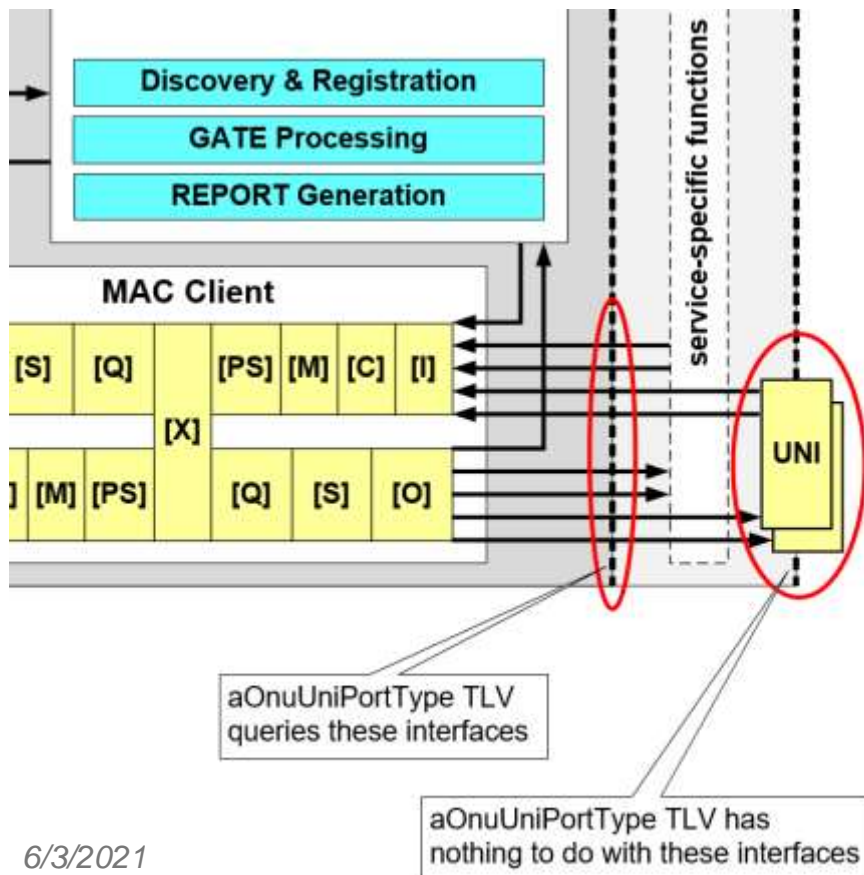
- In D0.3 (as in 1904.1) we have several management attributes that refer to *UNI ports*, while they mean *internal logical port*

## 14.4.3.1.15 Attribute *aOnuUniPortType* (0xDB/0x00-10)

This attribute represents information about the type of individual UNI ports supported on the ONU and devices connected to individual UNI ports (if present), including embedded (eSAFE) and other known CPE devices.

Table 14-70—ONU UNI Port Type TLV (0xDB/0x00-10)

Size (octets)	Field (name)	Value	Notes
1	Branch	0xDB	Branch identifier
2	Leaf	0x00-10	Leaf identifier
1	Length	Varies	The size of TLV fields following the Length field, equal to value of <i>sPortCount</i> sub-attribute
1	PortType[0]	Varies	Value of <i>sPortType</i> [0] sub-attribute, defined as follows: unspecified: 0x00 emta: 0x01 estb_ip: 0x02 estb_dsg: 0x03 etea: 0x04 esg: 0x05 erouter: 0x06 edva: 0x07 seb_estp_ip: 0x08
...	...	...	..
1	PortType[N-1]	Varies	Value of <i>sPortType</i> [N-1] sub-attribute



- DPoE provides a more accurate taxonomy for various interfaces

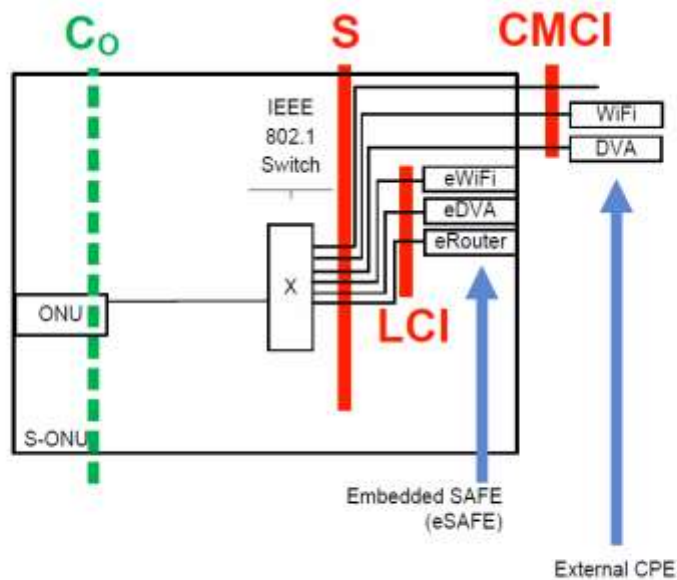


Figure 8 - DPoE Specifications Support Both Embedded SAFEs and External CPE

- **S-Interface** is an IEEE 802 interface. The S interface may be an internal interface, (such as an GMII or XGMII interface implemented in the form of a SERDES) or an external interface exposed in a BB-ONU or S-ONU for connection to other devices.
- **LCI (Logical CPE interface)** connects 802 transport functions to embedded devices (eSAFE)
- **CMCI (Cable Modem CPE Interface)** connects 802 transport functions to external devices (CPE)

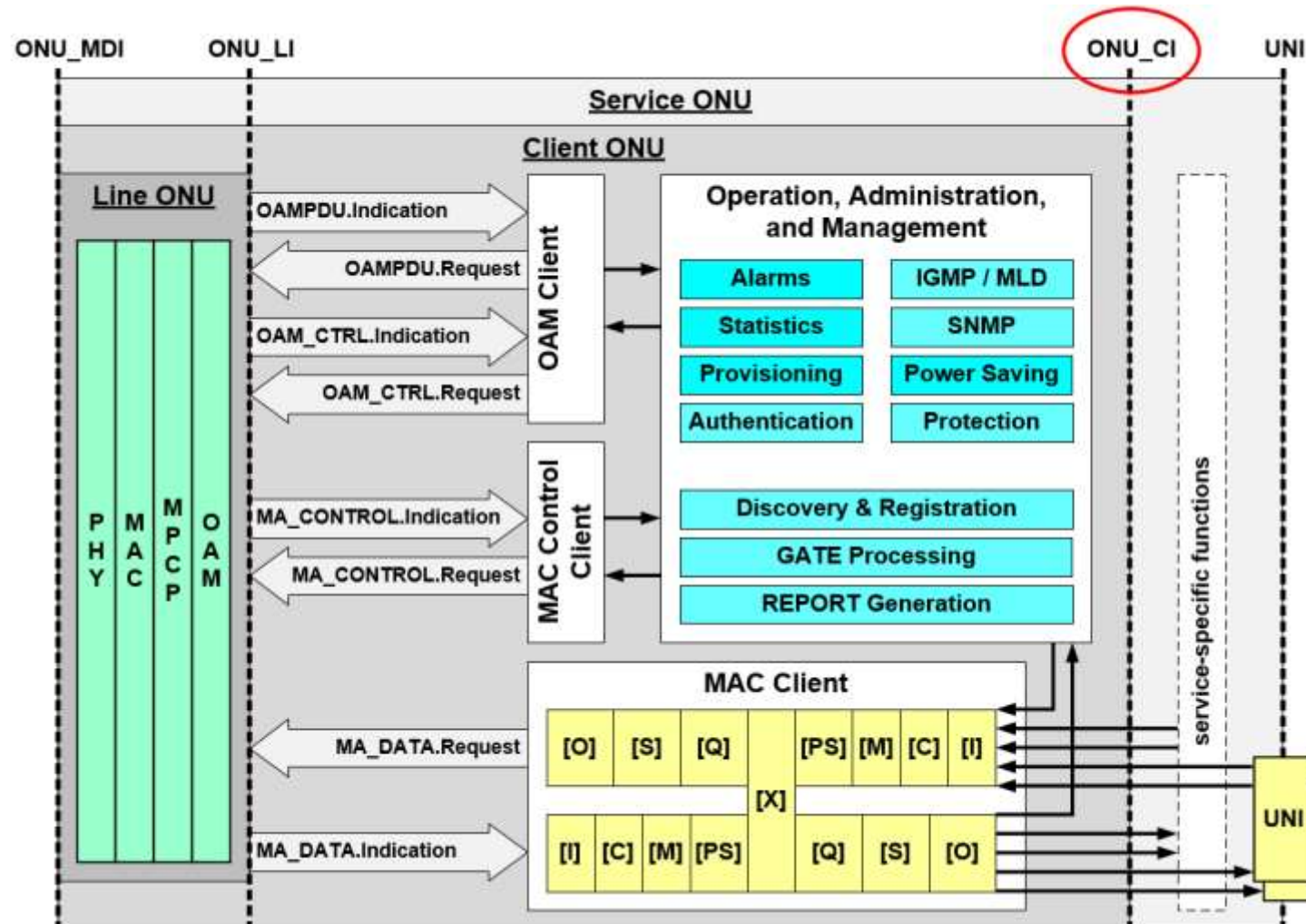
# S interface in DPoE = ONU\_CI in SIEPON

## Definition from 1904.4:

The ONU\_CI represents the interface between the C-ONU and the S-ONU functionalities.

When no service-specific functions are implemented, the ONU\_CI corresponds to the UNI.

When service-specific functions are present, the ONU\_CI is an internal interface that does not correspond to any existing IEEE Std 802.3- or IEEE Std 802.1-compliant interface.



# What terminology to use?



- ❑ Where attribute names use “UNI Port” to mean either external (physical) or internal (logical) port, we need to use a more accurate term.
- ❑ Use the interface name already defined in 1904.4
  - **Client Interface (CI)**
    - Not a well-known or intuitive name
    - Examples: *aOnuCiPortType*, *acConfigCiPort*
  - **S-interface (SI)**
    - What “S” stands for?
    - Not a well-known or intuitive name
    - 1904.4 will have two names for the same interface
    - Examples: *aOnuSiPortType*, *acConfigSiPort*
- ❑ Use a new term
  - **Service Port**
    - Maybe more descriptive, but yet another name
    - Examples: *aOnuSrvPortType*, *acConfigSrvPort*
  - Other names?