

#### 4.1.1. ROE protocol overview:

Figure 1 shows the various layers in transporting CPRI frames over ethernet through ROE protocol. CPRI mapping layer maps CPRI frames to/from ROE layer based on the mode - tunnel, structure aware or structure agnostic. ROE packets are assembled/disassembled with control, data and timing information by the ROE layer. ROE control information is mapped from/to CPRI frames in structure aware mode while it is added/removed by ROE layer in tunnel and structure agnostic modes. The resulting ROE packets are encapsulated/decapsulated as ethernet frames and transmitted/received by the PHY layer.

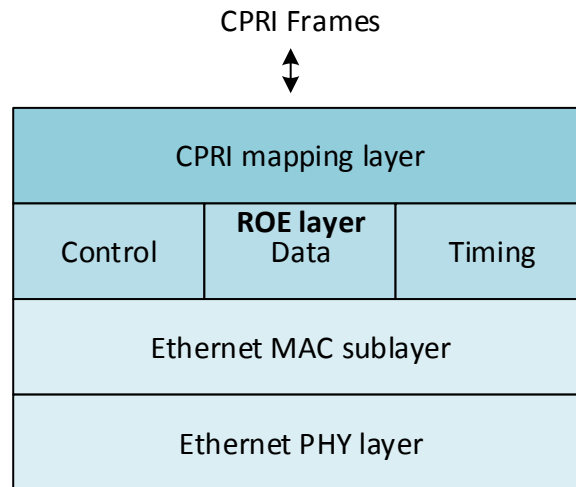


Figure 1 : CPRI Frames transported by ROE

Figure 2 shows the various layers in transporting fronthaul data natively over ethernet through ROE. Fronthaul data is assembled/disassembled by ROE layer as ROE packets with data, control and timing information which are then encapsulated/decapsulated as ethernet frames and eventually transmitted/received by the PHY layer.

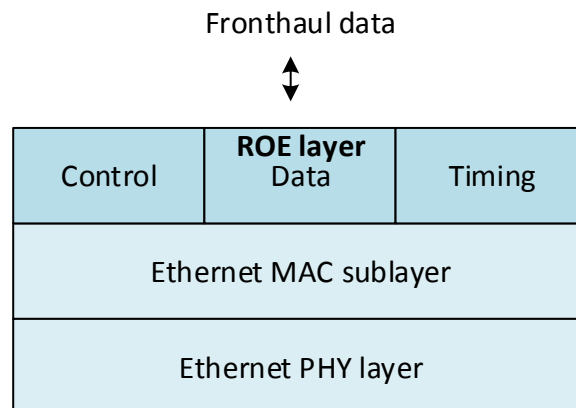


Figure 2 : Native ROE