Comparison of IPv6 Addressing Method for Wireline Network

	Case1 DHCPv6	Case2 DHCPv6-PD	Case3 RA + DHCPv6-PD	Case4 RA only
WAN Address	DHCPv6(IA_NA) : /128	LLA(Link Local Address) only	ND/RA : /64	One /64 prefix for LAN and WAN
LAN Address	DHCPv6(IA_PD) : /48-/64	DHCPv6(IA_PD) : /48-/64	DHCPv6(IA_PD) : /48-/64	
Address Management and Provisioning by Administrator	Complicated, need many resources IPv6 Address for WAN IPv6 Prefix for LAN	Simple, easy provisioning One IPv6 Prefix for LAN	Complicated, need many resources IPv6 Prefix for WAN IPv6 Prefix for LAN	Simple, easy provisioning One IPv6 Prefix for WAN and LAN
Address Management by CPE	WAN : LLA/GUA LAN : LLA/GUA	WAN : LLA LAN : LLA/GUA	WAN : LLA/GUA LAN : LLA/GUA	WAN : LLA/GUA LAN : LLA/GUA
Notes	We can use DHCPv6 protocol which is both IA_NA and IA_PD.	Many telecom carriers and ISPs are using this method because of simple addressing and provisioning.	CPE has to manage NDP for GUA.	CPE has to implement NDP Proxy due to only one /64 prefix.