

# **IETF Network Slice use cases**

**draft-cheng-teas-network-slice-usecase-00**

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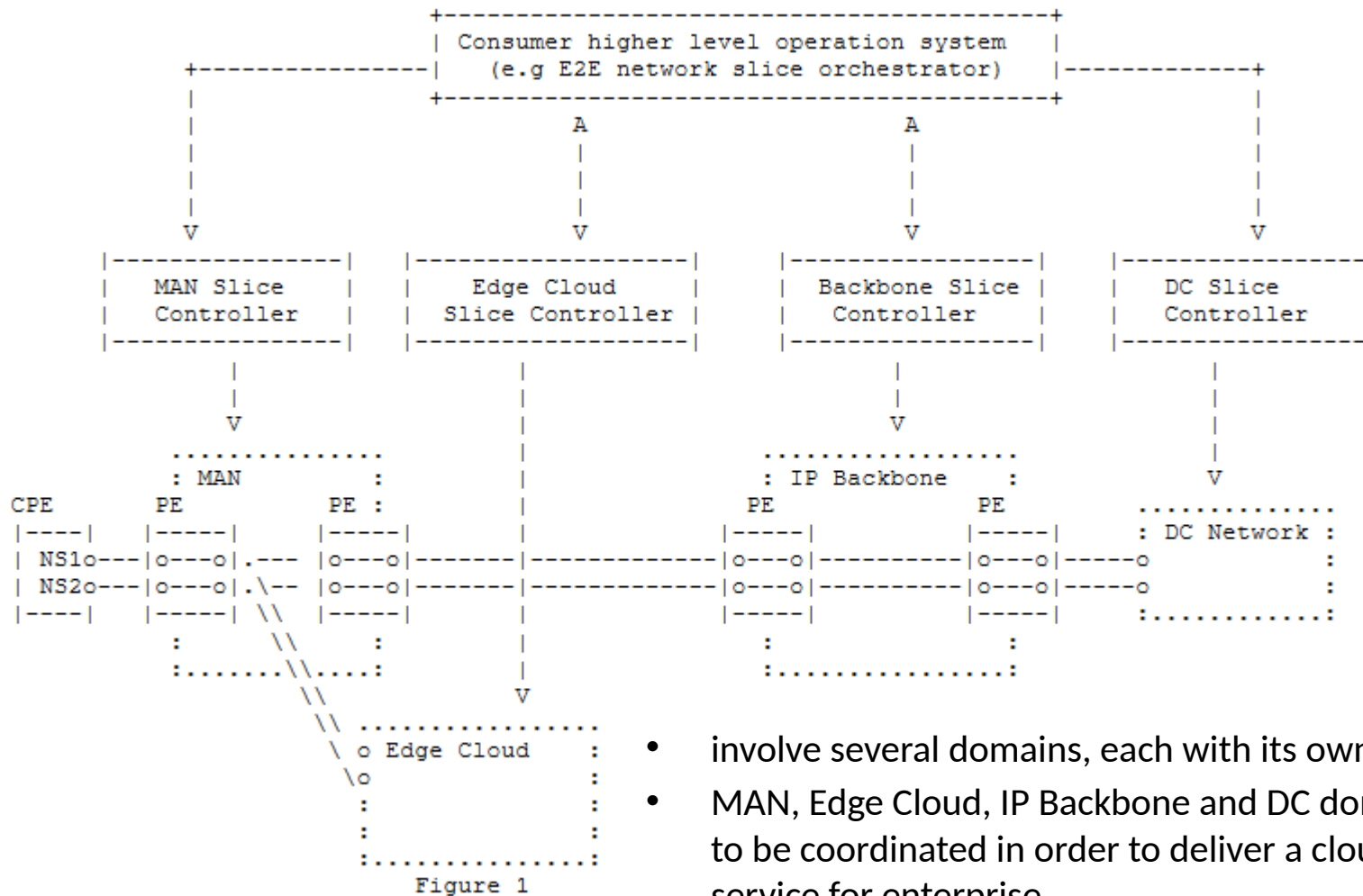
# Motivation

- The definition of IETF Network Slice describes a number of use-cases benefiting from network slicing and clearly stated services that might benefit from the network slices include but not limited to the above use-cases.
- This document supplements two use-cases from the perspective of operators.

# Use cases in the draft

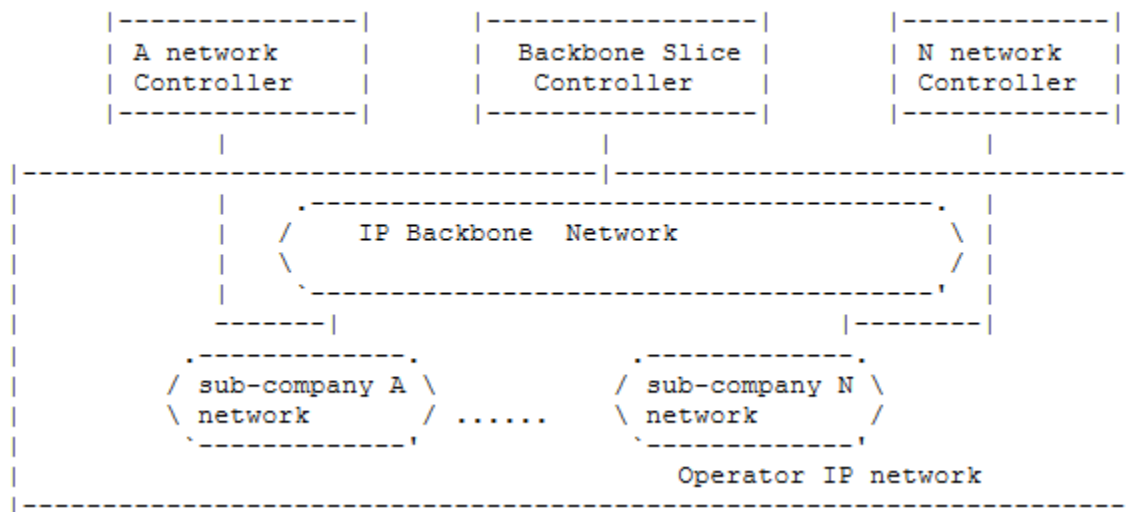
- This document mainly includes two types of the network slice customers from the perspective of operator
  - End-to-end slicing cloud-network collaboration
  - The branch departments that use slices within the operator.

# End-to-end slicing cloud-network collaboration



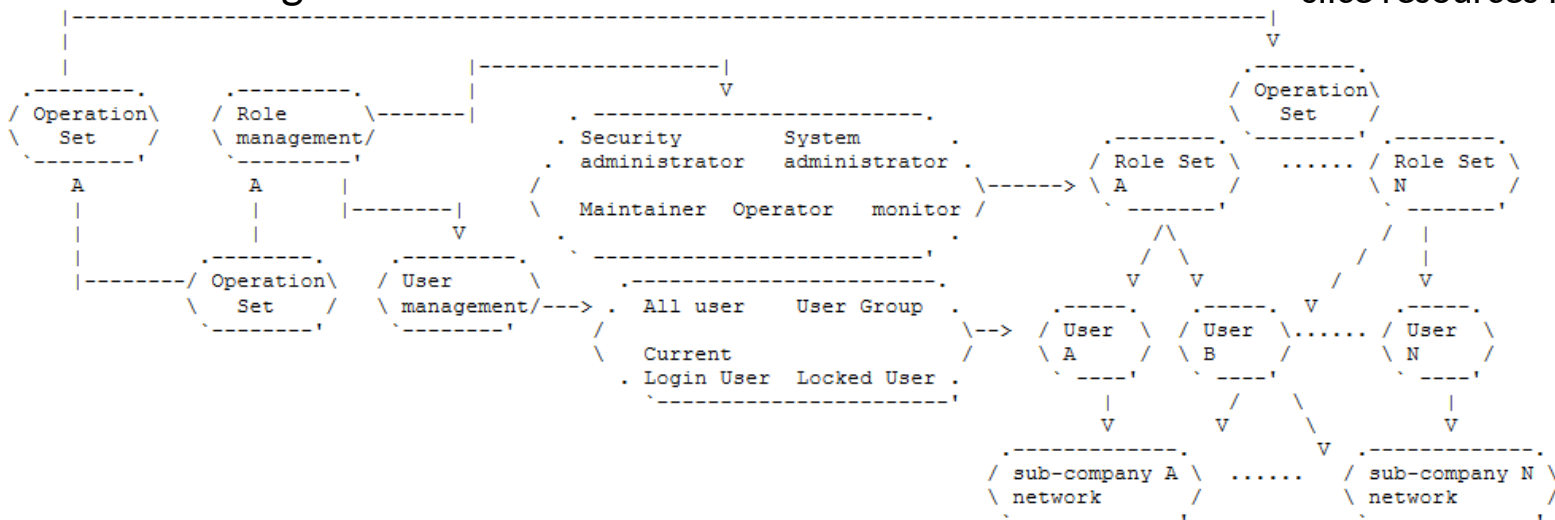
- involve several domains, each with its own controller.
- MAN, Edge Cloud, IP Backbone and DC domains need to be coordinated in order to deliver a cloud-network service for enterprise.

# The branch departments that use slices within the operator



- multiple sub-company network and a IP Backbone network in an operator IP network.
- each with its own slice controller.
- IP Backbone network and sub-company network need to be coordinated in order to control and calculates the end-to-end path.
- Role-based user rights management uses the role template to quickly allocate user rights, and provides network resources and sub-network slice resources for different users.

## • Domain governance of network slice



# The branch departments that use slices within the operator(cont.)

- Network Slice resource management:

Resource Type	Orchestrator resource management
Slice ID	Unified resource orchestration and planning, plan Slice ID by sub-company. The orchestrator ensures that the IDs do not conflict with each other.
Node SID	Unified resource orchestration and planning. A unified coding mode is recommended.
SR Policy Color	Unified resource orchestration and planning, and resource pool allocation.
VPN name	Unified resource orchestration and planning. Perform unified resource conflict detection. VPN name within the same network element shall not be repeated.
VLAN sub-intf	Unified resource orchestration and planning: Resources are divided for VLAN sub-interfaces under the same physical interface.

# Next Steps

- Comments & questions