What is contained in an APN Attribute and why?

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10 mins + 5 mins questions (80/120)
What is contained in an APN attribute and why?

- The APN Attribute is attached to packet to indicate how it should be handled in the network

- The APN Attribute contains two elements
  - APN ID
  - APN parameters

- The structured APN Attribute can be used as an opaque value to map to a policy

- The individual fields of the structured APN Attribute can be inspected and used to indicate which policies to apply
What is contained in an APN ID and why?

- The values of the APN IDs are assigned and interpreted under local administration, determined by a mapping of packet fields as instructed by the controller.

- An APN ID can be used to identify the policies on the various policy enforcement points within an APN domain.

- APN ID can include the followings
  - Application Group ID: identifies an application group of the traffic
  - User Group ID: identifies the user group of the traffic
  - e.g. MKT-user-group/app-group, R&D-user-group/app-group

- The different combinations of the IDs can be used to provide different granularity of the service provisioning and SLA guarantee for the traffic.
What is contained in APN parameters and why?

- APN parameters can identify the specific network performance requirements, including:
  - Bandwidth: the bandwidth requirement
  - Latency: the latency requirement
  - Packet loss ratio: the packet loss ratio requirement
  - Jitter: the jitter requirement

- The different combinations of the parameters are for further expressing more detailed service requirements

- Conveyed together with the APN ID, they can be used to match to appropriate tunnels/SR Policies and queues that can satisfy these service requirements
Thank you!