Considering ALTO as IETF Network Exposure Function

draft-contreras-alto-ietf-nef-00

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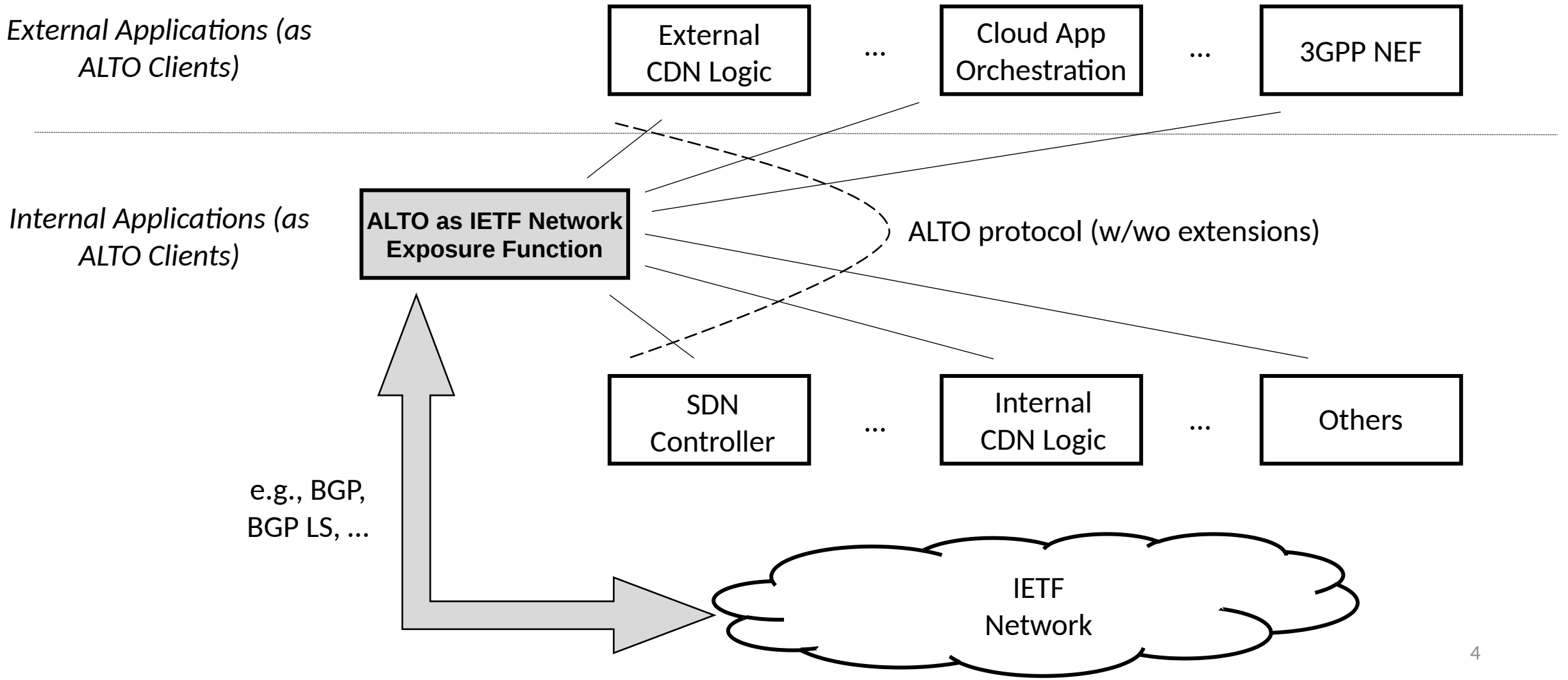
Motivation

- Networks becoming consumable by applications and services
- Forms for exposing capabilities from networks are emerging in different contexts
  - Applications can performed informed decisions based on information retrieved from the Network instead of inferring or guessing network capabilities or status
- Examples
  - 3GPP Network Exposure Function
  - ETSI MEC APIs
  - O-RAN RIC
  - …

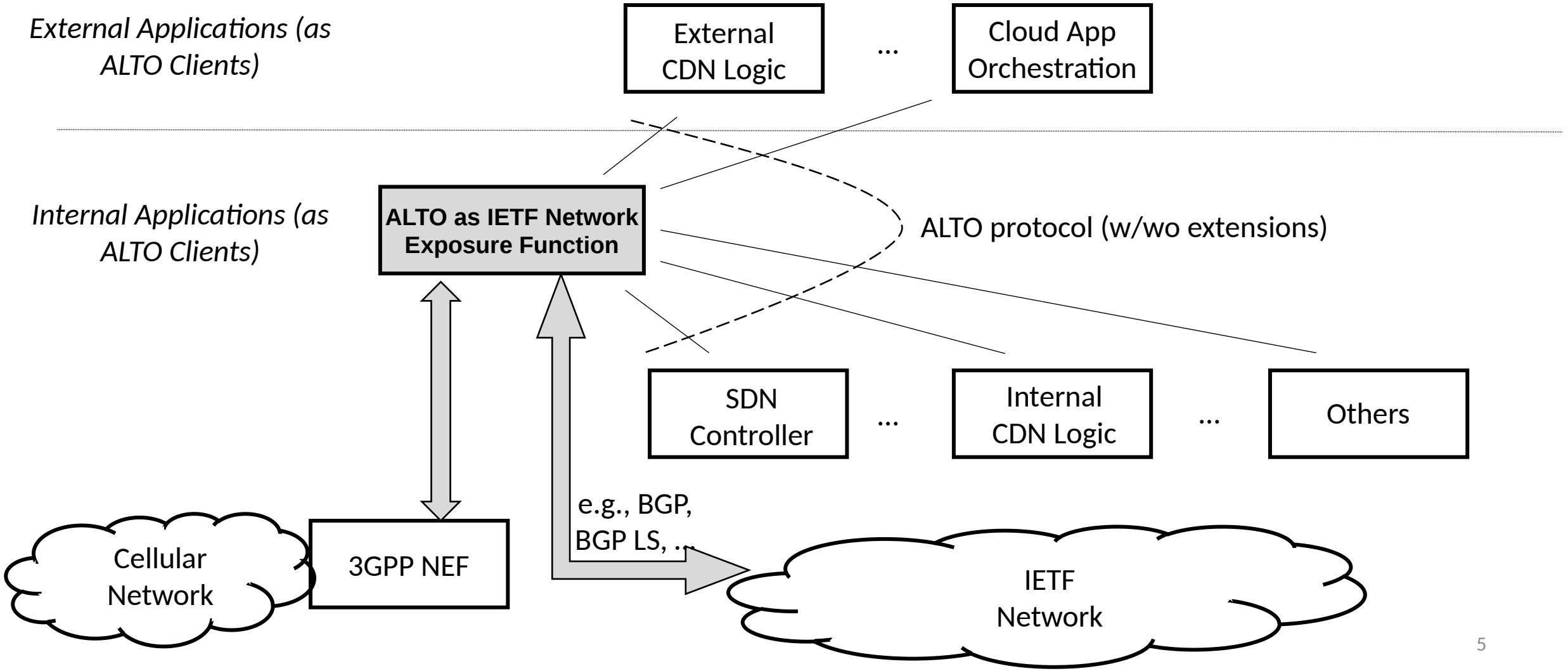
ALTO as IETF Network Exposure Function

- ALTO conceived from its inception on providing information to Support optimization decisions on applications
  - Initially topology information, being expanded to a number of other capabilities such as performance, segmented Network view, etc
- Existing and foreseen extension will extend the catalog of information exposure enabled by ALTO
  - Information exposed by existing specifications (RFCs or RFC-to-be): Network topology and associated cost metrics, performance metrics, segmented view, dynamic IP addressing
  - Information exposed by proposed augmentations (I-D): optimal service edge, underly view for overlays (cellular, CDN, etc)
  - Other information discussed in weekly ALTO meetings, not yet documented
    - To be included in next versions of this draft

ALTO as IETF NEF



ALTO as IETF NEF



Next steps

- Collect feedback from the WG
- Prepare next version with more detail on usage of ALTO as IETF Network Exposure Function