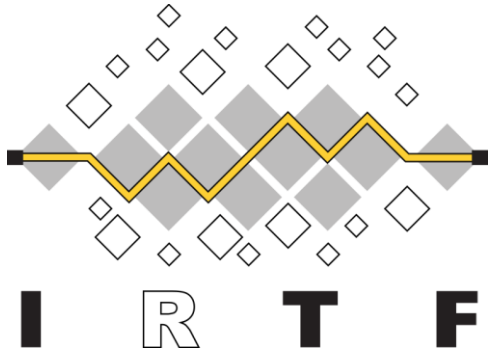

IETF Network Slice Intent

<draft-contreras-nmrg-transport-slice-intent-06>

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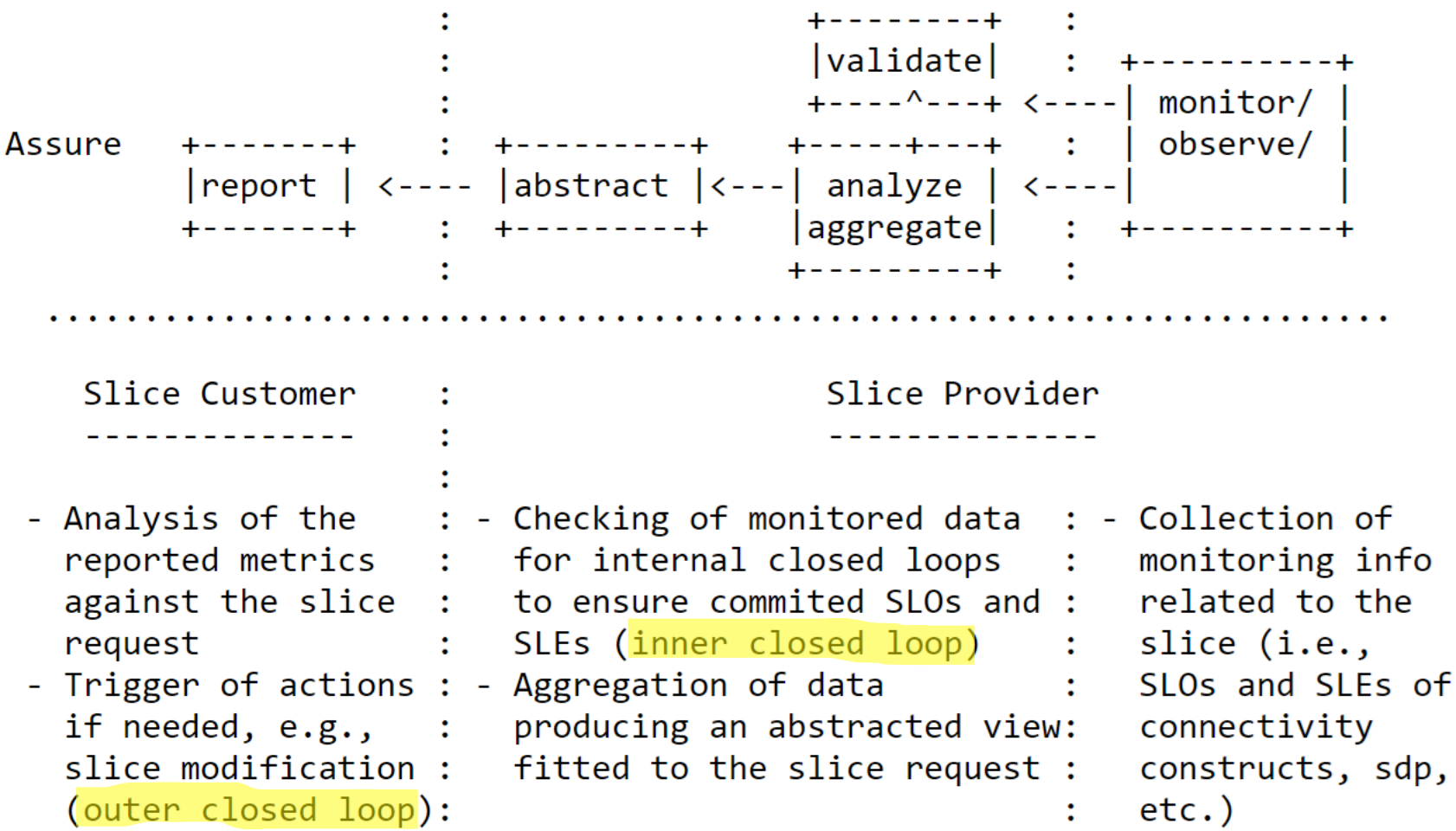
Summary of the draft (reminder)

- Target: to leverage on IBN technologies to request IETF Network Slices
- Use case:
  - Upper systems processing end-to-end network slices will elicit requirements for setting up IETF Network Slices
    - E.g., 3GPP Management System processing SLOs from slice templates to connect radio access and core slice parts for 5G services
  - IETF Network Slices will be requested as intents to IETF Network Slice Controller
- Benefits:
  - Portability of the solution across implementations and networks
  - Simple way of expressing transport slice needs by e.g. vertical customers
  - Focus on what, not on how
- This work complements TEAS work by offering an intent-based approach for slice request through transport slice controller NBI interface

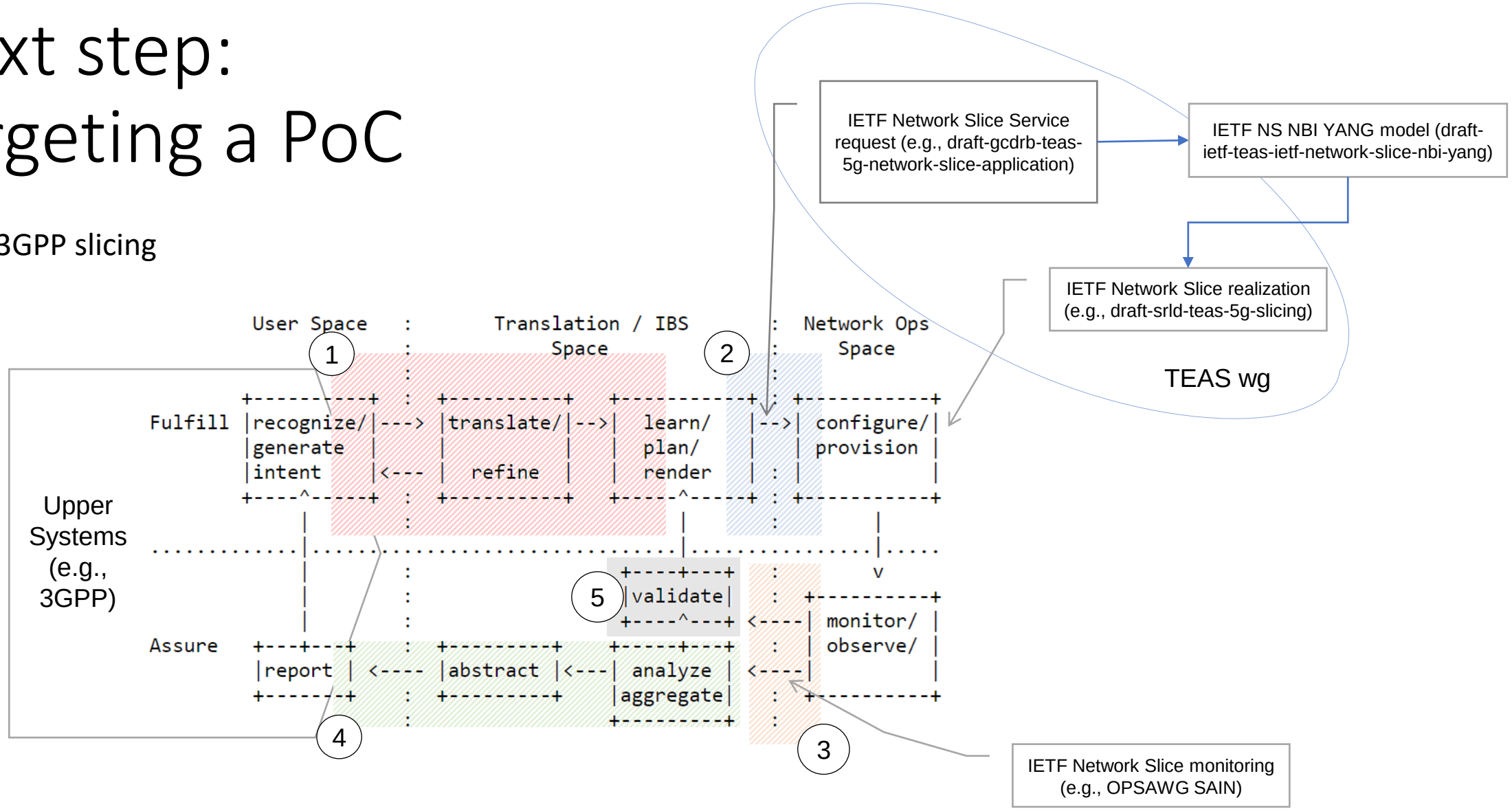
Updates from -05 version

- Restructuring of section 3 adding a new sub-section on “Additional information needed for a network slice at the IETF domain”
- Details on assurance phase of the intent lifecycle



Next step: Targeting a PoC

Use case: 5G/3GPP slicing



Question: should be this use case fully documented in the draft, or it is enough to reference TEAS work only adding here the potential additions?

Key questions from the chairs

- Objective of the work in regards to NMRG activities
  - Elaborate intents to facilitate the request of IETF Network Slice Services, complementing the effort in TEAS WG by defining IBS suitable for interaction with the IETF Network Slice Controller
- Remaining steps to finalize
  - Propose a structure to express IETF Network Slice Service intents and validate them (through a PoC for a concrete example, i.e. 5G/3GPP slices)
- How long this would take
  - Fulfillment phase ① of intent lifecycle foreseen by April'23 (i.e., after IETF 116)
  - (Basic) Assurance phase ④ targeting Q4'23 (i.e., IETF 118) – outer closed loop
  - Validation ⑤ within assurance phase for further analysis - inner closed loop

Moving forward the draft ideas

- Define the structure of the IETF Network Slice intent template
  - Adaptation to IETF Network Slice NBI YANG model
  - It could be complemented with additional information that could be required for slicing
    - E.g., consider the initial slicing phases defined in 3GPP (preparation / instantiation, configuration and activation / run-time / decomisioning)
- Fulfillment phase - elaborate on translation approaches and interaction with the upper systems
- Assurance phase – explore monitoring/telemetry data enabling reporting and validation

- Feedback is more tan welcomed!!