# Network Measurement Intent

draft-yang-nmrg-network-measurement-intent-03
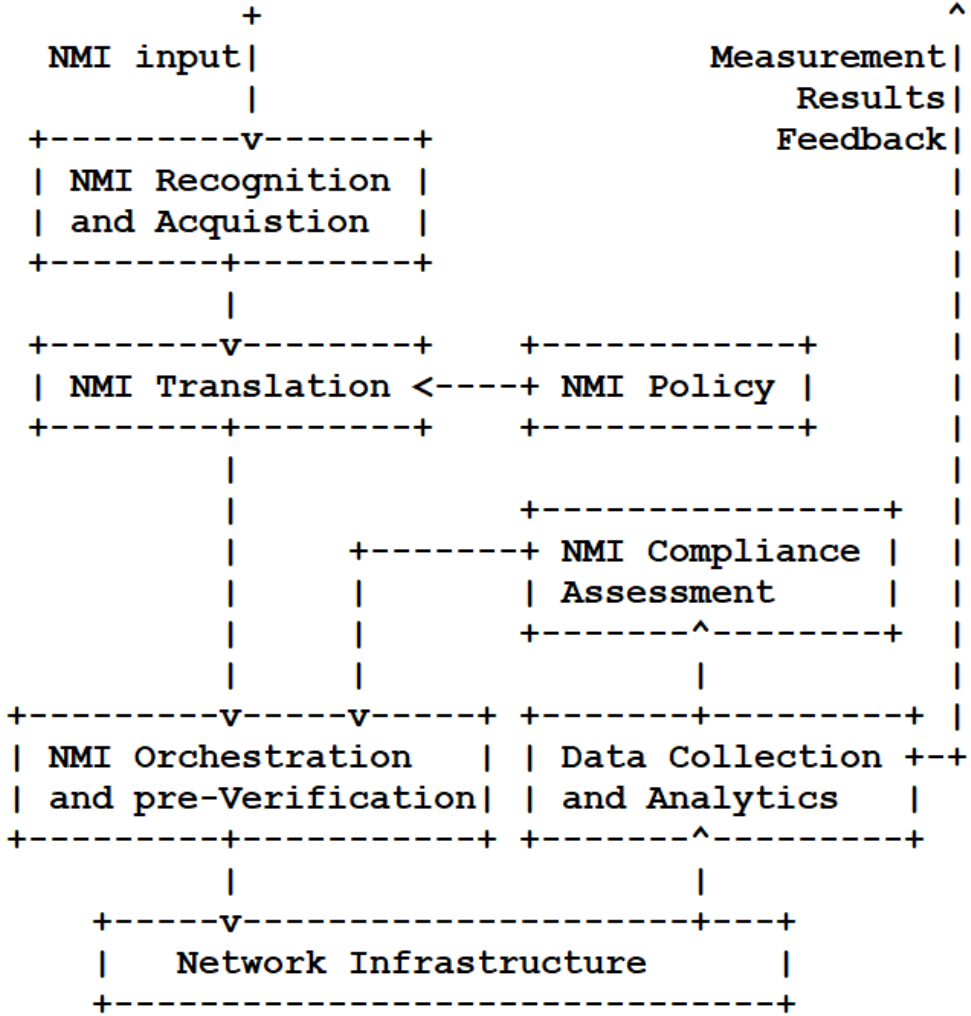
https://datatracker.ietf.org/doc/draft-yang-nmrg-network-measurement-intent/
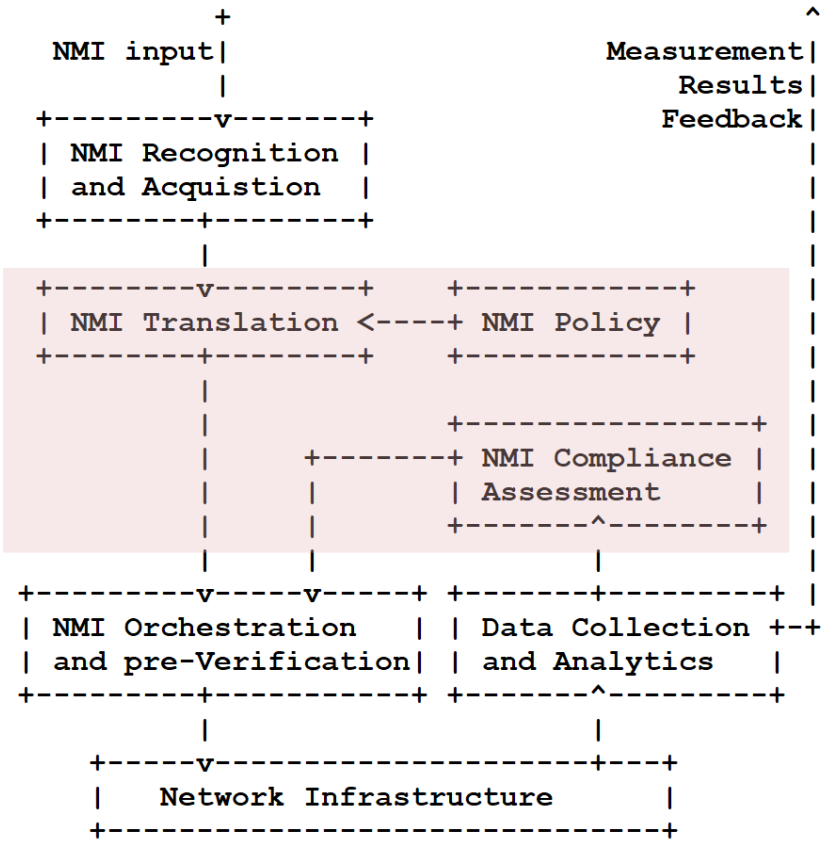
# Recap

◆NMI (Network Measurement Intent)
➢the on-demand measurement of the network state based on the user/ network operators' perceived intent of the network state .
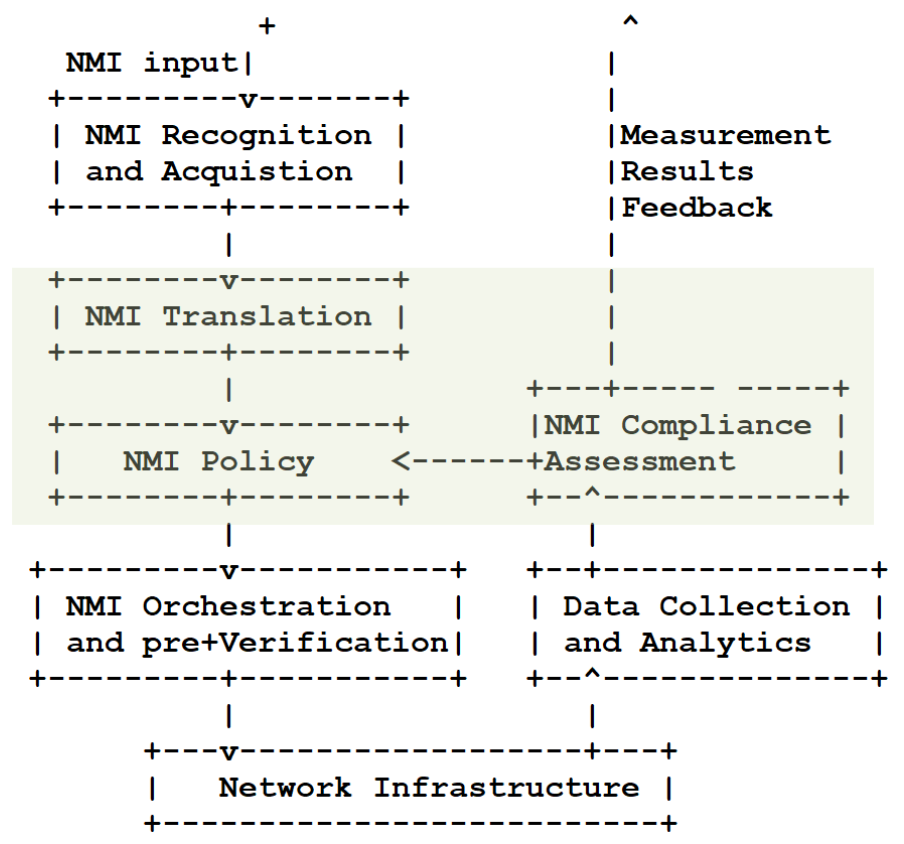
## **The major components**

• NMI Recognition and Acquisition

• NMI Translation

• **NMI Policy**

• NMI Orchestration and pre-Verification

• Data Collection and Analytics

• NMI Compliance Assessment

```
                 +                                      ^
        NMI input|                      Measurement|
                 |                          Results|
        +--------v-------+                 Feedback|
        | NMI Recognition |                        |
        | and Acquistion  |                        |
        +--------+-------+                          |
                 |                                  |
        +--------v-------+     +-----------+        |
        | NMI Translation <----+ NMI Policy |       |
        +--------+-------+     +-----------+        |
                 |                         |        |
                 |            +---------------+     |
                 |    +-------+ NMI Compliance |    |
                 |    |       | Assessment     |    |
                 |    |       +-------^--------+    |
                 |    |               |            |
    +---------v----v-----+ +-------+--------+ |
    | NMI Orchestration  | | Data Collection +-+
    | and pre-Verification| | and Analytics   |
    +--------+--------+ +-------^--------+
             |                  |
        +-----v--------------------------+---+
        |     Network Infrastructure     |
        +-------------------------------+
```

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# Major Updates

```
        +                        ^                         +                        ^
NMI input|              Measurement|              NMI input|                        |
        |                   Results|                      |                         |
+---------v-------+        Feedback|              +---------v-------+        |Measurement
| NMI Recognition |               |              | NMI Recognition |        |Results
| and Acquistion  |               |              | and Acquistion  |        |Feedback
+--------+--------+               |              +--------+--------+        |
         |                        |                       |                |
+--------v--------+  +-----------+ |              +--------v--------+       |
| NMI Translation <----+ NMI Policy |             | NMI Translation |       |
+--------+--------+  +-----------+ |              +--------+--------+       +---+----- -----+
         |                        |                       |                |NMI Compliance |
         |      +---------------+ |              +--------v--------+        |Assessment     |
         |  +-------+ NMI Compliance | |         |   NMI Policy    <------+Assessment      |
         |  |       | Assessment    | |          +--------+--------+        +--^------------+
         |  |       +-------^-------+ |                   |                    |
+--------v-----v----+  +-------+--------+ |      +--------v---------+  +--+-------------+
| NMI Orchestration |  | Data Collection +-+     | NMI Orchestration |  | Data Collection |
| and pre-Verification| | and Analytics  |       | and pre+Verification|  | and Analytics  |
+--------+----------+  +-------^--------+ |      +--------+----------+  +--^-------------+
         |                     |          |               |                |
+-----v--------------+---+     |          |      +---v-----------------+---+
|   Network Infrastructure   |            |      |   Network Infrastructure |
+---------------------------+             |      +-------------------------+
```

Version-02                                       Version-03

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# Major Updates

- **NMI Translation**

  Translated into actions and requests taken against the network ⟶ Translated into corresponding measurement policy

- **NMI Policy (add)**

  NMI policy needs to be translated into actions and requests taken against the specified network element.

- **NMI Compliance Assessment**

  Verifies whether the results meets the requirement and whether the NMI is satisfied. If either of the two conditions is not satisfied, the NMI should be modified and re-enter the NMI Orchestration and pre-Verification. ⟶ Verifies whether the results meets the requirement and whether the NMI is satisfied. If either of the two conditions is not satisfied, the NMI should be modified and re-enter the NMI Policy

# Next Steps

- The draft is stable now, and we will request for RG adoption.

- Since Network Measurement Intent is a kind of use cases of IBN, we would like to start writing the draft of "Intent Based Network use cases"

- **Looking forward to the comments, suggestions and questions.**

**Thanks!**