

R7 E2E Network Slicing Model Proposal

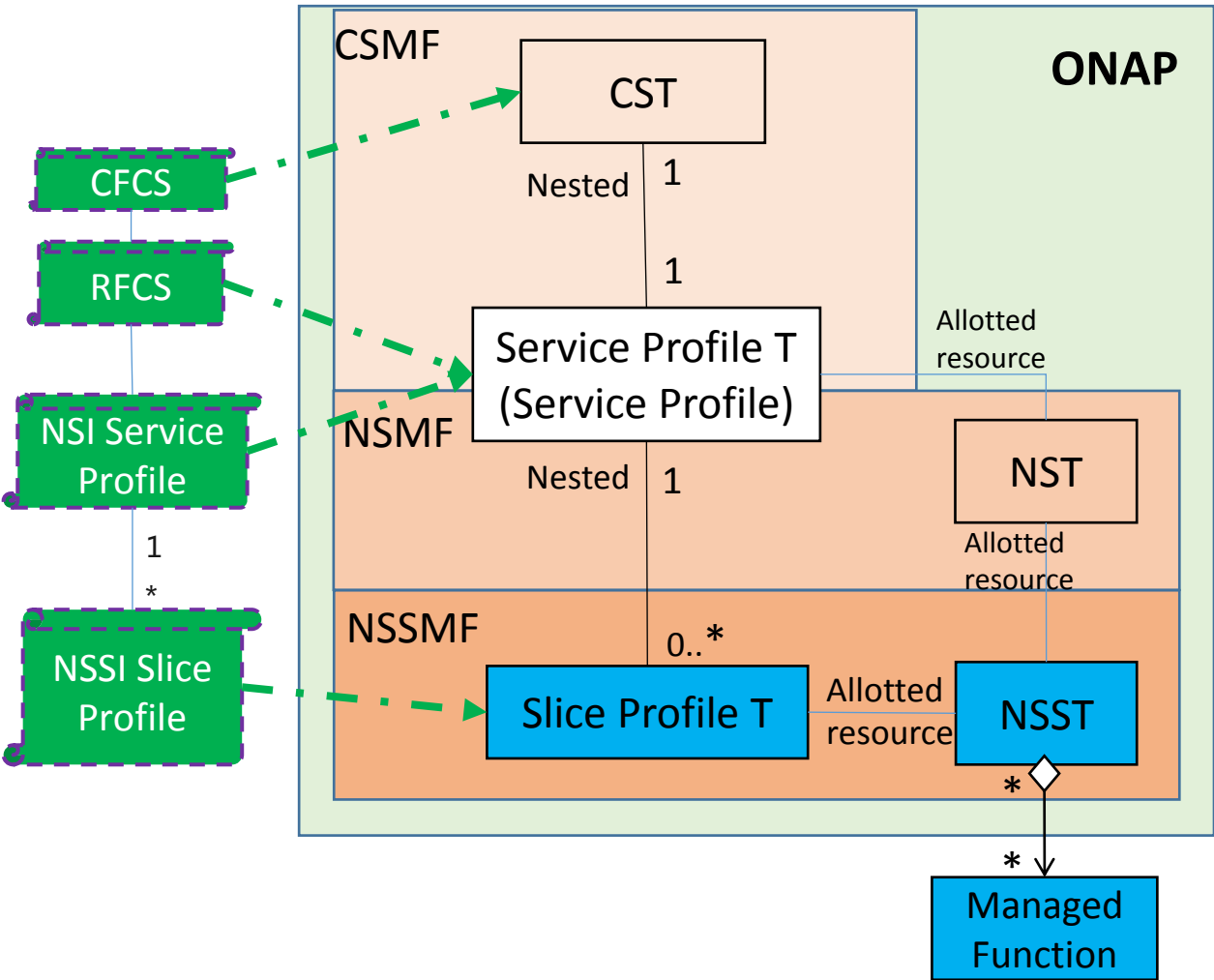
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2020.6.22

Modeling Requirements for R7

- Realize RAN TN CN NSSMF internally in ONAP, RAN can also support external NSSMF
 - RAN TN slice subnet model, includes: 1) NSST 2) slice profile
 - CN model enhancement to NF level
- Support 3 Slice subnet domains combination
 - Add connectivity points description
- KPI monitoring for enable Intelligent Slicing
- Update AAI instance model
- Subnet resource discovery

R7 Modeling Structure



NST: ONAP concept, Network Slice(NS) max capability and composited by Network Slice Subnet(NSS) capability (operator provides)

NSST: ONAP concept, NSS max capability (operator provides)

Service Profile(T): specific NS requirement

Slice Profile (T): specific NSS requirement

NST and ServiceProfile(T):

In DT, NST defines one NS max capability (eg. maxNumberOfUEs:10000) which is based on operator network capability.


While ServiceProfile(T) defines concrete NS which is from service requirement (eg. maxNumberOfUEs:3000)

In RT, OOF shall based on policy/rules to select related NST for NS requirement first.

AllottedResource: indicate one NS/NSS requirement in DT need find a NSI/NSSI to carry in RT

- There will be RAN NSST, CN NSST and TN NSST, and slice profile templates for 3 subnets separately.

 Enhancement in R7

 3gpp concept mapping in RT, not DT

R7 Model Flow

Allotted resource here is to show one NS requirement need find a NSI to carry.

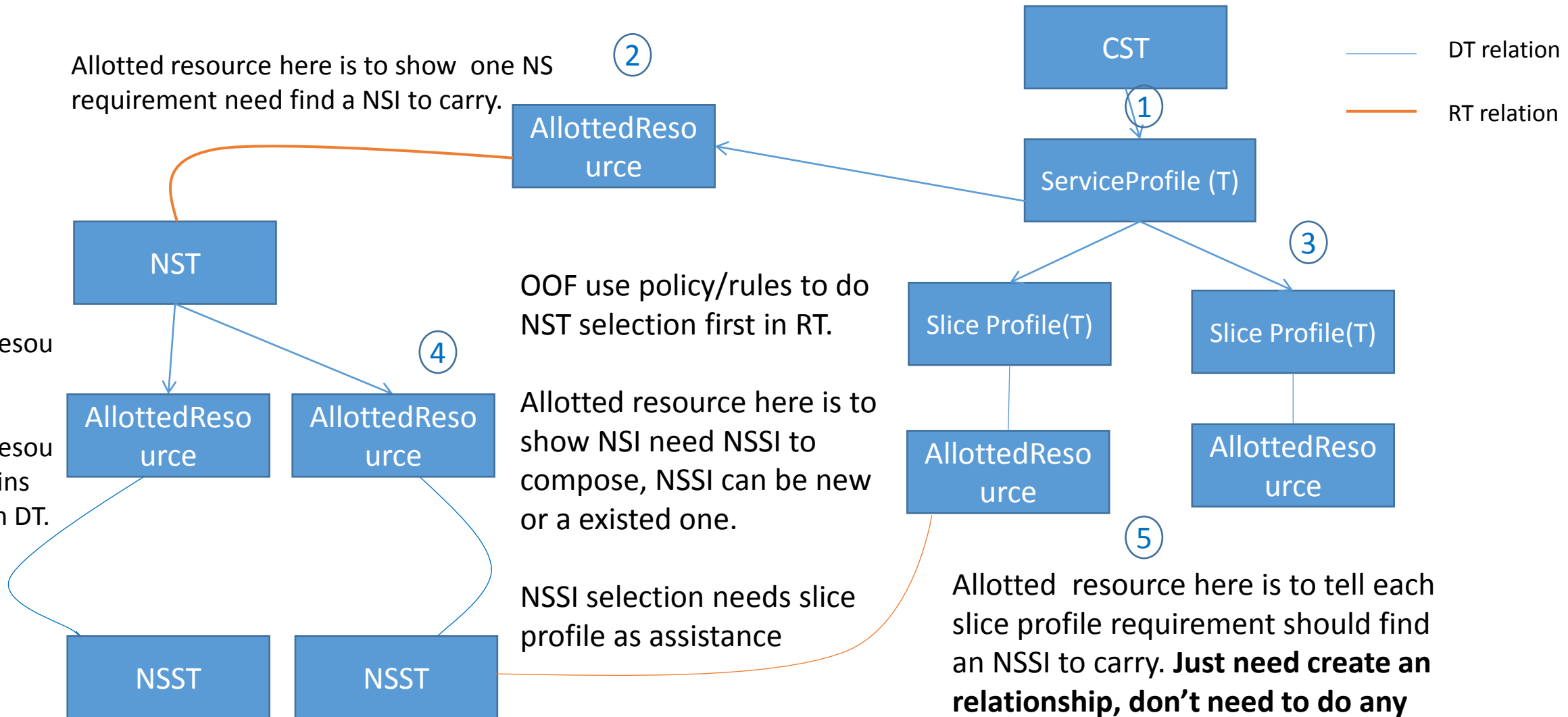
Here NST associate AllottedResource in DT, where AllottedResource contains NSST ID in DT.

OOF use policy/rules to do NST selection first in RT.

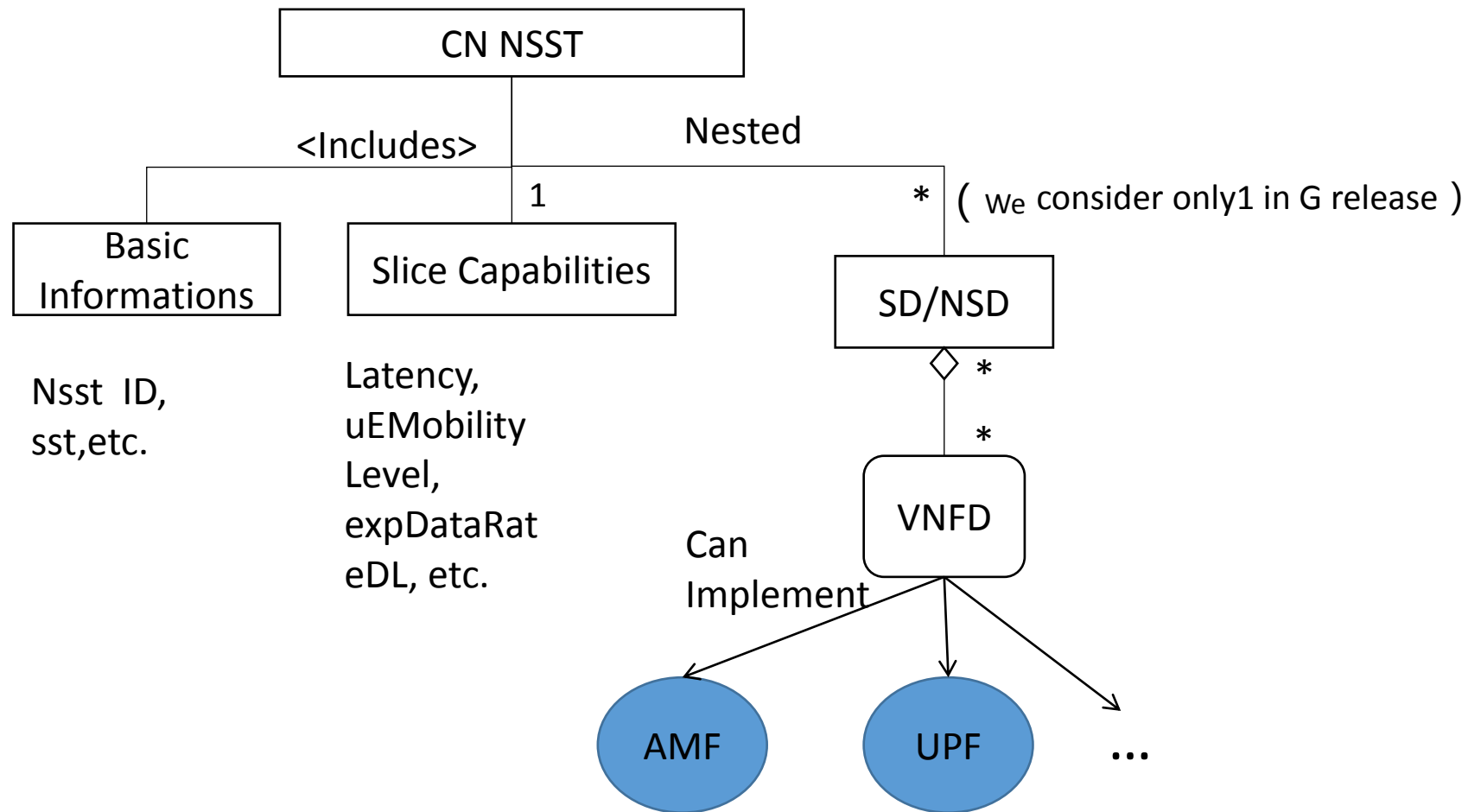
Allotted resource here is to show NSI need NSSI to compose, NSSI can be new or a existed one.

NSSI selection needs slice profile as assistance

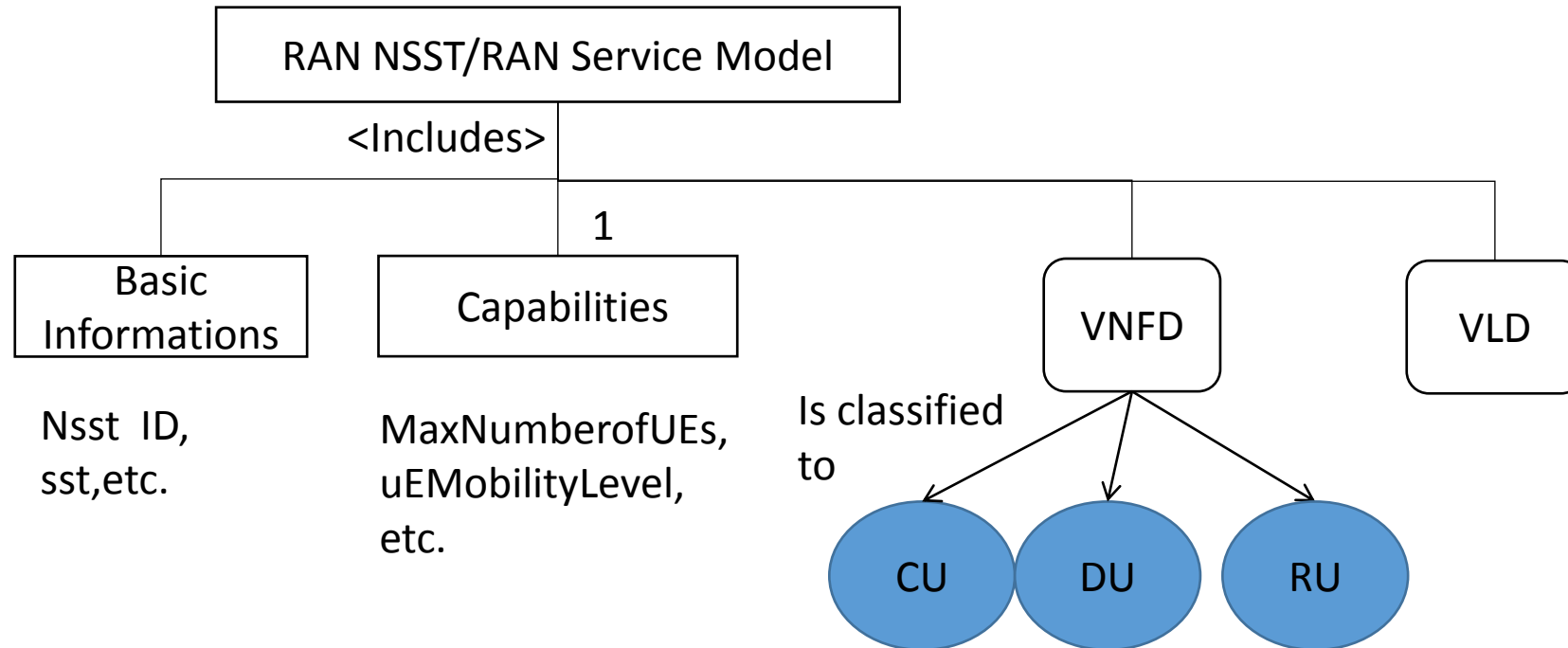
Allotted resource here is to tell each slice profile requirement should find an NSSI to carry. **Just need create an relationship, don't need to do any selection.**



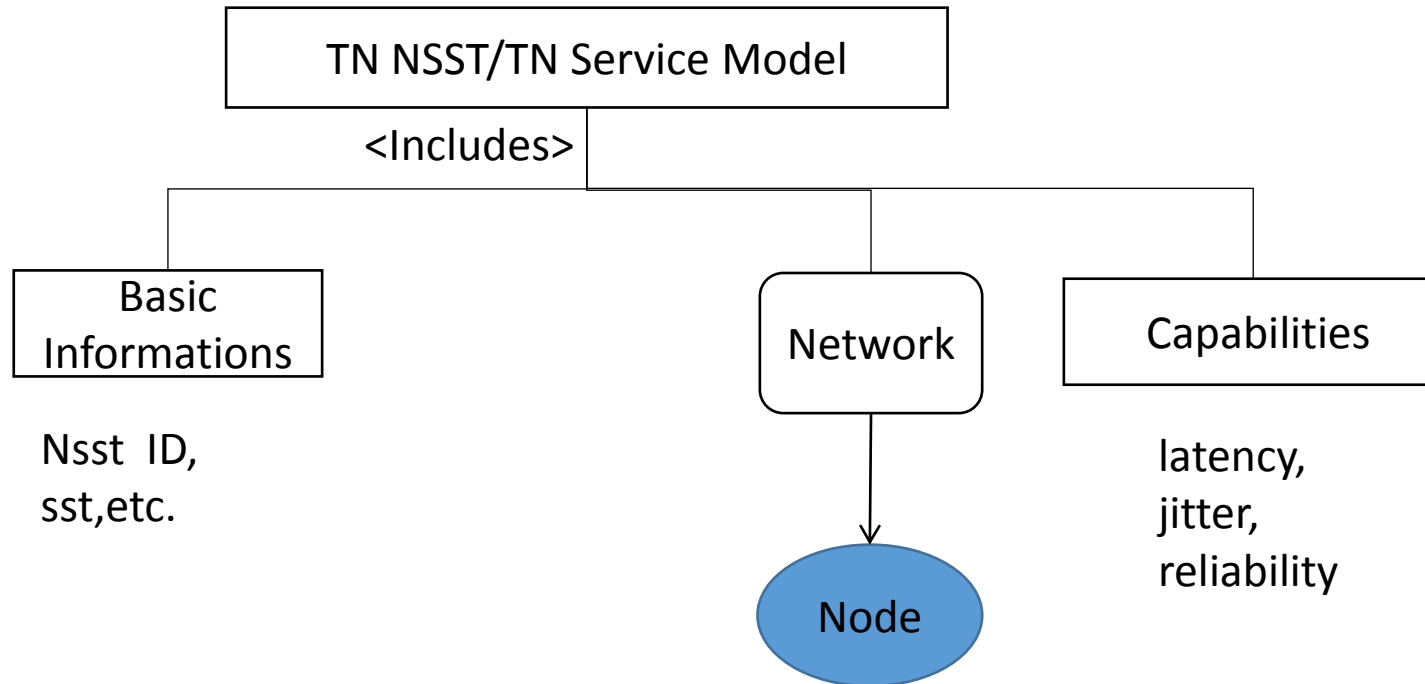
CN NSST



RAN NSST/ RAN Service Model



TN NSST/ TN Service Model





ONAP

OPEN NETWORK AUTOMATION PLATFORM

Thank You!