I E T F

COMS Architectural Design Enablers & Artefacts -I

COMS Technology Independent Information Model

draft-qiang-coms-netslicing-information-model-02

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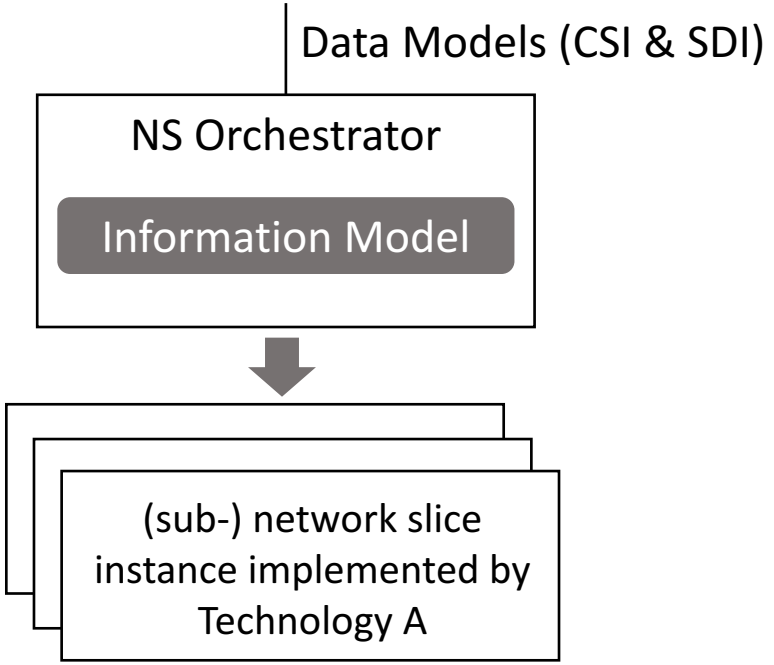
COMS Information Model describes what network slice looks like, independent of NS implementation technology

- used to enable the design of data models;
- used in the mapping to different implementation technologies at data-plane (top-down)
- used in providing a complete slice view in single or multiple domains (bottom-up)

Information Model (Apartment)

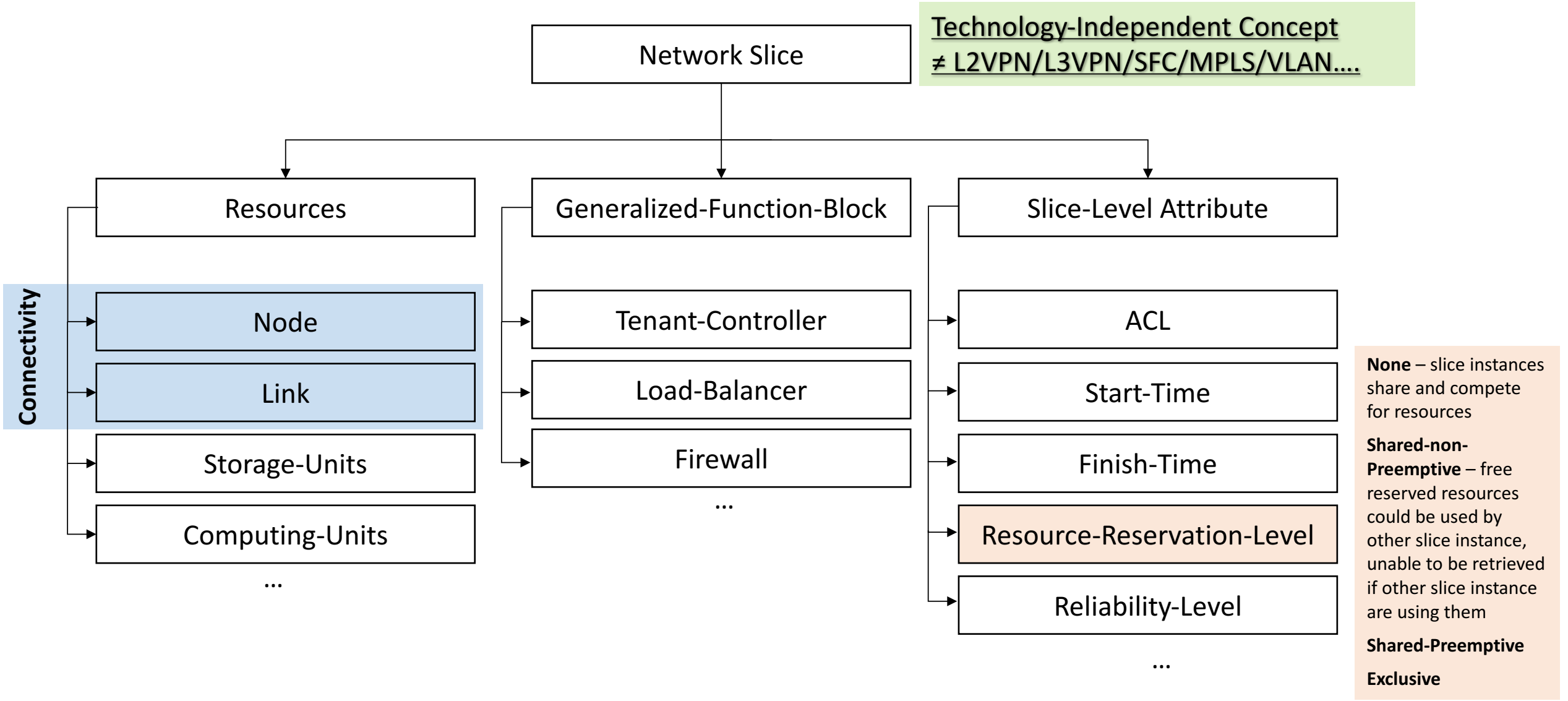
Entity \ Attribute	Material	Color	Price
Desk	Int 8 (1-wood, 2-metal, …)	(Float R, Float G, Float B)	Float
Light	String 32	String 32	Enum (1-0~100, 2-100~200, …)
Sofa	String 64	Int 8 (1-white, 2-black, …)	String 64
…			

Data Model

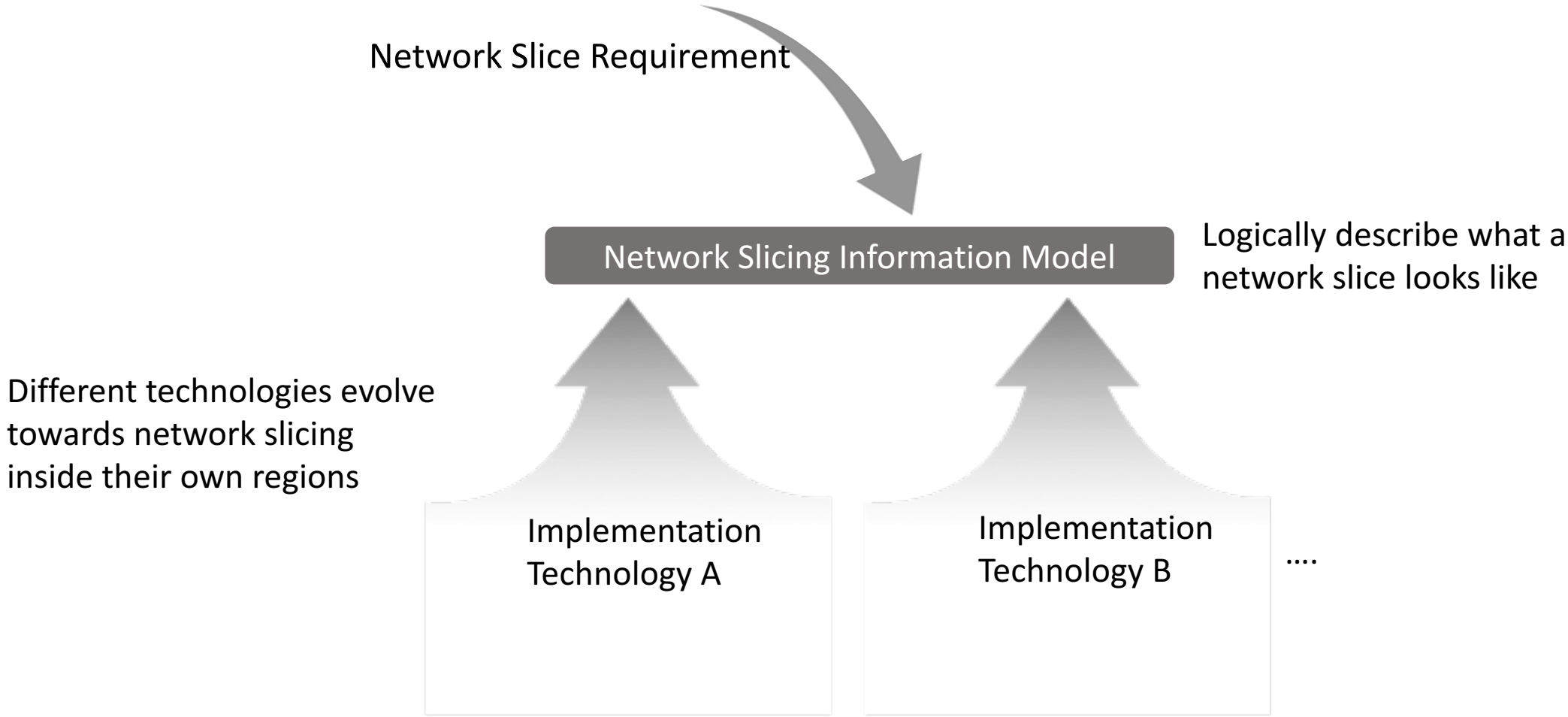


Information Model will be followed by data models (Customer Service Interface & Service Delivery Interface) as a next step

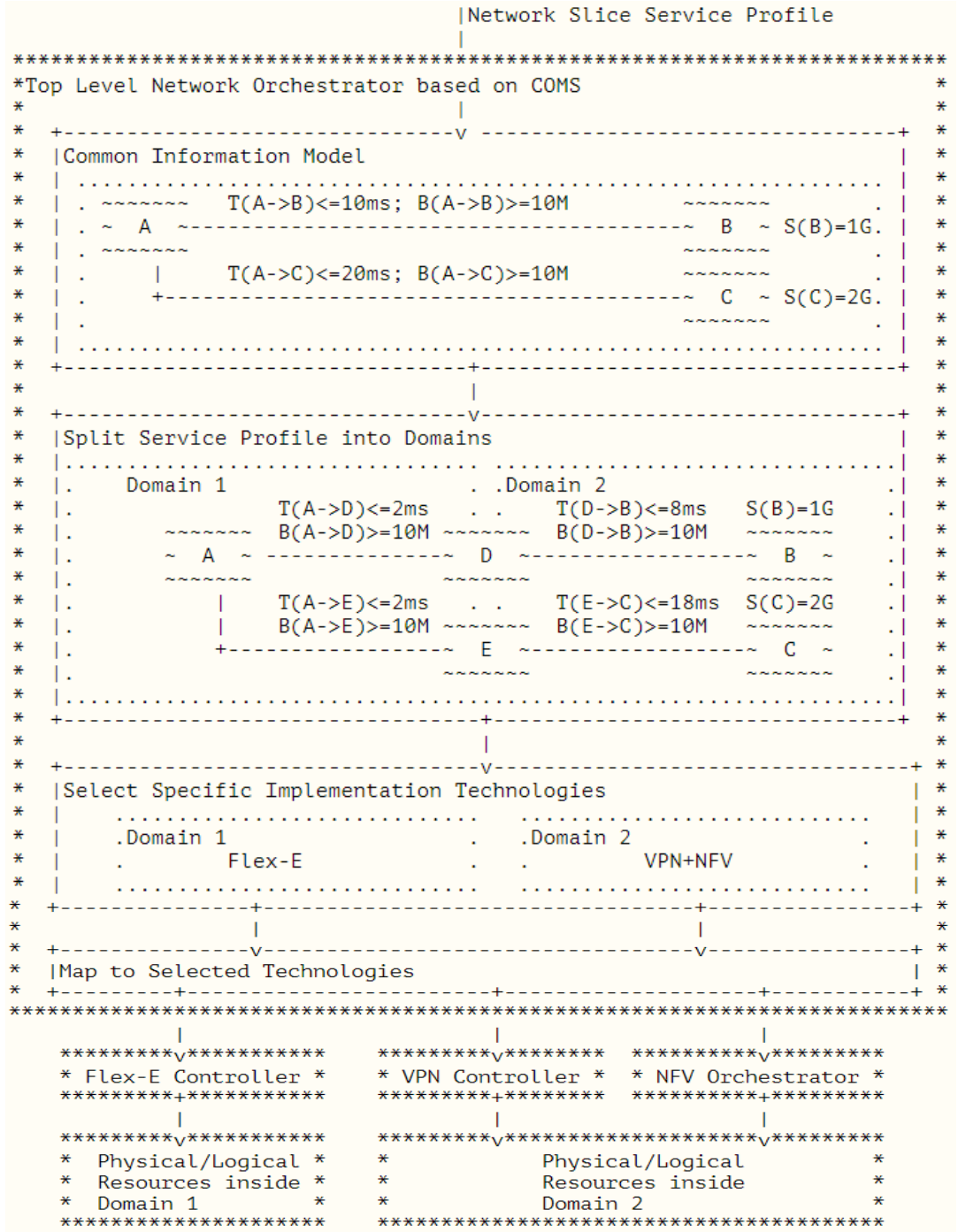
Various methodes to describe the information model – UML, Yang, Pseudocode, Plain Text, etc.



NS Top-down and Bottom-up approaches converge at Information Model



Thank You


|Network Slice Service Profile
*Top Level Network Orchestrator based on COMS
|Common Information Model
T(A->B)<=10ms; B(A->B)>=10M
A
B
S(B)=1G.
T(A->C)<=20ms; B(A->C)>=10M
C
S(C)=2G.
|Split Service Profile into Domains
Domain 1
Domain 2
T(A->D)<=2ms
B(A->D)>=10M
D
T(D->B)<=8ms
B(D->B)>=10M
S(B)=1G
B
T(A->E)<=2ms
B(A->E)>=10M
E
T(E->C)<=18ms
B(E->C)>=10M
S(C)=2G
C
|Select Specific Implementation Technologies
.Domain 1
Flex-E
.Domain 2
VPN+NFV
|Map to Selected Technologies
* Flex-E Controller *
* VPN Controller *
* NFV Orchestrator *
* Physical/Logical Resources inside Domain 1 *
* Physical/Logical Resources inside Domain 2 *