**3GPP TSG-SA5 Meeting #157 *S5-246164***

**Hyderabad, India, 14th Oct 2024 - 18th Oct 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.541** | **CR** | **1380** | **rev** | **1** | **Current version:** | **19.1.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **x** | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Rel-19 CR TS 28.541 OpenAPI SS Stage 3 for energy cost mapping rule | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-10-04 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | OpenAPI Stage 3 changes for energy cost mapping rule is missing | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding OpenAPI Stage 3 for energy cost mapping rule | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Incomplete specification leads to wrong implementation | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | (Normative stage 3 is in Forge) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This mirror of Rel-18 CR1379  Forge MR link: <https://forge.3gpp.org/rep/sa5/MnS/-/merge_requests/1420> at commit d7164af137ac1201e170eaa88073dbe3ac285e1e | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | S5-246164 is a revision of S5-245625 | | | | | | | | |

|  |
| --- |
| **1st Change** |

Forge MR link: <https://forge.3gpp.org/rep/sa5/MnS/-/merge_requests/1420> at commit d7164af137ac1201e170eaa88073dbe3ac285e1e

\*\*\* START OF CHANGE 1 \*\*\*

\*\*\* OpenAPI/TS28541\_NrNrm.yaml \*\*\*

<CODE BEGINS>

openapi: 3.0.1

info:

title: NR NRM

version: 19.1.0

description: >-

OAS 3.0.1 specification of the NR NRM

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externalDocs:

description: 3GPP TS 28.541; 5G NRM, NR NRM

url: http://www.3gpp.org/ftp/Specs/archive/28\_series/28.541/

paths: {}

components:

schemas:

#-------- Definition of types-----------------------------------------------------

GnbId:

type: integer

minimum: 0

maximum: 4294967295

GnbIdLength:

type: integer

minimum: 22

maximum: 32

GnbName:

type: string

maxLength: 150

GnbDuId:

type: integer

minimum: 0

maximum: 68719476735

GnbCuUpId:

type: integer

minimum: 0

maximum: 68719476735

readOnly: true

Sst:

type: integer

minimum: 0

maximum: 255

Snssai:

type: object

properties:

sst:

$ref: '#/components/schemas/Sst'

sd:

type: string

pattern: '^[A-Fa-f0-9]{6}$'

PlmnIdList:

type: array

items:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

PlmnInfo:

type: object

properties:

plmnId:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

snssai:

$ref: '#/components/schemas/Snssai'

sliceExpiryTime:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DateTime'

PlmnInfoList:

type: array

items:

$ref: '#/components/schemas/PlmnInfo'

NpnIdentityList:

type: array

items:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/NpnId-Type'

GGnbId:

type: string

pattern: '^[0-9]{3}[0-9]{2,3}-(22|23|24|25|26|27|28|29|30|31|32)-[0-9]{1,10}'

GEnbId:

type: string

pattern: '^[0-9]{3}[0-9]{2,3}-(18|20|21|22)-[0-9]{1,7}'

GGnbIdList:

type: array

items:

$ref: '#/components/schemas/GGnbId'

GEnbIdList:

type: array

items:

$ref: '#/components/schemas/GEnbId'

NrPci:

type: integer

maximum: 503

NrTac:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Tac'

NrTacList:

type: array

items:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Tac'

TaiList:

type: array

items:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Tai'

BackhaulAddress:

type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

tai:

$ref: "TS28623\_GenericNrm.yaml#/components/schemas/Tai"

MappingSetIDBackhaulAddress:

type: object

properties:

setID:

type: integer

backhaulAddress:

$ref: '#/components/schemas/BackhaulAddress'

LoadTimeThreshold:

type: object

properties:

loadThreshold:

type: integer

timeDuration:

type: integer

IntraRatEsActivationOriginalCellLoadParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

IntraRatEsActivationCandidateCellsLoadParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

IntraRatEsDeactivationCandidateCellsLoadParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

EsNotAllowedTimePeriod:

type: object

properties:

startTime:

type: string

description: >-

Time of day is in HH:MM or H:MM 24-hour format per UTC time zone.

Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).

endTime:

type: string

description: >-

Time of day is in HH:MM or H:MM 24-hour format per UTC time zone.

Examples, 20:15:00, 20:15:00-08:00 (for 8 hours behind UTC).

daysOfWeek:

type: string

enum:

- MONDAY

- TUESDAY

- WEDNESDAY

- THURSDAY

- FRIDAY

- SATURDAY

- SUNDAY

InterRatEsActivationOriginalCellParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

InterRatEsActivationCandidateCellParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

InterRatEsDeactivationCandidateCellParameters:

$ref: '#/components/schemas/LoadTimeThreshold'

UeAccProbabilityDist:

type: array

items:

$ref: '#/components/schemas/UeAccProbability'

UeAccProbability:

type: object

properties:

targetProbability:

type: integer

minimum: 0

maximum: 100

numberOfPreamblesSent:

type: integer

minimum: 0

maximum: 200

UeAccDelayProbabilityDist:

type: array

items:

$ref: '#/components/schemas/UeAccDelayProbability'

UeAccDelayProbability:

type: object

properties:

targetProbability:

type: integer

minimum: 0

maximum: 100

accessDelay:

type: integer

minimum: 10

maximum: 560

NRPciList:

type: array

items:

$ref: '#/components/schemas/NrPci'

minItems: 0

maxItems: 1007

CSonPciList:

type: array

items:

$ref: '#/components/schemas/NrPci'

minItems: 1

maxItems: 100

MaximumDeviationHoTrigger:

type: integer

minimum: -20

maximum: 20

MaximumDeviationHoTriggerLow:

type: integer

minimum: -20

maximum: 20

MaximumDeviationHoTriggerHigh:

type: integer

minimum: -20

maximum: 20

MinimumTimeBetweenHoTriggerChange:

type: integer

minimum: 0

maximum: 604800

TstoreUEcntxt:

type: integer

minimum: 0

maximum: 1023

CellState:

type: string

enum:

- IDLE

- INACTIVE

- ACTIVE

readOnly: true

CyclicPrefix:

type: string

enum:

- '15'

- '30'

- '60'

- '120'

TxDirection:

type: string

enum:

- DL

- UL

- DL\_AND\_UL

BwpContext:

type: string

enum:

- DL

- UL

- SUL

IsInitialBwp:

type: string

enum:

- INITIAL

- OTHER

- SUL

IsESCoveredBy:

type: string

enum:

- NO

- PARTIAL

- FULL

RrmPolicyMember:

type: object

properties:

plmnId:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

snssai:

$ref: '#/components/schemas/Snssai'

RrmPolicyMemberList:

type: array

items:

$ref: '#/components/schemas/RrmPolicyMember'

AddressWithVlan:

type: object

properties:

ipv4Address:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv4Addr'

ipv6Address:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv6Addr'

vlanId:

type: integer

minimum: 0

maximum: 4096

LocalAddress:

type: object

properties:

addressWithVlan:

$ref: '#/components/schemas/AddressWithVlan'

port:

type: integer

minimum: 0

maximum: 65535

RemoteAddress:

type: object

properties:

ipv4Address:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv4Addr'

ipv6Address:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv6Addr'

CellIndividualOffset:

type: object

properties:

rsrpOffsetSSB:

type: integer

default: 0

rsrqOffsetSSB:

type: integer

default: 0

sinrOffsetSSB:

type: integer

default: 0

rsrpOffsetCSI-RS:

type: integer

default: 0

rsrqOffsetCSI-RS:

type: integer

default: 0

sinrOffsetCSI-RS:

type: integer

default: 0

QOffsetRange:

type: integer

enum:

- -24

- -22

- -20

- -18

- -16

- -14

- -12

- -10

- -8

- -6

- -5

- -4

- -3

- -2

- -1

- 0

- 24

- 22

- 20

- 18

- 16

- 14

- 12

- 10

- 8

- 6

- 5

- 4

- 3

- 2

- 1

QOffsetRangeList:

type: object

properties:

rsrpOffsetSSB:

$ref: '#/components/schemas/QOffsetRange'

rsrqOffsetSSB:

$ref: '#/components/schemas/QOffsetRange'

sinrOffsetSSB:

$ref: '#/components/schemas/QOffsetRange'

rsrpOffsetCSI-RS:

$ref: '#/components/schemas/QOffsetRange'

rsrqOffsetCSI-RS:

$ref: '#/components/schemas/QOffsetRange'

sinrOffsetCSI-RS:

$ref: '#/components/schemas/QOffsetRange'

QOffsetFreq:

type: number

default: 0

TReselectionNRSf:

type: integer

enum:

- 25

- 50

- 75

- 100

SsbPeriodicity:

type: integer

enum:

- 5

- 10

- 20

- 40

- 80

- 160

SsbDuration:

type: integer

enum:

- 1

- 2

- 3

- 4

- 5

SsbSubCarrierSpacing:

type: integer

enum:

- 15

- 30

- 120

- 240

CoverageShape:

type: integer

maximum: 65535

DigitalTilt:

type: integer

minimum: -900

maximum: 900

DigitalAzimuth:

type: integer

minimum: -1800

maximum: 1800

RSSetId:

type: integer

maximum: 4194303

RSSetType:

type: string

enum:

- RS1

- RS2

FrequencyDomainPara:

type: object

properties:

rimRSSubcarrierSpacing:

type: integer

rIMRSBandwidth:

type: integer

nrofGlobalRIMRSFrequencyCandidates:

type: integer

rimRSCommonCarrierReferencePoint:

type: integer

minimum: 0

maximum: 3279165

rimRSStartingFrequencyOffsetIdList:

type: array

items:

type: integer

SequenceDomainPara:

type: object

properties:

nrofRIMRSSequenceCandidatesofRS1:

type: integer

rimRSScrambleIdListofRS1:

type: array

items:

type: integer

nrofRIMRSSequenceCandidatesofRS2:

type: integer

rimRSScrambleIdListofRS2:

type: array

items:

type: integer

enableEnoughNotEnoughIndication:

type: string

enum:

- ENABLE

- DISABLE

default: DISABLE

rIMRSScrambleTimerMultiplier:

type: integer

rIMRSScrambleTimerOffset:

type: integer

TimeDomainPara:

type: object

properties:

dlULSwitchingPeriod1:

type: string

enum:

- MS0P5

- MS0P625

- MS1

- MS1P25

- MS2

- MS2P5

- MS3

- MS4

- MS5

- MS10

- MS20

symbolOffsetOfReferencePoint1:

type: integer

dlULSwitchingPeriod2:

type: string

enum:

- MS0P5

- MS0P625

- MS1

- MS1P25

- MS2

- MS2P5

- MS3

- MS4

- MS5

- MS10

- MS20

symbolOffsetOfReferencePoint2:

type: integer

totalnrofSetIdofRS1:

type: integer

totalnrofSetIdofRS2:

type: integer

nrofConsecutiveRIMRS1:

type: integer

nrofConsecutiveRIMRS2:

type: integer

consecutiveRIMRS1List:

type: array

items:

type: integer

consecutiveRIMRS2List:

type: array

items:

type: integer

enablenearfarIndicationRS1:

type: string

enum:

- ENABLE

- DISABLE

default: DISABLE

enablenearfarIndicationRS2:

type: string

enum:

- ENABLE

- DISABLE

default: DISABLE

RimRSReportInfo:

type: object

properties:

detectedSetID:

type: integer

propagationDelay:

type: integer

functionalityOfRIMRS:

type: string

enum:

- RS1

- RS2

- RS1\_FOR\_ENOUGH\_MITIGATION

- RS1\_FOR\_NOT\_ENOUGH\_MITIGATION

RimRSReportConf:

type: object

properties:

reportIndicator:

type: string

enum:

- ENABLE

- DISABLE

default: DISABLE

reportInterval:

type: integer

nrofRIMRSReportInfo:

type: integer

maxPropagationDelay:

type: integer

rimRSReportInfoList:

type: array

items:

$ref: '#/components/schemas/RimRSReportInfo'

TceMappingInfo:

type: object

properties:

TceIPAddress:

oneOf:

- $ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv4Addr'

- $ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv6Addr'

TceID:

type: integer

PlmnTarget:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

TceMappingInfoList:

type: array

items:

$ref: '#/components/schemas/TceMappingInfo'

ResourceType:

type: string

enum:

- PRB

- PRB\_UL

- PRB\_DL

- RRC\_CONNECTED\_USERS

- DRB

ParameterRange:

type: object

properties:

maxValue:

type: integer

minValue:

type: integer

NTNTAClist:

type: array

items:

$ref: '#/components/schemas/NrTac'

Ephemeris:

type: object

oneOf:

- required: [ positionVelocity ]

- required: [ orbital ]

required:

- satelliteId

- epochTime

properties:

satelliteId:

type: string

pattern: '^[0-9]{5}$'

epochTime:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DateTime'

positionVelocity:

$ref: '#/components/schemas/PositionVelocity'

orbital:

$ref: '#/components/schemas/Orbital'

EphemerisInfos:

type: array

items:

$ref: '#/components/schemas/Ephemeris'

PositionVelocity:

type: object

properties:

positionX:

type: integer

default: 0

minimum: 0

maximum: 604800

positionY:

type: integer

default: 0

minimum: 0

maximum: 604800

positionZ:

type: integer

default: 0

minimum: 0

maximum: 604800

velocityVX:

type: integer

default: 0

minimum: -131072

maximum: 131071

velocityVY:

type: integer

default: 0

minimum: -131072

maximum: 131071

velocityVZ:

type: integer

default: 0

minimum: -131072

maximum: 131071

Orbital:

type: object

properties:

semiMajorAxis:

type: integer

default: 0

minimum: 0

maximum: 8589934591

eccentricity:

type: integer

default: 0

minimum: -524288

maximum: 524287

periapsis:

type: integer

default: 0

minimum: 0

maximum: 16777215

longitude:

type: integer

default: 0

minimum: 0

maximum: 2097151

inclination:

type: integer

default: 0

minimum: -524288

maximum: 524287

meanAnomaly:

type: integer

default: 0

minimum: 0

maximum: 16777215

MappedCellIdInfo:

type: object

properties:

ntnGeoArea:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/GeoArea'

mappedCellId:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Ncgi'

MappedCellIdInfoList:

type: array

items:

$ref: '#/components/schemas/MappedCellIdInfo'

QceIdMappingInfo:

type: object

properties:

qoECollectionEntityAddress:

oneOf:

- $ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv4Addr'

- $ref: 'TS28623\_ComDefs.yaml#/components/schemas/Ipv6Addr'

qoECollectionEntityIdentity:

type: string

pLMNTarget:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

QceIdMappingInfoList:

type: array

items:

$ref: '#/components/schemas/QceIdMappingInfo'

MdtUserConsentReqList:

type: array

items:

type: string

enum:

- M1

- M2

- M3

- M4

- M5

- M6

- M7

- M8

- M9

- MDT\_UE\_LOCATION

#-------- Definition of types for name-containments ------

SubNetwork-ncO-NrNrm:

type: object

properties:

NRFrequency:

$ref: '#/components/schemas/NRFrequency-Multiple'

ExternalGnbCuCpFunction:

$ref: '#/components/schemas/ExternalGnbCuCpFunction-Multiple'

ExternalGnbCuUpFunction:

$ref: '#/components/schemas/ExternalGnbCuUpFunction-Multiple'

ExternalGnbDuFunction:

$ref: '#/components/schemas/ExternalGnbDuFunction-Multiple'

ExternalENBFunction:

$ref: '#/components/schemas/ExternalENBFunction-Multiple'

EUtranFrequency:

$ref: '#/components/schemas/EUtranFrequency-Multiple'

DESManagementFunction:

$ref: '#/components/schemas/DESManagementFunction-Single'

DRACHOptimizationFunction:

$ref: '#/components/schemas/DRACHOptimizationFunction-Single'

DMROFunction:

$ref: '#/components/schemas/DMROFunction-Single'

DLBOFunction:

$ref: '#/components/schemas/DLBOFunction-Single'

DPCIConfigurationFunction:

$ref: '#/components/schemas/DPCIConfigurationFunction-Single'

CPCIConfigurationFunction:

$ref: '#/components/schemas/CPCIConfigurationFunction-Single'

CESManagementFunction:

$ref: '#/components/schemas/CESManagementFunction-Single'

Configurable5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Configurable5QISet-Multiple'

RimRSGlobal:

$ref: '#/components/schemas/RimRSGlobal-Single'

Dynamic5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Dynamic5QISet-Multiple'

CCOFunction:

$ref: '#/components/schemas/CCOFunction-Single'

ManagedElement-ncO-NrNrm:

type: object

properties:

GnbDuFunction:

$ref: '#/components/schemas/GnbDuFunction-Multiple'

GnbCuUpFunction:

$ref: '#/components/schemas/GnbCuUpFunction-Multiple'

GnbCuCpFunction:

$ref: '#/components/schemas/GnbCuCpFunction-Multiple'

DESManagementFunction:

$ref: '#/components/schemas/DESManagementFunction-Single'

DRACHOptimizationFunction:

$ref: '#/components/schemas/DRACHOptimizationFunction-Single'

DMROFunction:

$ref: '#/components/schemas/DMROFunction-Single'

DLBOFunction:

$ref: '#/components/schemas/DLBOFunction-Single'

DPCIConfigurationFunction:

$ref: '#/components/schemas/DPCIConfigurationFunction-Single'

CPCIConfigurationFunction:

$ref: '#/components/schemas/CPCIConfigurationFunction-Single'

CESManagementFunction:

$ref: '#/components/schemas/CESManagementFunction-Single'

Configurable5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Configurable5QISet-Multiple'

Dynamic5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Dynamic5QISet-Multiple'

#-------- Definition of abstract IOCs --------------------------------------------

RrmPolicy\_-Attr:

type: object

properties:

resourceType:

$ref: '#/components/schemas/ResourceType'

rRMPolicyMemberList:

$ref: '#/components/schemas/RrmPolicyMemberList'

#-------- Definition of concrete IOCs --------------------------------------------

GnbDuFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

gnbDuId:

$ref: '#/components/schemas/GnbDuId'

gnbDuName:

$ref: '#/components/schemas/GnbName'

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

rimRSReportConf:

$ref: '#/components/schemas/RimRSReportConf'

configurable5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

dynamic5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

RRMPolicyRatio:

$ref: '#/components/schemas/RRMPolicyRatio-Multiple'

NrCellDu:

$ref: '#/components/schemas/NrCellDu-Multiple'

Bwp-Multiple:

$ref: '#/components/schemas/Bwp-Multiple'

NrSectorCarrier-Multiple:

$ref: '#/components/schemas/NrSectorCarrier-Multiple'

EP\_F1C:

$ref: '#/components/schemas/EP\_F1C-Single'

EP\_F1U:

$ref: '#/components/schemas/EP\_F1U-Multiple'

DRACHOptimizationFunction:

$ref: '#/components/schemas/DRACHOptimizationFunction-Single'

OperatorDU:

$ref: '#/components/schemas/OperatorDu-Multiple'

BWPSet:

$ref: '#/components/schemas/BWPSet-Multiple'

Configurable5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Configurable5QISet-Multiple'

Dynamic5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Dynamic5QISet-Multiple'

OperatorDu-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

- type: object

properties:

EP\_F1C:

$ref: '#/components/schemas/EP\_F1C-Single'

EP\_F1U:

$ref: '#/components/schemas/EP\_F1U-Multiple'

configurable5QISetRef:

description: This attribute is condition optional. The condition is NG-RAN Multi-Operator Core Network (NG-RAN MOCN) network sharing with operator specific 5QI is supported.

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

dynamic5QISetRef:

description: This attribute is condition optional. The condition is NG-RAN Multi-Operator Core Network (NG-RAN MOCN) network sharing with operator specific 5QI is supported.

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

NrOperatorCellDu:

$ref: '#/components/schemas/NrOperatorCellDu-Multiple'

GnbCuUpFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

gnbCuUpId:

$ref: '#/components/schemas/GnbCuUpId'

plmnInfoList:

$ref: '#/components/schemas/PlmnInfoList'

configurable5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

dynamic5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

RRMPolicyRatio:

$ref: '#/components/schemas/RRMPolicyRatio-Multiple'

EP\_E1:

$ref: '#/components/schemas/EP\_E1-Single'

EP\_XnU:

$ref: '#/components/schemas/EP\_XnU-Multiple'

EP\_F1U:

$ref: '#/components/schemas/EP\_F1U-Multiple'

EP\_NgU:

$ref: '#/components/schemas/EP\_NgU-Multiple'

EP\_X2U:

$ref: '#/components/schemas/EP\_X2U-Multiple'

EP\_S1U:

$ref: '#/components/schemas/EP\_S1U-Multiple'

Configurable5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Configurable5QISet-Multiple'

Dynamic5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Dynamic5QISet-Multiple'

GnbCuCpFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

gnbCuName:

$ref: '#/components/schemas/GnbName'

plmnId:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

x2BlockList:

$ref: '#/components/schemas/GGnbIdList'

xnBlockList:

$ref: '#/components/schemas/GGnbIdList'

x2AllowList:

$ref: '#/components/schemas/GGnbIdList'

xnAllowList:

$ref: '#/components/schemas/GGnbIdList'

x2HOBlockList:

$ref: '#/components/schemas/GEnbIdList'

xnHOBlackList:

$ref: '#/components/schemas/GGnbIdList'

mappingSetIDBackhaulAddress:

$ref: '#/components/schemas/MappingSetIDBackhaulAddress'

tceMappingInfoList:

$ref: '#/components/schemas/TceMappingInfoList'

configurable5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

dynamic5QISetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

ephemerisInfoSetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

dCHOControl:

type: boolean

dDAPSHOControl:

type: boolean

mappedCellIdInfoList:

$ref: '#/components/schemas/MappedCellIdInfoList'

qceIdMappingInfoList:

$ref: '#/components/schemas/QceIdMappingInfoList'

mdtUserConsentReqList:

$ref: '#/components/schemas/MdtUserConsentReqList'

nRECMappingRuleRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

RRMPolicyRatio:

$ref: '#/components/schemas/RRMPolicyRatio-Multiple'

NrCellCu:

$ref: '#/components/schemas/NrCellCu-Multiple'

EP\_XnC:

$ref: '#/components/schemas/EP\_XnC-Multiple'

EP\_E1:

$ref: '#/components/schemas/EP\_E1-Multiple'

EP\_F1C:

$ref: '#/components/schemas/EP\_F1C-Multiple'

EP\_NgC:

$ref: '#/components/schemas/EP\_NgC-Multiple'

EP\_X2C:

$ref: '#/components/schemas/EP\_X2C-Multiple'

DANRManagementFunction:

$ref: '#/components/schemas/DANRManagementFunction-Single'

DESManagementFunction:

$ref: '#/components/schemas/DESManagementFunction-Single'

DMROFunction:

$ref: '#/components/schemas/DMROFunction-Single'

DLBOFunction:

$ref: '#/components/schemas/DLBOFunction-Single'

Configurable5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Configurable5QISet-Multiple'

Dynamic5QISet:

$ref: 'TS28541\_5GcNrm.yaml#/components/schemas/Dynamic5QISet-Multiple'

NRNetwork:

$ref: '#/components/schemas/NRNetwork-Single'

EUtranNetwork:

$ref: '#/components/schemas/EUtraNetwork-Single'

NrCellCu-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

cellLocalId:

type: integer

plmnInfoList:

$ref: '#/components/schemas/PlmnInfoList'

nRFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnRo'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

RRMPolicyRatio:

$ref: '#/components/schemas/RRMPolicyRatio-Multiple'

NRCellRelation:

$ref: '#/components/schemas/NRCellRelation-Multiple'

EUtranCellRelation:

$ref: '#/components/schemas/EUtranCellRelation-Multiple'

NRFreqRelation:

$ref: '#/components/schemas/NRFreqRelation-Multiple'

EUtranFreqRelation:

$ref: '#/components/schemas/EUtranFreqRelation-Multiple'

DESManagementFunction:

$ref: '#/components/schemas/DESManagementFunction-Single'

DMROFunction:

$ref: '#/components/schemas/DMROFunction-Single'

DLBOFunction:

$ref: '#/components/schemas/DLBOFunction-Single'

CESManagementFunction:

$ref: '#/components/schemas/CESManagementFunction-Single'

DPCIConfigurationFunction:

$ref: '#/components/schemas/DPCIConfigurationFunction-Single'

NrCellDu-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

administrativeState:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/AdministrativeState'

operationalState:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/OperationalState'

cellLocalId:

type: integer

cellState:

$ref: '#/components/schemas/CellState'

plmnInfoList:

$ref: '#/components/schemas/PlmnInfoList'

npnIdentityList:

$ref: '#/components/schemas/NpnIdentityList'

nrPci:

$ref: '#/components/schemas/NrPci'

nrTac:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Tac'

arfcnDL:

type: integer

arfcnUL:

type: integer

arfcnSUL:

type: integer

bSChannelBwDL:

type: integer

bSChannelBwUL:

type: integer

bSChannelBwSUL:

type: integer

ssbFrequency:

type: integer

minimum: 0

maximum: 3279165

ssbPeriodicity:

$ref: '#/components/schemas/SsbPeriodicity'

ssbSubCarrierSpacing:

$ref: '#/components/schemas/SsbSubCarrierSpacing'

ssbOffset:

type: integer

minimum: 0

maximum: 159

ssbDuration:

$ref: '#/components/schemas/SsbDuration'

nrSectorCarrierRef:

type: array

items:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

bwpRef:

description: "Condition is BWP sets are not supported"

type: array

items:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

bwpSetRef:

description: "Condition is BWP sets are supported"

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnList'

rimRSMonitoringStartTime:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DateTime'

rimRSMonitoringStopTime:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DateTime'

rimRSMonitoringWindowDuration:

type: integer

rimRSMonitoringWindowStartingOffset:

type: integer

rimRSMonitoringWindowPeriodicity:

type: integer

rimRSMonitoringOccasionInterval:

type: integer

rimRSMonitoringOccasionStartingOffset:

type: integer

nRFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

victimSetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

aggressorSetRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

RRMPolicyRatio:

$ref: '#/components/schemas/RRMPolicyRatio-Multiple'

CPCIConfigurationFunction:

$ref: '#/components/schemas/CPCIConfigurationFunction-Single'

DRACHOptimizationFunction:

$ref: '#/components/schemas/DRACHOptimizationFunction-Single'

BWPSet-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

bWPlist:

type: array

items:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

maxItems: 12

NrOperatorCellDu-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

cellLocalId:

type: integer

administrativeState:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/AdministrativeState'

plmnInfoList:

$ref: '#/components/schemas/PlmnInfoList'

nrTac:

$ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Tac'

NRFrequency-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

absoluteFrequencySSB:

type: integer

minimum: 0

maximum: 3279165

ssbSubCarrierSpacing:

$ref: '#/components/schemas/SsbSubCarrierSpacing'

multiFrequencyBandListNR:

type: integer

minimum: 1

maximum: 256

readOnly: true

EUtranFrequency-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

earfcnDL:

type: integer

minimum: 0

maximum: 262143

multiBandInfoListEutra:

type: integer

minimum: 1

maximum: 256

NrSectorCarrier-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

txDirection:

$ref: '#/components/schemas/TxDirection'

configuredMaxTxPower:

type: integer

arfcnDL:

type: integer

arfcnUL:

type: integer

bSChannelBwDL:

type: integer

bSChannelBwUL:

type: integer

sectorEquipmentFunctionRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

CommonBeamformingFunction:

$ref: '#/components/schemas/CommonBeamformingFunction-Single'

Bwp-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

bwpContext:

$ref: '#/components/schemas/BwpContext'

isInitialBwp:

$ref: '#/components/schemas/IsInitialBwp'

subCarrierSpacing:

type: integer

cyclicPrefix:

$ref: '#/components/schemas/CyclicPrefix'

startRB:

type: integer

numberOfRBs:

type: integer

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

CommonBeamformingFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- type: object

properties:

coverageShape:

$ref: '#/components/schemas/CoverageShape'

digitalAzimuth:

$ref: '#/components/schemas/DigitalAzimuth'

digitalTilt:

$ref: '#/components/schemas/DigitalTilt'

- type: object

properties:

Beam:

$ref: '#/components/schemas/Beam-Multiple'

Beam-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- type: object

properties:

beamIndex:

type: integer

readOnly: true

beamType:

type: string

readOnly: true

enum:

- SSB\_BEAM

beamAzimuth:

type: integer

readOnly: true

minimum: -1800

maximum: 1800

beamTilt:

type: integer

readOnly: true

minimum: -900

maximum: 900

beamHorizWidth:

type: integer

readOnly: true

minimum: 0

maximum: 3599

beamVertWidth:

type: integer

readOnly: true

minimum: 0

maximum: 1800

RRMPolicyRatio-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: '#/components/schemas/RrmPolicy\_-Attr'

- type: object

properties:

rRMPolicyMaxRatio:

type: integer

default: 100

minimum: 0

maximum: 100

rRMPolicyMinRatio:

type: integer

default: 0

minimum: 0

maximum: 100

rRMPolicyDedicatedRatio:

type: integer

default: 0

minimum: 0

maximum: 100

NRCellRelation-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

nRTCI:

type: integer

cellIndividualOffset:

$ref: '#/components/schemas/CellIndividualOffset'

adjacentNRCellRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

nRFreqRelationRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

isRemoveAllowed:

type: boolean

isHOAllowed:

type: boolean

isESCoveredBy:

$ref: '#/components/schemas/IsESCoveredBy'

isENDCAllowed:

type: boolean

isMLBAllowed:

type: boolean

EUtranCellRelation-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

adjacentEUtranCellRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

NRFreqRelation-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

offsetMO:

$ref: '#/components/schemas/QOffsetRangeList'

blockListEntry:

type: array

items:

type: integer

minimum: 0

maximum: 1007

blockListEntryIdleMode:

type: integer

cellReselectionPriority:

type: integer

cellReselectionSubPriority:

type: number

minimum: 0.2

maximum: 0.8

multipleOf: 0.2

pMax:

type: integer

minimum: -30

maximum: 33

qOffsetFreq:

$ref: '#/components/schemas/QOffsetFreq'

qQualMin:

type: number

qRxLevMin:

type: integer

minimum: -140

maximum: -44

threshXHighP:

type: integer

minimum: 0

maximum: 62

threshXHighQ:

type: integer

minimum: 0

maximum: 31

threshXLowP:

type: integer

minimum: 0

maximum: 62

threshXLowQ:

type: integer

minimum: 0

maximum: 31

tReselectionNr:

type: integer

minimum: 0

maximum: 7

tReselectionNRSfHigh:

$ref: '#/components/schemas/TReselectionNRSf'

tReselectionNRSfMedium:

$ref: '#/components/schemas/TReselectionNRSf'

nRFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

EUtranFreqRelation-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

cellIndividualOffset:

$ref: '#/components/schemas/CellIndividualOffset'

blackListEntry:

type: array

items:

type: integer

minimum: 0

maximum: 1007

blackListEntryIdleMode:

type: integer

cellReselectionPriority:

type: integer

default: 0

cellReselectionSubPriority:

type: number

minimum: 0.2

maximum: 0.8

multipleOf: 0.2

pMax:

type: integer

minimum: -30

maximum: 33

qOffsetFreq:

$ref: '#/components/schemas/QOffsetFreq'

qQualMin:

type: number

qRxLevMin:

type: integer

minimum: -140

maximum: -44

threshXHighP:

type: integer

minimum: 0

maximum: 62

threshXHighQ:

type: integer

minimum: 0

maximum: 31

threshXLowP:

type: integer

minimum: 0

maximum: 62

threshXLowQ:

type: integer

minimum: 0

maximum: 31

tReselectionEutran:

type: integer

minimum: 0

maximum: 7

tReselectionNRSfHigh:

$ref: '#/components/schemas/TReselectionNRSf'

tReselectionNRSfMedium:

$ref: '#/components/schemas/TReselectionNRSf'

eUTranFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

DANRManagementFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

intrasystemANRManagementSwitch:

type: boolean

intersystemANRManagementSwitch:

type: boolean

DESManagementFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

desSwitch:

type: boolean

intraRatEsActivationOriginalCellLoadParameters:

$ref: "#/components/schemas/IntraRatEsActivationOriginalCellLoadParameters"

intraRatEsActivationCandidateCellsLoadParameters:

$ref: "#/components/schemas/IntraRatEsActivationCandidateCellsLoadParameters"

intraRatEsDeactivationCandidateCellsLoadParameters:

$ref: "#/components/schemas/IntraRatEsDeactivationCandidateCellsLoadParameters"

esNotAllowedTimePeriod:

$ref: "#/components/schemas/EsNotAllowedTimePeriod"

interRatEsActivationOriginalCellParameters:

$ref: "#/components/schemas/InterRatEsActivationOriginalCellParameters"

interRatEsActivationCandidateCellParameters:

$ref: "#/components/schemas/InterRatEsActivationCandidateCellParameters"

interRatEsDeactivationCandidateCellParameters:

$ref: "#/components/schemas/InterRatEsDeactivationCandidateCellParameters"

isProbingCapable:

type: string

readOnly: true

enum:

- YES

- NO

energySavingState:

type: string

readOnly: true

enum:

- IS\_NOT\_ENERGY\_SAVING

- IS\_ENERGY\_SAVING

mLModelRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

aIMLInferenceFunctionRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

DRACHOptimizationFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

drachOptimizationControl:

type: boolean

ueAccProbabilityDist:

$ref: "#/components/schemas/UeAccProbabilityDist"

ueAccDelayProbabilityDist:

$ref: "#/components/schemas/UeAccDelayProbabilityDist"

DMROFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

dmroControl:

type: boolean

maximumDeviationHoTriggerLow:

$ref: '#/components/schemas/MaximumDeviationHoTriggerLow'

maximumDeviationHoTriggerHigh:

$ref: '#/components/schemas/MaximumDeviationHoTriggerHigh'

minimumTimeBetweenHoTriggerChange:

$ref: '#/components/schemas/MinimumTimeBetweenHoTriggerChange'

tstoreUEcntxt:

$ref: '#/components/schemas/TstoreUEcntxt'

mLModelRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

aIMLInferenceFunctionRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

DLBOFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

dlboControl:

type: boolean

maximumDeviationHoTrigger:

$ref: '#/components/schemas/MaximumDeviationHoTrigger'

minimumTimeBetweenHoTriggerChange:

$ref: '#/components/schemas/MinimumTimeBetweenHoTriggerChange'

mLModelRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

aIMLInferenceFunctionRefList:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

DPCIConfigurationFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

dPciConfigurationControl:

type: boolean

nRPciList:

$ref: "#/components/schemas/NRPciList"

CPCIConfigurationFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

cPciConfigurationControl:

type: boolean

cSonPciList:

$ref: "#/components/schemas/CSonPciList"

CESManagementFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

cesSwitch:

type: boolean

intraRatEsActivationOriginalCellLoadParameters:

$ref: "#/components/schemas/IntraRatEsActivationOriginalCellLoadParameters"

intraRatEsActivationCandidateCellsLoadParameters:

$ref: "#/components/schemas/IntraRatEsActivationCandidateCellsLoadParameters"

intraRatEsDeactivationCandidateCellsLoadParameters:

$ref: "#/components/schemas/IntraRatEsDeactivationCandidateCellsLoadParameters"

esNotAllowedTimePeriod:

$ref: "#/components/schemas/EsNotAllowedTimePeriod"

interRatEsActivationOriginalCellParameters:

$ref: "#/components/schemas/IntraRatEsActivationOriginalCellLoadParameters"

interRatEsActivationCandidateCellParameters:

$ref: "#/components/schemas/IntraRatEsActivationOriginalCellLoadParameters"

interRatEsDeactivationCandidateCellParameters:

$ref: "#/components/schemas/IntraRatEsActivationOriginalCellLoadParameters"

energySavingControl:

type: string

enum:

- TO\_BE\_ENERGY\_SAVING

- TO\_BE\_NOT\_ENERGY\_SAVING

energySavingState:

type: string

enum:

- IS\_NOT\_ENERGY\_SAVING

- IS\_ENERGY\_SAVING

RimRSGlobal-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

frequencyDomainPara:

$ref: '#/components/schemas/FrequencyDomainPara'

sequenceDomainPara:

$ref: '#/components/schemas/SequenceDomainPara'

timeDomainPara:

$ref: '#/components/schemas/TimeDomainPara'

RimRSSet:

$ref: '#/components/schemas/RimRSSet-Multiple'

RimRSSet-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

setId:

$ref: '#/components/schemas/RSSetId'

setType:

$ref: '#/components/schemas/RSSetType'

nRCellDURefs:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

ExternalGnbDuFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

EP\_F1C:

$ref: '#/components/schemas/EP\_F1C-Multiple'

EP\_F1U:

$ref: '#/components/schemas/EP\_F1U-Multiple'

NRNetwork-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

NRFrequency:

$ref: '#/components/schemas/NRFrequency-Multiple'

ExternalGnbCuCpFunction:

$ref: '#/components/schemas/ExternalGnbCuCpFunction-Multiple'

ExternalGnbCuUpFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

EP\_E1:

$ref: '#/components/schemas/EP\_E1-Multiple'

EP\_F1U:

$ref: '#/components/schemas/EP\_F1U-Multiple'

EP\_XnU:

$ref: '#/components/schemas/EP\_XnU-Multiple'

ExternalGnbCuCpFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: >-

TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr

- type: object

properties:

gnbId:

$ref: '#/components/schemas/GnbId'

gnbIdLength:

$ref: '#/components/schemas/GnbIdLength'

plmnId:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/PlmnId'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

ExternalNrCellCu:

$ref: '#/components/schemas/ExternalNrCellCu-Multiple'

EP\_XnC:

$ref: '#/components/schemas/EP\_XnC-Multiple'

EP\_E1:

$ref: '#/components/schemas/EP\_E1-Multiple'

EP\_F1C:

$ref: '#/components/schemas/EP\_F1C-Multiple'

ExternalNrCellCu-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

cellLocalId:

type: integer

nrPci:

$ref: '#/components/schemas/NrPci'

plmnIdList:

$ref: '#/components/schemas/PlmnIdList'

nRFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

EUtraNetwork-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

EUtranFrequency:

$ref: '#/components/schemas/EUtranFrequency-Multiple'

ExternalENBFunction:

$ref: '#/components/schemas/ExternalENBFunction-Multiple'

ExternalENBFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

eNBId:

type: integer

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

- type: object

properties:

ExternalEUTranCell:

$ref: '#/components/schemas/ExternalEUTranCell-Multiple'

ExternalEUTranCell-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-Attr'

- type: object

properties:

EUtranFrequencyRef:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/Dn'

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/ManagedFunction-ncO'

EP\_XnC-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_E1-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_F1C-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_NgC-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_X2C-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_XnU-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_F1U-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

epTransportRefs:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

EP\_NgU-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

epTransportRefs:

$ref: 'TS28623\_ComDefs.yaml#/components/schemas/DnListRo'

EP\_X2U-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

EP\_S1U-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/EP\_RP-Attr'

- type: object

properties:

localAddress:

$ref: '#/components/schemas/LocalAddress'

remoteAddress:

$ref: '#/components/schemas/RemoteAddress'

CCOFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

cCOControl:

type: boolean

cCOWeakCoverageParameters:

$ref: '#/components/schemas/CCOWeakCoverageParameters-Single'

cCOPilotPollutionParameters:

$ref: '#/components/schemas/CCOPilotPollutionParameters-Single'

cCOOvershootCoverageParameters-Single:

$ref: '#/components/schemas/CCOOvershootCoverageParameters-Single'

CCOParameters-Attr:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

coverageShapeList:

type: integer

downlinkTransmitPowerRange:

$ref: '#/components/schemas/ParameterRange'

antennaTiltRange:

$ref: '#/components/schemas/ParameterRange'

antennaAzimuthRange:

$ref: '#/components/schemas/ParameterRange'

digitalTiltRange:

$ref: '#/components/schemas/ParameterRange'

digitalAzimuthRange:

$ref: '#/components/schemas/ParameterRange'

CCOWeakCoverageParameters-Single:

allOf:

- $ref: '#/components/schemas/CCOParameters-Attr'

- type: object

CCOPilotPollutionParameters-Single:

allOf:

- $ref: '#/components/schemas/CCOParameters-Attr'

- type: object

CCOOvershootCoverageParameters-Single:

allOf:

- $ref: '#/components/schemas/CCOParameters-Attr'

- type: object

NTNFunction-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

type: object

properties:

nTNpLMNInfoList:

$ref: '#/components/schemas/PlmnInfoList'

nTNTAClist:

$ref: '#/components/schemas/NrTacList'

ephemerisInfoSet:

$ref: '#/components/schemas/EphemerisInfoSet-Multiple'

EphemerisInfoSet-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- type: object

properties:

ephemerisInfos:

$ref: '#/components/schemas/EphemerisInfos'

NRECMappingRule-Single:

allOf:

- $ref: 'TS28623\_GenericNrm.yaml#/components/schemas/Top'

- type: object

properties:

attributes:

allOf:

- type: object

properties:

ecMRInputMinimumValue:

type: integer

ecMRInputMaximumValue:

type: integer

ecTimeInterval:

type: integer

#-------- Definition of JSON arrays for name-contained IOCs ----------------------

GnbDuFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/GnbDuFunction-Single'

OperatorDu-Multiple:

type: array

items:

$ref: '#/components/schemas/OperatorDu-Single'

GnbCuUpFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/GnbCuUpFunction-Single'

GnbCuCpFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/GnbCuCpFunction-Single'

BWPSet-Multiple:

type: array

items:

$ref: '#/components/schemas/BWPSet-Single'

NrCellDu-Multiple:

type: array

items:

$ref: '#/components/schemas/NrCellDu-Single'

NrOperatorCellDu-Multiple:

type: array

items:

$ref: '#/components/schemas/NrOperatorCellDu-Single'

NrCellCu-Multiple:

type: array

items:

$ref: '#/components/schemas/NrCellCu-Single'

NRFrequency-Multiple:

type: array

minItems: 1

items:

$ref: '#/components/schemas/NRFrequency-Single'

EUtranFrequency-Multiple:

type: array

minItems: 1

items:

$ref: '#/components/schemas/EUtranFrequency-Single'

NrSectorCarrier-Multiple:

type: array

items:

$ref: '#/components/schemas/NrSectorCarrier-Single'

Bwp-Multiple:

type: array

items:

$ref: '#/components/schemas/Bwp-Single'

Beam-Multiple:

type: array

items:

$ref: '#/components/schemas/Beam-Single'

RRMPolicyRatio-Multiple:

type: array

items:

$ref: '#/components/schemas/RRMPolicyRatio-Single'

NRCellRelation-Multiple:

type: array

items:

$ref: '#/components/schemas/NRCellRelation-Single'

EUtranCellRelation-Multiple:

type: array

items:

$ref: '#/components/schemas/EUtranCellRelation-Single'

NRFreqRelation-Multiple:

type: array

items:

$ref: '#/components/schemas/NRFreqRelation-Single'

EUtranFreqRelation-Multiple:

type: array

items:

$ref: '#/components/schemas/EUtranFreqRelation-Single'

RimRSSet-Multiple:

type: array

items:

$ref: '#/components/schemas/RimRSSet-Single'

ExternalGnbDuFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalGnbDuFunction-Single'

ExternalGnbCuUpFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalGnbCuUpFunction-Single'

ExternalGnbCuCpFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalGnbCuCpFunction-Single'

ExternalNrCellCu-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalNrCellCu-Single'

ExternalENBFunction-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalENBFunction-Single'

ExternalEUTranCell-Multiple:

type: array

items:

$ref: '#/components/schemas/ExternalEUTranCell-Single'

EP\_E1-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_E1-Single'

EP\_XnC-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_XnC-Single'

EP\_F1C-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_F1C-Single'

EP\_NgC-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_NgC-Single'

EP\_X2C-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_X2C-Single'

EP\_XnU-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_XnU-Single'

EP\_F1U-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_F1U-Single'

EP\_NgU-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_NgU-Single'

EP\_X2U-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_X2U-Single'

EP\_S1U-Multiple:

type: array

items:

$ref: '#/components/schemas/EP\_S1U-Single'

EphemerisInfoSet-Multiple:

type: array

items:

$ref: '#/components/schemas/EphemerisInfoSet-Single'

NRECMappingRule-Multiple:

type: array

items:

$ref: '#/components/schemas/NRECMappingRule-Single'

#-------- Definitions in TS 28.541 for TS 28.532 ---------------------------------

resources-nrNrm:

oneOf:

- $ref: '#/components/schemas/GnbDuFunction-Single'

- $ref: '#/components/schemas/GnbCuUpFunction-Single'

- $ref: '#/components/schemas/GnbCuCpFunction-Single'

- $ref: '#/components/schemas/OperatorDu-Single'

- $ref: '#/components/schemas/NrCellCu-Single'

- $ref: '#/components/schemas/NrCellDu-Single'

- $ref: '#/components/schemas/NrOperatorCellDu-Single'

- $ref: '#/components/schemas/NRNetwork-Single'

- $ref: '#/components/schemas/EUtraNetwork-Single'

- $ref: '#/components/schemas/NRFrequency-Single'

- $ref: '#/components/schemas/EUtranFrequency-Single'

- $ref: '#/components/schemas/NrSectorCarrier-Single'

- $ref: '#/components/schemas/Bwp-Single'

- $ref: '#/components/schemas/BWPSet-Single'

- $ref: '#/components/schemas/CommonBeamformingFunction-Single'

- $ref: '#/components/schemas/Beam-Single'

- $ref: '#/components/schemas/RRMPolicyRatio-Single'

- $ref: '#/components/schemas/NRCellRelation-Single'

- $ref: '#/components/schemas/EUtranCellRelation-Single'

- $ref: '#/components/schemas/NRFreqRelation-Single'

- $ref: '#/components/schemas/EUtranFreqRelation-Single'

- $ref: '#/components/schemas/DANRManagementFunction-Single'

- $ref: '#/components/schemas/DESManagementFunction-Single'

- $ref: '#/components/schemas/DRACHOptimizationFunction-Single'

- $ref: '#/components/schemas/DMROFunction-Single'

- $ref: '#/components/schemas/DLBOFunction-Single'

- $ref: '#/components/schemas/DPCIConfigurationFunction-Single'

- $ref: '#/components/schemas/CPCIConfigurationFunction-Single'

- $ref: '#/components/schemas/CESManagementFunction-Single'

- $ref: '#/components/schemas/RimRSGlobal-Single'

- $ref: '#/components/schemas/RimRSSet-Single'

- $ref: '#/components/schemas/ExternalGnbDuFunction-Single'

- $ref: '#/components/schemas/ExternalGnbCuUpFunction-Single'

- $ref: '#/components/schemas/ExternalGnbCuCpFunction-Single'

- $ref: '#/components/schemas/ExternalNrCellCu-Single'

- $ref: '#/components/schemas/ExternalENBFunction-Single'

- $ref: '#/components/schemas/ExternalEUTranCell-Single'

- $ref: '#/components/schemas/EP\_XnC-Single'

- $ref: '#/components/schemas/EP\_E1-Single'

- $ref: '#/components/schemas/EP\_F1C-Single'

- $ref: '#/components/schemas/EP\_NgC-Single'

- $ref: '#/components/schemas/EP\_X2C-Single'

- $ref: '#/components/schemas/EP\_XnU-Single'

- $ref: '#/components/schemas/EP\_F1U-Single'

- $ref: '#/components/schemas/EP\_NgU-Single'

- $ref: '#/components/schemas/EP\_X2U-Single'

- $ref: '#/components/schemas/EP\_S1U-Single'

- $ref: '#/components/schemas/CCOFunction-Single'

- $ref: '#/components/schemas/CCOWeakCoverageParameters-Single'

- $ref: '#/components/schemas/CCOPilotPollutionParameters-Single'

- $ref: '#/components/schemas/CCOOvershootCoverageParameters-Single'

- $ref: '#/components/schemas/NTNFunction-Single'

- $ref: '#/components/schemas/EphemerisInfoSet-Single'

- $ref: '#/components/schemas/NRECMappingRule-Single'

<CODE ENDS>

\*\*\* END OF CHANGE 1 \*\*\*

|  |
| --- |
| **End of change** |