

ISG - Connectivity / 5G-New Radio for IoT

Version 1.2

I. Introduction

5G is the 5th generation of 3GPP™ mobile networks. It is the fastest and most reliable mobile technology developed to this date, offering very high data speeds, significantly increased capacity, and ultra-low latency. 5G is designed to meet the enormous data growth and connectivity needs of today's society and to effectively support billions of Internet of Things devices connected simultaneously, as well as innovative applications that will dramatically change the way we live and work.

This document summarizes technical and functional requirements, as well as lessons learned, from key IoT and consumer commercial deployments of 5G-New Radio (NR) solutions on Deutsche Telekom networks. All requirements including the words “SHALL,” “SHALL NOT,” or “MANDATORY” in their descriptions are essential for 5G and are required to follow. All statements containing the terms “SHOULD,” “SHOULD NOT,” or “RECOMMENDED” are recommended to be implemented as such. Any items containing the term “INFORMATION” are indicative of potential new requirements, to support upcoming network features and capabilities.

This document is divided into several sections, categorizing the features that IoT Device and component manufacturers are either required to implement or should consider, to provide for maximum performance and feature interoperability with Deutsche Telekom 5G-NR networks:

- [Definitions](#)
- [DT 5G-NR Network Description](#)
- [DT 5G Deployment Guidelines for IoT Devices: General Requirements](#)
- [DT 5G Deployment Guidelines for IoT Devices: Private Networks](#)
- [Required EN-DC Combinations: Multicarrier LTE with one NR Carrier](#)
- [Required EN-DC Combinations: Multicarrier LTE with Multicarrier NR Carrier](#)
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Please contact your Deutsche Telekom IoT or local DT affiliate Sales or Technical Sales representative in case of any questions.

II. Definitions

Automotive Emergency Calls (eCall)

eCall is a European initiative intended to bring rapid assistance to motorists involved in a collision anywhere in the European Union. The aim is for all new cars to incorporate a system that automatically contacts the emergency services in the event of a serious accident, sending location and sensor information. eCall was made mandatory in all new cars sold within the EU from April 2018.

Campus Network

Campus networks are customized private networks that enterprises can lease for their operations, usually with mobile communication infrastructure on premises. With infrastructure planned specifically for a customer's site, they can achieve extremely high bandwidths, low latencies, and improved availability – suitable for diverse applications, as campus networks have versatile uses for industrial sites of all sizes.

Customers benefit from the application possibilities enabled by the combination of a private and public mobile network. The public mobile network supports, among other things, cooperation with external service providers and suppliers. For the on-site automation of processes, customers have a private network at their disposal. Since the private part of the campus network is not publicly accessible, they benefit fully from the network resources that are exclusive to their location and indispensable for time and business-critical processes, as well as for innovative applications of "Industry 4.0":

- Combination of a public and private mobile network (public network for voice and data, private network exclusively for critical machine communication)
- High security thanks to a licensed spectrum and managed network resources
- Low latency times thanks to on-site data processing
- Service-level agreements for the private network (availability, data throughput, latency)
- Various applications through the combination of different frequencies, also possible with existing systems

Carrier Aggregation (CA)

LTE uses a technique called Carrier Aggregation to increase the effective delivered data rate, whereby multiple LTE carriers (called component carriers, CC) can be assigned to an IoT Device. The maximum possible data rate per device increases as additional CC are assigned to devices. This improves the overall resource utilization at the LTE cell, increasing its sum data rate, and provides for superior load balancing across the operator's licensed spectrum.

Dynamic Spectrum Sharing (DSS)

Licensed LTE spectrum can be deployed in an operational mode called Dynamic spectrum sharing, whereby LTE and 5G NR traffic can co-exist in the same spectrum. This is achieved by multiplexing the LTE spectrum between both technologies over time, while using the LTE control channels for joint signaling, depending on traffic demand. Dynamic spectrum sharing can be deployed on existing 4G Radio Access Network eNB that are connected to a 5G Access Network gNB in its vicinity or collocated. It is important to note that only those IoT Devices using 5G NR wireless communication modules supporting DSS can use this spectrum with 5G.

eUTRA New Radio Dual Connectivity (EN-DC)

eUTRA-NR Dual Connectivity is the backbone of 5G Non-Standalone. It involves the set-up of connectivity over two bearers: LTE (referred to as the Master Cell Group) and NR (known as the Secondary Cell Group). The EN-DC anchor point for the Data Radio Bearer (DRB) is at the PDCP layer, as this is where the data is split and simultaneously sent to/from the IoT Device over an LTE and NR air interface. The EN-DC anchor point for the Signaling Radio Bearer (SRB) is the LTE eNB, which has a connection to the LTE Evolved Packet Core MME.

FR1 / FR2 New Radio Spectrum

Frequency Range 1 (FR1, or sub-6 GHz), is the 5G New Radio spectrum made available for licensing, ranging from 450 MHz to 6 GHz, and including the LTE frequency range. Three Subcarrier Spacing (SCS) options are available in NR for FR1: 15kHz, 30kHz, and 60kHz. Frequency Range 2 (FR2, or mmWave), in turn, ranges from 24.25 GHz to 52.6 GHz.

IoT Service Application

Business application logic of the IoT Service which processes the data collected from assets. The IoT Service Provider hosts their IoT Service Application on a server or Cloud Platform provided by Deutsche Telekom or another third party.

IP-Multimedia Subsystem (IMS)

The IP Multimedia Subsystem or IP Multimedia Core Network Subsystem (IMS) is an architectural framework for delivering IP multimedia services. Historically, mobile phones have provided voice call services over a circuit-switched-style network, rather than strictly over an IP packet-switched network.

Network Slice (Public / Private Slice)

A network slice is an independent end-to-end logical network that runs on a common shared physical infrastructure, capable of providing differentiated/negotiated QoS to a business/service customer. It comprises dedicated and/or shared resource, e.g., in terms of network function, bandwidth, processing power, and has isolation from other network slices.

Non-Standalone (NSA)

Introduced in 3GPP™ Release 15 “Early Drop” (December 2017) to accelerate time-to-market, the 5G New Radio Non-Standalone operation mode addresses the most urgent deployment needs enabling 5G Enhanced Mobile Broadband (eMBB) use cases. It is the best solution for non-contiguous New Radio (NR) coverage, as full mobility with LTE is supported. NSA works by pairing LTE master carrier groups with 5G New Radio secondary carrier groups in Dual Connectivity (DC) configurations. It leverages the legacy 4G core network, the Evolved Package Core (EPC) for fast deployment. Since the commercialization of the first 5G network, NSA has allowed to industry to quickly build a single global ecosystem for 5G. The only drawback with NSA is that its architecture has to be supported in the future, as long as IoT Devices using it are in use.

Standalone (SA)

Introduced in 3GPP™ Release 15 “Main Drop” (June 2018), the 5G New Radio Standalone operation mode uses a dedicated 5G core network, the 5GC, which is highly optimized to deliver the full extent of 5G technology’s benefits. Most NSA wireless communication modules support SA operations as well.

Voice over LTE (VoLTE)

VoLTE stands for “Voice over Long-Term Evolution.” Utilizing IMS technology, it is a digital packet voice service delivered over IP via an LTE access network. Voice calls over LTE are recognized as the industry-agreed progression of voice services across mobile networks, deploying LTE radio access technology.

III. DT 5G-NR Network Description

Deutsche Telekom (DT) has deployed 5G New Radio (NR) public networks for M2M/IoT customers in multiple European affiliates, including Austria, Croatia, Czechia, Germany, Greece, Hungary, The Netherlands, Poland, and Slovakia. 5G access networks are also planned for future deployment in Northern Macedonia and Montenegro. In parallel, 5G NR private networks are commercially sold in Germany, with plans to roll out similar offerings in other countries.

To-date, DT 5G-NR networks are deployed in Non-Standalone (NSA) configuration to support Enhanced Mobile Broadband (eMBB) communication in licensed FR1 (Sub-6 GHz) spectrum, as per 3GPP™ architecture Option 3x. 5G coverage is provided by an Access Network of gNB cells connected to LTE Radio Access Network (eNB) and a local or centralized Evolved Package Core (EPC). 5G coverage maps for DT’s affiliates can be found online at different websites which are regularly maintained:

- **Magenta Telekom** (Austria): <https://www.magenta.at/5g>
- **Hrvatski Telekom** (Croatia): <https://www.hrvatskitelekom.hr/5g>

- **T-Mobile Czech Republic** (Czechia): <https://www.t-mobile.cz/5g>
- **Telekom Deutschland** (Germany): <https://www.telekom.de/netz/mobilfunk-netzausbau>
- **COSMOTE** (Greece): https://www.cosmote.gr/cs/otegroup/en/kalipsi_diktiou_en.html
- **Magyar Telekom** (Hungary): <https://www.telekom.hu/lakossagi/english/customer-centre/coverage>
- **T-Mobile Netherlands**: <https://www.t-mobile.nl/mobiel/netwerk/dekking>
- **T-Mobile Polska** (Poland): <https://www.t-mobile.pl/c/mapa-zasiegu>
- **Slovak Telekom** (Slovakia): <https://www.telekom.sk/5G>

DT's NR Access Networks leverage eUTRA New Radio - Dual Connectivity (EN-DC) split bearer support on the Downlink and Uplink (i.e., combining LTE Master Cell Groups (MCG) with an NR Secondary Cell Group (SCG)). Dynamic Spectrum Sharing (DSS) is additionally used on several FR1 frequencies, especially in NR n1 and n3 band, to enable a coexistence of both LTE and 5G-NR traffic on shared spectrum.

Depending on the affiliate, EN-DC connectivity may be provided using one or more LTE contiguous Component Carrier (CC) MCG on Bands 28, 20, 8, 3, 1, 7, and/or 38. The NR SCG currently consists of only one contiguous CC on Bands n28, n3, n1, n7, n38, or n78. Dynamic Spectrum Sharing (DSS) is supported on LTE Band 1 and Band 3. Please contact your Deutsche Telekom IoT or local DT affiliate Sales or Technical Sales representative to obtain a list of the EN-DC combinations relevant to the deployment markets of interest.

To safeguard backward compatibility on DT 5G-NR networks, all IoT devices using current DT 5G IoT and Campus tariffs should integrate modules supporting 5G Standalone (SA) mode. Furthermore, FR2 (mmWave, millimeter-Wave) spectrum will eventually become relevant in DT's frequency planning for enabling high throughput use cases, such as self-guided vehicles, V2X, medical, etc. The selection of a modules for both NSA and SA use cases should also ideally consider the individual DT affiliate's deployed spectrum bands and the commercially implemented EN-DC combinations.

IV. DT 5G Deployment Guidelines for IoT Devices: General Requirements

Exclusive Use of DT-certified Wireless Communication Modules on DT 5G Networks

The integrated 5G wireless communication module used by the IoT Device to communicate with the IoT Service over 5G public networks **SHALL** be one that has been certified by Deutsche Telekom's centralized IoT Chipset / Module Certification process. Compliant modules can be found on the Deutsche Telekom [IoT Hardware Ecosystem](#) website, under the [Modems](#) category of the Hardware page.

As per DT Group-level governance, it is not allowed to operate IoT Devices on any DT networks with modules that are not DT-certified via this centralized process. This rule applies for all B2B, B2C, and B2B2C IoT Devices in the Business IoT, Consumer IoT, Campus, and Smart City segments. DT affiliate customers using modules that are not DT-certified may periodically encounter interoperability issues which receive no customer support for troubleshooting. Furthermore, the offending devices will be expeditiously removed from the network(s) whenever and wherever they cause signaling storms or other issues on the said network(s) or to other IoT customers.

GCF or PTCRB certification, regulatory certifications (such as CE, FCC), and all other operator certifications (e.g., AT&T, Orange, Verizon, Vodafone, etc.) are not accepted in lieu of a Deutsche Telekom-specific certification. For more information, please [contact](#) Deutsche Telekom's certification team.

Use of Wireless Communication Modules Supporting "mid-mid" and "low-low" EN-DC Combinations

IoT Devices **SHALL** implement 5G wireless communication modules supporting mid-mid and low-low EN-DC combinations, thereby avoiding problems with anchoring on LTE and 5G NR carriers that are closely spaced

spectrally to each other. Specifically, wireless communication modules **SHALL** minimally support DC_B3_n1A, DC_B7_n1A. The supplier **SHOULD** consider support for additional mid-mid and low-low EN-DC combinations (such as DC_B20_n28A, DC_B8_n28A), if these are needed for off-footprint, roaming cases.

Network Protection Mechanisms on 5G IoT Devices

IoT Service Providers **SHALL** implement network protection mechanisms within the Application and Service Layers of their IoT Devices to safeguard efficient communication and avoid the generation of unwanted or unintended signaling storms, or interference to other IoT customers. For more information, please refer to Deutsche Telekom's *IoT Solution Guidelines for No Harm to Network*¹, as well as the latest version of the GSMA TS.34, *IoT Device Connection Efficiency Guidelines*².

Radio Policy Manager (RPM) Support on Integrated 5G Modules

The integrated 5G wireless communication module used by the IoT Device **SHOULD** support the Radio Policy Manager (RPM) feature, as defined in GSMA TS.34, *IoT Device Connection Efficiency Guidelines*². Alternatively, the IoT Device may run an industry-wide established operating system with highly developed API policies controlling communication management and access control (e.g., Android, iOS, etc.). If neither are implemented, the IoT Service Provider or their IoT Device manufacturer **SHALL** ensure that the Application Layer and Service Layer on the IoT Device comply to Deutsche Telekom's *IoT Solution Guidelines for No Harm to Network*¹ whenever a quantity of over 10,000 units are deployed on any Deutsche Telekom network.

Support for DSS in DT 5G Networks

IoT Devices **SHALL** use wireless communication modules supporting Dynamic Spectrum Sharing (DSS) if they will be deployed in Croatia, Czechia, The Netherlands, Poland, and Slovakia. Currently, 5G service is available in these markets with DSS.

In the case of Austria, Germany, Greece, and Hungary, 5G service is deployed in both DSS and non-DSS mode; however, there may be network regions where only DSS is used, or a higher-prioritized LTE carrier is available for 5G NSA service with EN-DC, using DSS. For this reason, customers **SHALL** use wireless communication modules supporting DSS in these markets, as well.

Communication Back-off Window during EN-DC Set-up or Changes

During the initialization state of the IoT Device, when its wireless communication module initially attaches to the DT network, as well as during every subsequent attach, or during intra/inter-network handovers, a scenario may occur, whereby the IoT Device's wireless communication module camps on a higher prioritized LTE network cell (Primary Cell), with which – as a Master Cell Group (MCG), a 5G aggregated carrier (Secondary Cell Group, SCG) in EN-DC combination may not be supported. For example, in parts of the 5G network, the Band 3 LTE MCG may be aggregated with the 5G New Radio Band n1 SCG. The wireless communication module, however, may not support this mid-mid EN-DC combination (DC_3A_n1A); in this case, 5G service would not be immediately available for the IoT Device's communication.

The DT network in this case supports advanced features which trigger a handover of the module to another MCG, based on the UE capabilities message (a subset of the wireless communication module's supported EN-DC combinations). In several operator networks the infrastructure supplier has enabled this mechanism to work during the time that the device finds itself in the Connected Mode. However, in other networks with different infrastructure suppliers, the feature is only supported once the device enters the Idle Mode. In the latter case, once the Inactivity Timer expires, the device receives a *RRC Connection Release Message* from the network. This message contains a

¹ <https://hardware.iot.telekom.com/Learn/SolutionGuidelines>

² <https://www.gsma.com/iot/gsma-iot-device-connection-efficiency-guidelines/>

different set of LTE band priorities which overwrite the original set received earlier in Connected Mode. Based on this, the device triggers a reselection to the new highest priority band (LTE network Primary Cell), where there would be a higher chance of the wireless communication module setting up an SCG with this new MCG. The device can thereby use the 5G service with EN-DC. This secures better throughput at the next opportunity that the IoT Device enters Connected Mode to exchange data with the IoT Service.

For this reason, the IoT Device **SHOULD** implement a mechanism that ensures that the wireless communication module can perform the reselection to the new LTE Primary cell, if required. This can be achieved by checking if the setup of the 5G aggregated carrier (SCG) has been performed successfully. If not, the IoT Device should back-off further communication until the LTE network's RRC inactivity timer expires and the wireless communication module drops into Idle Mode, where a reselection can finally occur. Data transmission is not to be resumed until this reselection is completed. This mechanism **SHOULD** be applied whenever the UE fails to setup a 5G aggregated carrier due to unsupported EN-DC combinations.

Adherence to RAT-specific “No Harm to Network” Communication Policies

The 5G-NR IoT Service **SHALL** comply with the data traffic model constraints defined in the appendix of Deutsche Telekom's *IoT Solution Guidelines for No Harm to Network*¹. Wherever values are not defined, please refer to the corresponding tariff conditions, which may set forward rules for the following:

- Maximum number of IoT module power cycles/Attaches per day
- Maximum number of application messages per day
- Maximum monthly data volume generated

Performance Requirements for DT IoT 5G Portfolio: Sustainable Data Rate

The sustainable data rate for Downlink 5G communication under ideal radio conditions **SHALL** be within 90% of the peak data rate for at least one minute (before the thermal limit is reached), as well as continuously above 1Gbps during the period of communication.

Adequate Hardware Thermal Design Implemented

IoT Devices **SHALL** provide sufficient heat dissipation, thus avoiding a need to regularly switch off the 5G New Radio-capable wireless communication module as a preventative measure. The casing of the device **SHALL** not directly dissipate the heat, such that it may cause thermal damage or fire to the surfaces it contacts.

Antenna Design is Optimized to Minimize Antenna Inefficiency in Small Devices

If using the lower radio frequency FR1 band n28, the supplier of small-sized IoT Devices **SHALL** carefully select the antenna and implement mechanical workarounds, including an optimization of the PCB board layout, in a way that minimizes the degradation of antenna performance. A compromise may be needed between device size, antenna efficiency (gain), and bandwidth.

Adequate Memory and Processing Power Implemented

The supplier **SHALL** ensure that sufficient memory and processing power are provided to support the IoT application's buffering needs, thereby avoiding overflow issues.

Use of Secondary Batteries in Battery-powered 5G IoT Devices

5G IoT Devices **SHOULD** employ secondary batteries, which can be recharged and reused several times. It **RECOMMENDED** not to use primary batteries unless the use case requires it.

¹ <https://hardware.iot.telekom.com/Learn/SolutionGuidelines>

Power Saving Functionality

If the DT 5G network supports Connected Mode Discontinuous Reception (cDRX), the 5G wireless communication module in the device **SHALL** use it. Network-configured long DRX cycles achieve significant power consumption savings during Connected Mode operations. By using cDRX, power consumption in the RRC Connected state can be the same of that in Idle Mode DRX (iDRX), as long as identical DRX cycle windows are used.

Voice over 5G Support

Voice over New Radio is currently not supported by DT 5G networks. An LTE bearer should be used instead with VoLTE. Please refer to Deutsche Telekom's *IoT Solution Guidelines for Voice over LTE (VoLTE)* for connectivity in both home and roaming networks. DT VoLTE-certified modules can be found on the Deutsche Telekom [IoT Hardware Ecosystem](#) website, under the [Modems](#) category of the Hardware page, by using the "Module Selection Guide," or by searching in the product listing for modules using the following logo:



Picture 1: DT VoLTE-certified Logo

eCall over 5G Support

Automotive eCall over New Radio is currently not supported. An LTE bearer should be used instead with VoLTE. If LTE is not available in a specific geography, a 2G bearer is used, wherever available. Please refer to Deutsche Telekom's *IoT Solution Guidelines for Voice over LTE (VoLTE)* for connectivity in both home and roaming networks.

V. DT 5G Deployment Guidelines for IoT Devices: Private Networks

Use of DT-certified Modules for DT 5G Private (Campus) Networks

The integrated 5G wireless communication module used by the IoT Device to communicate with the IoT Service over 5G private (Campus) networks **SHALL** be one that has been certified by Deutsche Telekom's centralized IoT Chipset / Module Certification process. Compliant, Campus-certified modules can be found on the Deutsche Telekom [IoT Hardware Ecosystem](#) website, under the [Modems](#) category of the Hardware page, by using the "Module Selection Guide," or by searching in the product listing for modules using the following logo:



Picture 2: DT "Campus Network Certified" Logo

As per DT Group-level governance, it is not allowed to operate IoT Devices on any DT networks, including private ones, with modules that are not DT-certified via this centralized process. DT affiliate customers using modules that are not DT-certified may periodically encounter interoperability issues on Campus private networks which receive no

customer support for troubleshooting. Furthermore, the offending devices will be expeditiously removed from the network(s) whenever and wherever they cause signaling storms or other issues on the said network(s) or to other IoT Devices.

GCF or PTCRB certification, regulatory certifications (such as CE, FCC), and all other operator certifications (e.g., AT&T, Orange, Verizon, Vodafone, etc.) are not accepted in lieu of a Deutsche Telekom-specific Campus certification. For more information, please [contact](#) Deutsche Telekom's certification team.

Use of PLMN ID to Identify Private vs. Public DT 5G Networks

The public network (also known as "public slice") PLMN ID is identical to that of the standard M2M/IoT network. If dedicated private slices are used in a DT Campus network, the private slice PLMN ID will be different from the standard M2M/IoT network PLMN ID. IoT Device manufacturer **SHALL** ensure that their IoT Services account for the PLMN change when transitioning from one slice to another. For more information, please refer to Appendix 1: Deutsche Telekom Public and Private 5G Networks.

Industry-wide Operating Systems Whitelist DT 5G Private Network PLMN IDs

IoT Service Providers using consumer and enterprise Campus devices with industry-wide established operating system (e.g., Android, iOS, etc.), **SHALL** ensure that their OS versions whitelist the PLMN IDs of the dedicated DT 5G private slice.

Supported for Parallel, Concurrent APN Sessions

IoT Devices for Campus deployments **SHALL** support minimally two parallel, concurrent sessions (APNs), for use in different applications. Up to eight concurrent APN connection are possible on DT Campus private networks.

Use of 5G Quality of Service Identifiers

Several DT affiliate 5G Campus networks support different QoS Class Identifiers for 5G (5QI) on the private slice to ensure IoT Application data is allocated an appropriate Quality of Service (QoS). For example, in Telekom Deutschland GmbH network, there is support for a quality of service of 300 ms delay, with a packet error rate of 10^{-6} , using the following:

- APN (campus.advanced.136) with QCI136 (= QCI6) – Priority level 60
- APN (campus.advanced.139) with QCI139 (=QCI9) – Priority level 90

In the event that different types of data traffic may require different levels of QoS, different 5QI values **SHALL** be supported and actively applied by the IoT Application.

VI. Required EN-DC Combinations: Multicarrier LTE with one NR Carrier

The following section details the specific EN-DC combinations that are supported on Deutsche Telekom and roaming partner networks, using one or more LTE carriers (Master Cell Group, MCG) with one NR carrier (Secondary Cell Group, SCG). For the support of specific MIMO modes in EN-DC, the following assumptions apply:

- Low bands (e.g., Bands 8 / 20 / 28): 2x2 MIMO
- Mid/high bands (e.g., Bands 1 / 3 / 7 / 32 / 38 / 78): 4x4 MIMO

Please note: If 4x4 MIMO is supported on a single LTE or NR band, it is in general also supported on this band within an EN-DC combination.

EN-DC LTE CA + n1A		
EN-DC 1 Carrier LTE + 1 Carrier n1A		
DC_3A(4x4)_n1A(4x4) i.e. 4 LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_7A(4x4)_n1A(4x4) i.e. 4 LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_8A(2x2)_n1A(4x4) i.e. 2 LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_20A(2x2)_n1A(4x4) i.e. 2 LTE & 4 NR layers	DC_20A_n1A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n1A		
DC_3C(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3C_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-8A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n1A	RECOMMENDED
DC_3A(4x4)-8A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_3A(4x4)-20A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-20A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
DC_7C(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_7C(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7C_n1A	MANDATORY
DC_7A(4x4)-7A(4x4)_n1A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_7A(4x4)-8A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n1A	RECOMMENDED
DC_7A(4x4)-8A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_7A(4x4)-20A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_7A(4x4)-20A(2x2)_n1A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n1A		
DC_3C(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3C_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY

DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3C(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n1A	RECOMMENDED
DC_3C(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3C_n1A	RECOMMENDED
DC_3C(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n1A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3C_n1A	MANDATORY
DC_3C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7C_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n1A	RECOMMENDED
DC_3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n1A	RECOMMENDED
DC_3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
DC_7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_7C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_7C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7C_n1A	MANDATORY
DC_7C(4x4)-20A(2x2)_n1A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
EN-DC 4 Carriers LTE + 1 Carrier n1A		
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n1A	INFORMATION

DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n1A	INFORMATION
DC_3C(4x4)-7C(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)-7C(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3C_n1A	MANDATORY
DC_3C(4x4)-7C(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3C(4x4)-7C(4x4)_n1A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7C_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	RECOMMENDED
DC_3C(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3C_n1A	RECOMMENDED
DC_3C(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	RECOMMENDED
DC_3C(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n1A	INFORMATION
DC_3C(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3C_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n1A	INFORMATION
DC_3A(4x4)-7C(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7C_n1A	MANDATORY
DC_3A(4x4)-7C(4x4)-20A(2x2)_n1A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_20A_n1A	MANDATORY
EN-DC 5 Carriers LTE + 1 Carrier n1A		
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_8A_n1A	INFORMATION

EN-DC LTE CA + n3A		
EN-DC 1 Carrier LTE + 1 Carrier n3A		
DC_1A(4x4)_n3A(4x4) i.e. 4 LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_3A(4x4)_n3A(4x4) i.e. 4 LTE & 4 NR layers	DC_3A_n3A	INFORMATION
DC_7A(4x4)_n3A(4x4) i.e. 4 LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_8A(2x2)_n3A(4x4) i.e. 2 LTE & 4 NR layers	DC_8A_n3A	MANDATORY
DC_20A(2x2)_n3A(4x4) i.e. 2 LTE & 4 NR layers	DC_20A_n3A	MANDATORY
DC_28A(2x2)_n3A(4x4) i.e. 2 LTE & 4 NR layers	DC_28A_n3A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n3A		
DC_1C(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1C(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1C_n3A	INFORMATION
DC_1A(4x4)-7A(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-7A(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_1A(4x4)-8A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-8A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n3A	MANDATORY
DC_1A(4x4)-20A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-20A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY
DC_1A(4x4)-28A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-28A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n3A	MANDATORY
DC_7C(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_7C(4x4)_n3A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7C_n3A	MANDATORY
DC_7A(4x4)-20A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_7A(4x4)-20A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY
DC_7A(4x4)-28A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_7A(4x4)-28A(2x2)_n3A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n3A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n3A		
DC_1C(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1C(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY

DC_1A(4x4)-7C(4x4)_n3A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-7C(4x4)_n3A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_1A(4x4)-7C(4x4)_n3A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7C_n3A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY
DC_7C(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_7C(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7C_n3A	MANDATORY
DC_7C(4x4)-20A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY
DC_7C(4x4)-28A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_7C(4x4)-28A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7C_n3A	MANDATORY
DC_7C(4x4)-28A(2x2)_n3A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n3A	MANDATORY
EN-DC 4 Carriers LTE + 1 Carrier n3A		
DC_1A(4x4)-7C(4x4)-20A(2x2)_n3A(4x4) i.e. 14 (4+8+2) LTE & 4 NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-7C(4x4)-20A(2x2)_n3A(4x4) i.e. 14 (4+8+2) LTE & 4 NR layers	DC_7A_n3A	MANDATORY
DC_1A(4x4)-7C(4x4)-20A(2x2)_n3A(4x4) i.e. 14 (4+8+2) LTE & 4 NR layers	DC_7C_n3A	MANDATORY
DC_1A(4x4)-7C(4x4)-20A(2x2)_n3A(4x4) i.e. 14 (4+8+2) LTE & 4 NR layers	DC_20A_n3A	MANDATORY
EN-DC LTE CA + n7A		
EN-DC 1 Carrier LTE + 1 Carrier n7A		
DC_1A(4x4)_n7A(4x4) i.e. 4 LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_3A(4x4)_n7A(4x4) i.e. 4 LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_7A(4x4)_n7A(4x4) i.e. 4 LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_20A(2x2)_n7A(4x4) i.e. 2 LTE & 4 NR layers	DC_20A_n7A	MANDATORY
DC_28A(2x2)_n7A(4x4) i.e. 2 LTE & 4 NR layers	DC_28A_n7A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n7A		
DC_1A(4x4)-1A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY

DC_1A(4x4)-7A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-7A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_3C(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3C(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3C_n7A	MANDATORY
DC_3A(4x4)-3A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3A(4x4)-7A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3A(4x4)-7A(4x4)_n7A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3A(4x4)-20A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3A(4x4)-20A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n7A	MANDATORY
DC_3A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_7A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n7A	MANDATORY
DC_7A(4x4)-28A(2x2)_n7A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n7A		
DC_1A(4x4)-1A(4x4)-3A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3C_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-3A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-3A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY

DC_1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3C(4x4)-20A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3C(4x4)-20A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3C_n7A	MANDATORY
DC_3C(4x4)-20A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n7A	MANDATORY
DC_3C(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3C(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3C_n7A	MANDATORY
DC_3C(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
EN-DC 4 Carriers LTE + 1 Carrier n7A		
DC_1A(4x4)-1A(4x4)-3C(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION

DC_1A(4x4)-1A(4x4)-3C(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)_n7A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3C_n7A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION

DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
EN-DC 5 Carriers LTE + 1 Carrier n7A		
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)_n7A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	MANDATORY
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION

DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 18 (4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
EN-DC 6 Carriers LTE + 1 Carrier n7A		
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_3C_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_7A_n7A	INFORMATION
DC_1A(4x4)-1A(4x4)-3A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n7A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_28A_n7A	INFORMATION
EN-DC LTE CA + n8A		
EN-DC 1 Carrier LTE + 1 Carrier n8A		
DC_1A(4x4)_n8A(2x2) i.e. 4 LTE & 2 NR layers	DC_1A_n8A	INFORMATION
DC_3A(4x4)_n8A(2x2) i.e. 4 LTE & 2 NR layers	DC_1A_n8A	INFORMATION
DC_7A(4x4)_n8A(2x2) i.e. 4 LTE & 2 NR layers	DC_1A_n8A	INFORMATION
DC_20A(2x2)_n8A(2x2) i.e. 2 LTE & 2 NR layers	DC_20A_n8A	INFORMATION
DC_28A(2x2)_n8A(2x2) i.e. 2 LTE & 2 NR layers	DC_28A_n8A	INFORMATION
EN-DC 2 Carrier LTE + 1 Carrier n8A		
DC_1A(4x4)-3A(4x4)_n8A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_1A_n8A	INFORMATION
DC_1A(4x4)-3A(4x4)_n8A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3A_n8A	INFORMATION

DC_1A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (2+2) LTE & 2 NR layers	DC_1A_n8A	INFORMATION
DC_1A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (2+2) LTE & 2 NR layers	DC_20A_n8A	INFORMATION
DC_3A(4x4)-7A(4x4)_n8A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3A_n8A	INFORMATION
DC_3A(4x4)-7A(4x4)_n8A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_7A_n8A	INFORMATION
DC_3A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_3A_n8A	INFORMATION
DC_3A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_20A_n8A	INFORMATION
DC_7A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_7A_n8A	INFORMATION
DC_7A(4x4)-20A(2x2)_n8A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_20A_n8A	INFORMATION
EN-DC LTE CA + n20A		
DC_3A(4x4)_n20A(2x2) i.e. 4 LTE & 2 NR layers	DC_3A_n20A	INFORMATION
EN-DC LTE CA + n28A		
EN-DC 1 Carrier LTE + 1 Carrier n28A		
DC_1A(4x4)_n28A(2x2) i.e. 4 LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_3A(4x4)_n28A(2x2) i.e. 4 LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_7A(4x4)_n28A(2x2) i.e. 4 LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_8A(2x2)_n28A(2x2) i.e. 2 LTE & 2 NR layers	DC_8A_n28A	RECOMMENDED
DC_20A(2x2)_n28A(2x2) i.e. 2 LTE & 2 NR layers	DC_20A_n28A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n28A		
DC_1A(4x4)-3A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-7A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-7A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-8A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_1A_n28A	RECOMMENDED
DC_1A(4x4)-8A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_8A_n28A	RECOMMENDED
DC_1A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_3C(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3C(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY

DC_3A(4x4)-7A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3A(4x4)-7A(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_3A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_7C(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_7C(4x4)_n28A(2x2) i.e. 8 (4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
DC_7A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_7A(4x4)-20A(2x2)_n28A(2x2) i.e. 6 (4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n28A		
DC_1A(4x4)-3C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_1A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_3C(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3C(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_3C(4x4)-7A(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY

DC_3C(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3C(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_3C(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_3A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_3A(4x4)-7C(4x4)_n28A(2x2) i.e. 12 (4+4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 10 (4+4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
EN-DC 4 Carriers LTE + 1 Carrier n28A		
DC_1A(4x4)-3C(4x4)-7A(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 14 (4+4+4+2) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 14 (4+4+4+2) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 14 (4+4+4+2) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n28A(2x2) i.e. 14 (4+4+4+2) LTE & 2 NR layers	DC_20A_n28A	MANDATORY
DC_3C(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_3C(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_3C(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_3C(4x4)-7C(4x4)_n28A(2x2) i.e. 16 (4+4+4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
EN-DC 5 Carriers LTE + 1 Carrier n28A		

DC_1A(4x4)-3C(4x4)-7C(4x4)_n28A(2x2) i.e. 20 (4+4+4+4+4) LTE & 2 NR layers	DC_1A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n28A(2x2) i.e. 20 (4+4+4+4+4) LTE & 2 NR layers	DC_3A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n28A(2x2) i.e. 20 (4+4+4+4+4) LTE & 2 NR layers	DC_3C_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n28A(2x2) i.e. 20 (4+4+4+4+4) LTE & 2 NR layers	DC_7A_n28A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n28A(2x2) i.e. 20 (4+4+4+4+4) LTE & 2 NR layers	DC_7C_n28A	MANDATORY
EN-DC LTE CA + n38A		
EN-DC 1 Carrier LTE + 1 Carrier n38A		
DC_1A(4x4)_n38A(4x4) i.e. 4 LTE & 4 NR layers	DC_1A_n38A	MANDATORY
DC_3A(4x4)_n38A(4x4) i.e. 4 LTE & 4 NR layers	DC_3A_n38A	MANDATORY
DC_20A(2x2)_n38A(4x4) i.e. 2 LTE & 4 NR layers	DC_20A_n38A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n38A		
DC_1C(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n38A	INFORMATION
DC_1C(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1C_n38A	INFORMATION
DC_1A(4x4)-3A(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n38A	MANDATORY
DC_1A(4x4)-3A(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n38A	MANDATORY
DC_1A(4x4)-20A(2x2)_n38A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n38A	MANDATORY
DC_3A(4x4)-20A(2x2)_n38A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n38A	MANDATORY
DC_3A(4x4)-20A(2x2)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_20A_n38A	MANDATORY
DC_3C(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n38A	MANDATORY
DC_3C(4x4)_n38A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3C_n38A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n38A		
DC_1A(4x4)-3A(4x4)-20A(2x2)_n38A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n38A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n38A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n38A	MANDATORY
EN-DC LTE CA + n78A		
EN-DC 1 Carrier LTE + 1 Carrier n78A		
DC_1A(4x4)_n78A(4x4) i.e. 4 LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_3A(4x4)_n78A(4x4) i.e. 4 LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_7A(4x4)_n78A(4x4) i.e. 4 LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_8A(2x2)_n78A(4x4) i.e. 2 LTE & 4 NR layers	DC_8A_n78A	MANDATORY

DC_20A(2x2)_n78A(4x4) i.e. 2 LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_28A(2x2)_n78A(4x4) i.e. 2 LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_38A(4x4)_n78A(4x4) i.e. 4 LTE & 4 NR layers	DC_38A_n78A	MANDATORY
EN-DC 2 Carriers LTE + 1 Carrier n78A		
DC_1A(4x4)-3A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_1A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_1A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3C(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_3A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3A(4x4)-38A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_7C(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7C(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY

DC_7A(4x4)-7A(4x4)_n78A(4x4) i.e. 8 (4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7A(4x4)-8A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_7A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7A(4x4)-20A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_7A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7A(4x4)-28A(2x2)_n78A(4x4) i.e. 6 (4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_8A(2x2)-20A(2x2)_n78A(4x4) i.e. 4 (2+2) LTE & 4 NR layers	DC_8A_n78A	RECOMMENDED
DC_8A(2x2)-20A(2x2)_n78A(4x4) i.e. 4 (2+2) LTE & 4 NR layers	DC_20A_n78A	RECOMMENDED
DC_20A(2x2)-38A(4x4)_n78A(4x4) i.e. 6 (2+4) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_20A(2x2)-38A(4x4)_n78A(4x4) i.e. 6 (2+4) LTE & 4 NR layers	DC_38A_n78A	MANDATORY
EN-DC 3 Carriers LTE + 1 Carrier n78A		
DC_1A(4x4)-3C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_1A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY

DC_1A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_1A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_8A_n78A	RECOMMENDED
DC_1A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_20A_n78A	RECOMMENDED
DC_1A(4x4)-20A(2x2)-38A(4x4)_n78A(4x4) i.e. 10 (4+2+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3C(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3C(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY

DC_3C(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 12 (4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_3A_n78A	RECOMMENDED
DC_3A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_8A_n78A	RECOMMENDED
DC_3A(4x4)-8A(2x2)-20A(2x2)_n78A(4x4) i.e. 8 (4+2+2) LTE & 4 NR layers	DC_20A_n78A	RECOMMENDED
DC_3A(4x4)-20A(2x2)-38A(4x4)_n78A(4x4) i.e. 10 (4+2+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_7C(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_7C(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_7C(4x4)-28A(2x2)_n78A(4x4) i.e. 10 (4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY

EN-DC 4 Carriers LTE + 1 Carrier n78A		
DC_1A(4x4)-3C(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3C_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	RECOMMENDED

DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	RECOMMENDED
DC_1A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n78A(4x4) i.e. 16 (4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-20A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_20A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3C_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_8A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_7C_n78A	MANDATORY

DC_3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 14 (4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
EN-DC 5 Carriers LTE + 1 Carrier n78A		
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_3C_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78A(4x4) i.e. 20 (4+4+4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_1A(4x4)-3A(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_28A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3C_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7A(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_28A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_8A_n78A	INFORMATION
DC_3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3A_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_3C_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7A_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_7C_n78A	MANDATORY
DC_3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 18 (4+4+4+4+4) LTE & 4 NR layers	DC_28A_n78A	MANDATORY
EN-DC 6 Carriers LTE + 1 Carrier n78A		
DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_1A_n78A	INFORMATION

DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_3C_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_7C_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)-28A(2x2)_n78A(4x4) i.e. 22 (4+4+4+4+4+2) LTE & 4 NR layers	DC_28A_n78A	INFORMATION

VII. Required EN-DC Combinations: Multicarrier LTE with Multicarrier NR Carrier

Although multiple NR carriers are currently not implemented on the commercial DT European networks, the following section details EN-DC combinations which may be required on roaming partner networks or future DT networks, using one or more LTE carriers (Master Cell Group, MCG) with one or more NR carrier (Secondary Cell Group, SCG). For the support of specific MIMO modes in EN-DC, the following assumptions apply:

- Low bands (e.g., Bands 8 / 20 / 28): 2x2 MIMO
- Mid/high bands (e.g., Bands 1 / 3 / 7 / 32 / 38 / 78): 4x4 MIMO

Please note: If 4x4 MIMO is supported on a single LTE or NR band, it is in general also supported on this band within an EN-DC combination.

EN-DC with NR CA n1A-n7A		
DC_3A(4x4)_n1A(4x4)-n7A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)_n1A(4x4)-n7A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n7A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n7A(4x4) i.e. 8 LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n7A(4x4) i.e. 8 LTE & 8 (4+4) NR layers	DC_3A_n7A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n7A(4x4) i.e. 8 LTE & 8 (4+4) NR layers	DC_3C_n1A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n7A(4x4) i.e. 8 LTE & 8 (4+4) NR layers	DC_3C_n7A	INFORMATION
EN-DC with NR CA n1A-n28A		
DC_3A(4x4)_n1A(4x4)-n28A(2x2) i.e. 4 LTE & 6 (4+2) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)_n1A(4x4)-n28A(2x2) i.e. 4 LTE & 6 (4+2) NR layers	DC_3A_n28A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n28A(2x2) i.e. 8 LTE & 6 (4+2) NR layers	DC_3A_n1A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n28A(2x2) i.e. 8 LTE & 6 (4+2) NR layers	DC_3A_n28A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n28A(2x2) i.e. 8 LTE & 6 (4+2) NR layers	DC_3C_n1A	INFORMATION

DC_3C(4x4)_n1A(4x4)-n28A(2x2) i.e. 8 LTE & 6 (4+2) NR layers	DC_3C_n28A	INFORMATION
DC_20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 2 LTE & 6 (4+2) NR layers	DC_20A_n1A	INFORMATION
DC_20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 2 LTE & 6 (4+2) NR layers	DC_20A_n28A	INFORMATION
DC_3A(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_3A_n28A	INFORMATION
DC_3A(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_20A_n1A	INFORMATION
DC_3A(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 NR (4+2) layers	DC_20A_n28A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_3A_n1A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_3A_n28A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_3C_n1A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_3C_n28A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_20A_n1A	INFORMATION
DC_3C(4x4)-20A(2x2)_n1A(4x4)-n28A(2x2) i.e. 10 (8+2) & 6 (4+2) NR layers	DC_20A_n28A	INFORMATION
EN-DC with NR CA n1A-n78A		
DC_3A(4x4)_n1A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)_n1A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
DC_20A(2x2)_n1A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_20A_n1A	MANDATORY
DC_20A(2x2)_n1A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION
DC_3C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY

DC_3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
DC_7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_7C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7C_n1A	MANDATORY
DC_7C(4x4)_n1A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
DC_7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n1A	INFORMATION
DC_7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
DC_3C(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3C(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_3C(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	MANDATORY
DC_3A(4x4)-3A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 12 (8+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION

DC_3C(4x4)-7C(4x4)_n1A(4x4)-n78A(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)_n1A(4x4)-n78A(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 14 (4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n1A	INFORMATION
DC_3A(4x4)-3A(4x4)-7A(4x4)-7A(4x4)-8A(2x2)_n1A(4x4)-n78A(4x4) i.e. 18 (4+4+4+4+2) LTE & 8 (4+4) NR layers	DC_8A_n78A	INFORMATION
EN-DC with NR CA n3A-n28A		
DC_1A(4x4)_n3A(4x4)-n28A(2x2) i.e. 4 LTE & 6 (4+2) NR layers	DC_1A_n3A	INFORMATION
DC_1A(4x4)_n3A(4x4)-n28A(2x2) i.e. 4 LTE & 6 (4+2) NR layers	DC_1A_n28A	INFORMATION
DC_8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 2 LTE & 6 (4+2) NR layers	DC_8A_n3A	INFORMATION

DC_8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 2 LTE & 6 (4+2) NR layers	DC_8A_n28A	INFORMATION
DC_1A(4x4)-8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_1A_n3A	INFORMATION
DC_1A(4x4)-8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_1A_n28A	INFORMATION
DC_1A(4x4)-8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_8A_n3A	INFORMATION
DC_1A(4x4)-8A(2x2)_n3A(4x4)-n28A(2x2) i.e. 6 (4+2) LTE & 6 (4+2) NR layers	DC_8A_n28A	INFORMATION
EN-DC with NR CA n3A-n38A		
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n38A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n3A	INFORMATION
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n38A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n3A	INFORMATION
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n38A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n38A	INFORMATION
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n3A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n38A	INFORMATION
EN-DC with NR CA n3A-n78A		
DC_1A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_3A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n3A	MANDATORY
DC_3A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_7A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n3A	MANDATORY
DC_7A(4x4)_n3A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_20A_n3A	MANDATORY
DC_20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION
DC_28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_28A_n3A	INFORMATION
DC_28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_28A_n78A	INFORMATION
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n3A	MANDATORY
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION
DC_1A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n3A	INFORMATION
DC_1A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION

DC_1A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n3A	INFORMATION
DC_1A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	INFORMATION
DC_7C(4x4)_n3A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n3A	MANDATORY
DC_7C(4x4)_n3A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7C(4x4)_n3A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7C_n3A	MANDATORY
DC_7C(4x4)_n3A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
DC_7A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n3A	MANDATORY
DC_7A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n3A	MANDATORY
DC_7A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION
DC_7A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n3A	INFORMATION
DC_7A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n3A	INFORMATION
DC_7A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7A(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	INFORMATION
DC_1A(4x4)-7A(4x4)-20A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_1A_n3A	MANDATORY
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_1A_n3A	INFORMATION
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_20A_n3A	INFORMATION
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_38A_n3A	INFORMATION
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION
DC_1A(4x4)-20A(2x2)-38A(4x4)_n3A(4x4)-n78A(4x4) i.e. 10 (4+2+4) LTE & 8 (4+4) NR layers	DC_38A_n78A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n3A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_7C_n3A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_28A_n3A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
DC_7C(4x4)-28A(2x2)_n3A(4x4)-n78A(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	INFORMATION

EN-DC with NR CA n7A-n78A/(2A)		
DC_1A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n7A	RECOMMENDED
DC_1A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n7A	RECOMMENDED
DC_3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_7A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n7A	INFORMATION
DC_7A(4x4)_n7A(4x4)-n78A(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_28A(2x2)_n7A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_28A_n7A	INFORMATION
DC_28A(2x2)_n7A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_28A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_1A_n7A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n7A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n7A	RECOMMENDED
DC_3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3C_n7A	RECOMMENDED
DC_7A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 4 LTE & 12 (4+4+4) NR layers	DC_7A_n7A	INFORMATION
DC_7A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 4 LTE & 12 (4+4+4) NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 8 (4+4) LTE & 12 (4+4+4) NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 8 (4+4) LTE & 12 (4+4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 8 (4+4) LTE & 12 (4+4+4) NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3A(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 8 (4+4) LTE & 12 (4+4+4) NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 12 (4+4+4) LTE & 8 (4+4) NR layers	DC_1A_n7A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 12 (4+4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 12 (4+4+4) LTE & 8 (4+4) NR layers	DC_3A_n7A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 12 (4+4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78A(4x4) i.e. 12 (4+4+4) LTE & 8 (4+4) NR layers	DC_3C_n7A	RECOMMENDED

DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 12 (4+4+4) LTE & 12 (4+4+4) NR layers	DC_1A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 12 (4+4+4) LTE & 12 (4+4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 12 (4+4+4) LTE & 12 (4+4+4) NR layers	DC_3A_n7A	INFORMATION
DC_1A(4x4)-3C(4x4)_n7A(4x4)-n78(2A)(4x4) i.e. 12 (4+4+4) LTE & 12 (4+4+4) NR layers	DC_3A_n78A	INFORMATION
EN-DC with NR CA n8A-n78A		
DC_1A(4x4)_n8A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_1A_n8A	INFORMATION
DC_1A(4x4)_n8A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_1A_n78A	INFORMATION
DC_28A(2x2)_n8A(2x2)-n78A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_28A_n8A	INFORMATION
DC_28A(2x2)_n8A(2x2)-n78A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_28A_n78A	INFORMATION
EN-DC with NR CA n28A-n78A		
DC_1A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_1A_n28A	RECOMMENDED
DC_1A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_7A_n28A	RECOMMENDED
DC_7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 4 LTE & 6 (2+4) NR layers	DC_7A_n78A	RECOMMENDED
DC_20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_20A_n28A	RECOMMENDED
DC_20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_20A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_1A_n28A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_1A_n28A	RECOMMENDED
DC_1A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n28A	RECOMMENDED
DC_1A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n78A	RECOMMENDED
DC_1A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_1A_n28A	RECOMMENDED

DC_1A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n28A	RECOMMENDED
DC_1A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n78A	RECOMMENDED
DC_3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3C_n28A	RECOMMENDED
DC_3A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_3A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_3A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n28A	RECOMMENDED
DC_3A(4x4)-7A(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n78A	RECOMMENDED
DC_3A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_3A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_3A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n28A	RECOMMENDED
DC_3A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n78A	RECOMMENDED
DC_7C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n28A	RECOMMENDED
DC_7C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7A_n78A	RECOMMENDED
DC_7C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7C_n28A	RECOMMENDED
DC_7C(4x4)_n28A(2x2)-n78A(4x4) i.e. 8 (4+4) LTE & 6 (2+4) NR layers	DC_7C_n78A	RECOMMENDED
DC_7A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_7A_n28A	RECOMMENDED
DC_7A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_7A_n78A	RECOMMENDED
DC_7A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n28A	RECOMMENDED
DC_7A(4x4)-20A(2x2)_n28A(2x2)-n78A(4x4) i.e. 6 (4+2) LTE & 6 (2+4) NR layers	DC_20A_n78A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 12 (4+4+4) LTE & 6 (2+4) NR layers	DC_1A_n28A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 12 (4+4+4) LTE & 6 (2+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 12 (4+4+4) LTE & 6 (2+4) NR layers	DC_3A_n28A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 12 (4+4+4) LTE & 6 (2+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-3C(4x4)_n28A(2x2)-n78A(4x4) i.e. 12 (4+4+4) LTE & 6 (2+4) NR layers	DC_3C_n28A	RECOMMENDED

DC_1A(4x4)-3A(4x4)_n38A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n38A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n38A(4x4)-n78A(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
EN-DC with NR CA n78C		
DC_1A(4x4)_n78C(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_3A(4x4)_n78C(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_28A(2x2)_n78C(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_28A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n78C(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)_n78C(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-28A(2x2)_n78C(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-28A(2x2)_n78C(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	RECOMMENDED
DC_3A(4x4)-28A(2x2)_n78C(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_3A(4x4)-28A(2x2)_n78C(4x4) i.e. 6 (4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78C(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_1A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78C(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_3A_n78A	RECOMMENDED
DC_1A(4x4)-3A(4x4)-28A(2x2)_n78C(4x4) i.e. 10 (4+4+2) LTE & 8 (4+4) NR layers	DC_28A_n78A	RECOMMENDED
EN-DC with NR CA n78(2A)		
DC_1A(4x4)_n78(2A)(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_3A(4x4)_n78(2A)(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_7A(4x4)_n78(2A)(4x4) i.e. 4 LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-7A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-7A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_3C(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_3A(4x4)-7A(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_7C(4x4)_n78(2A)(4x4) i.e. 8 (4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION

DC_3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 16 (4+4+4+4) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 20 (4+4+4+4+4) LTE & 8 (4+4) NR layers	DC_1A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 20 (4+4+4+4+4) LTE & 8 (4+4) NR layers	DC_3A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 20 (4+4+4+4+4) LTE & 8 (4+4) NR layers	DC_3C_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 20 (4+4+4+4+4) LTE & 8 (4+4) NR layers	DC_7A_n78A	INFORMATION
DC_1A(4x4)-3C(4x4)-7C(4x4)_n78(2A)(4x4) i.e. 20 (4+4+4+4+4) LTE & 8 (4+4) NR layers	DC_7C_n78A	INFORMATION
EN-DC with NR CA (others)		
DC_20A(2x2)_n8A(2x2)-n75A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_20A_n8A	INFORMATION
DC_20A(2x2)_n28A(2x2)-n75A(4x4) i.e. 2 LTE & 6 (2+4) NR layers	DC_20A_n28A	INFORMATION
DC_20A(2x2)_n75A(4x4)-n78A(4x4) i.e. 2 LTE & 8 (4+4) NR layers	DC_20A_n78A	INFORMATION

VIII. Appendix 1: Deutsche Telekom Public and Private 5G Networks

This section details the public land mobile network (PLMN) identifiers which are used on Deutsche Telekom public and private 5G networks in Europe.

NatCo	MCC	MNC	PLMN ID	Type	Name(s)
Global	999	01	99901	Private	Deutsche Telekom AG (Note: Not for use in roaming)
AL	276	01	27601	Public	Telekom Albania
AT	232	03	23203	Public	T-Mobile Austria GmbH
AT	232	07	23207	Public	tele.ring
CZ	230	01	23001	Public	T-Mobile Czech Republic a.s.
HR	219	01	21901	Public	Hrvatski Telekom d.d. / Hrvatski Telekom Bonbon
DE	262	01	26201	Public	Telekom Deutschland GmbH / congstar GmbH
DE	262	06	26206	Private	Telekom Deutschland GmbH / congstar GmbH
GR	202	01	20201	Public	COSMOTE Mobile Telecommunications S.A.
HU	216	30	21630	Public	Magyar Telekom Telecommunications Public Limited Company
MK	294	01	29401	Public	Makedonski Telekom AD - Skopje
ME	297	02	29702	Public	Crnogorski Telekom a.d. Podgorica
ME	220	04	22004	Public	Crnogorski Telekom a.d. Podgorica
PL	260	02	26002	Public	T-Mobile Polska S.A. / Heyah (T-Mobile Polska S.A.)
SK	231	02	23102	Public	Slovak Telekom, a.s.

Table 1: Deutsche Telekom Public and Private 5G Networks

IX. Release History

Publication Date	Version	Author	Reviewer
03.11.2021	1.0	Miguel Rodriguez (ITS-IOT)	Miguel Rodriguez (ITS-IOT)
24.01.2022	1.1	Miguel Rodriguez (ITS-IOT)	Miguel Rodriguez (VTI-IOT)
12.08.2022	1.2	Miguel Rodriguez (DT-IOT)	Miguel Rodriguez (DT-IOT)