**Alternative 1:** Single IE for XDD and FRX differentiation.

UE-NR-Capability ::= SEQUENCE {

phy-Parameters Phy-Parameters,

fdd-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

tdd-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

fr1-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

fr2-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

fdd-FR1-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

tdd-FR1-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

tdd-FR2-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-FRX-Mode OPTIONAL,

nonCriticalExtension SEQUENCE {} OPTIONAL

}

UE-NR-CapabilityAddXDD-FRX-Mode ::= SEQUENCE {

phy-ParametersXDD-FRX-Diff Phy-ParametersXDD-FRX-Diff OPTIONAL,

...

}

Phy-Parameters ::= SEQUENCE {

phy-ParametersCommon Phy-ParametersCommon OPTIONAL,

phy-ParametersXDD-FRX-Diff Phy-ParametersXDD-FRX-Diff OPTIONAL,

}

Phy-ParametersXDD-FRX-Diff ::= SEQUENCE {

-- FDD/TDD diff. needed

featureA ENUMERATED {supported} OPTIONAL,

-- FR1/FR2 diff. needed

featureB ENUMERATED {supported} OPTIONAL,

-- Both FDD/TDD and FR1/FR2 diff. needed

featureC ENUMERATED {supported} OPTIONAL

}

**Alternative 2:** Separate IE for XDD and FRX differentiation

UE-NR-Capability ::= SEQUENCE {

phy-Parameters Phy-Parameters,

fdd-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-Mode OPTIONAL,

tdd-Add-UE-NR-Capabilities UE-NR-CapabilityAddXDD-Mode OPTIONAL,

fr1-Add-UE-NR-Capabilities UE-NR-CapabilityAddFRX-Mode OPTIONAL,

fr2-Add-UE-NR-Capabilities UE-NR-CapabilityAddFRX-Mode OPTIONAL,

nonCriticalExtension SEQUENCE {} OPTIONAL

}

UE-NR-CapabilityAddXDD-Mode ::= SEQUENCE {

phy-ParametersXDD-Diff Phy-ParametersXDD-Diff OPTIONAL,

...

}

UE-NR-CapabilityAddFRX-Mode ::= SEQUENCE {

phy-ParametersFRX-Diff Phy-ParametersFRX-Diff OPTIONAL,

...

}

Phy-Parameters ::= SEQUENCE {

phy-ParametersCommon Phy-ParametersCommon OPTIONAL,

phy-ParametersXDD-Diff Phy-ParametersXDD-Diff OPTIONAL,

phy-ParametersFRX-Diff Phy-ParametersFRX-Diff OPTIONAL

}

Phy-ParametersXDD-Diff ::= SEQUENCE {

-- FDD/TDD diff. needed

featureA ENUMERATED {supported} OPTIONAL,

-- Both FDD/TDD and FR1/FR2 diff. needed

featureC ENUMERATED {supported} OPTIONAL

}

Phy-ParametersFRX-Diff ::= SEQUENCE {

-- FR1/FR2 diff. needed

featureB ENUMERATED {supported} OPTIONAL,

-- Both FDD/TDD and FR1/FR2 diff. needed

featureC ENUMERATED {supported} OPTIONAL

}