**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

}