VIAVI
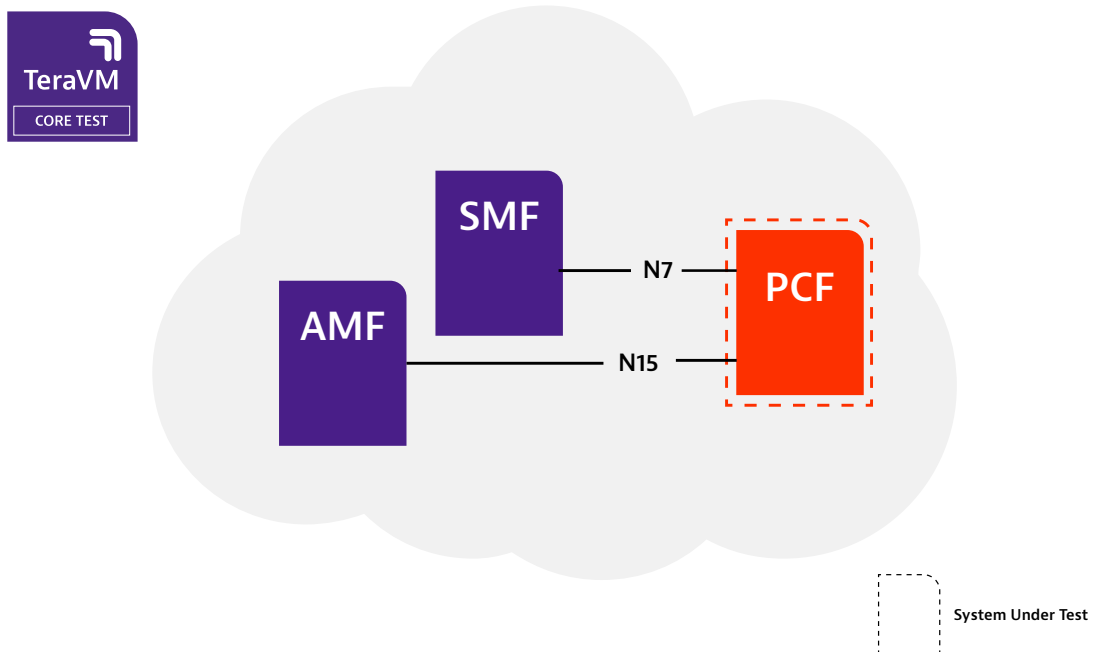## TeraVM PCF Wraparound Test

PCF Test

The PCF is a 5G SA Core Network element responsible for storing the policy information of the network subscriber base and has the following features and functions:

• Support 5G QoS policy and charging control functions and the related 5G signaling interfaces.

• Provide policy rules for control plane functions including network slicing, roaming and mobility management

• Collect subscriber metrics in relation to their network, usage, applications.

• Accesses subscription information relevant for policy decisions in a UDR (Unified Data Repository)

Testing a PCF requires emulating an AMF and SMF – the majority of interactions with PCF are from AMF and SMF. TeraVM PCF wraparound test does exactly that. The emulated AMF and SMF initiates control messages/procedures to the PCF over the N15 and N7 interface and the PCF under test in turn responds to these messages.

System Under Test

PCF Test Cases

TeraVM PCF wraparound test supports the following test procedures:

• AM Policy Control Service (N15)

• SM Policy Control Service (N7)

• UE Registration Procedure

• PDU Session Activation Procedure

• UE Registration + PDU Session Activation Procedures

PCF Test Configurable Parameters

As part of a test case the following parameters are configurable:

• Number of UEs

• Iterations per minute (an iteration is the complete set of transactions that comprises a procedure)

• Iteration limit

• Test time limit

Example Test Case

Policy Authorization Create procedure (Npcf_AMPolicyControl_Create):

PCF under test receives 'Policy Authorization create procedure' from the VIAVI emulated AMF. This procedure instructs the PCF to create a context for a UE (access and mobility policy control) and in response send UE policy related to access and mobility to the AMF where it is verified and sanity checked.

Order Codes

PCF wraparound test is available with the following product codes:

Part Number	Description	Capacity	Support
TVM3000	Dell Server for Core Test	—	HWSUP PPG15
TVM3136	PCF wraparound test	—	