

# VoSeT - Voice test KPI definition in compliance with Orange Group MSAD

## Voice call test KPIs for 2G/3G/4G CSFB

KPI name	KPI description
Calls	Number of all success and failed attempts
Call Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
Post Dial Delay /sec/	An average time of time when VoSeT Master (or Slave) receives back RING tone from Slave (or Master). Post Dial Delay (PDD) is experienced by the originating customer as the time from the sending of the final dialed digit to the point at which they hear ring tone.
Connect time /sec/	An average time taken to establish connection to subscriber. Connect time is a time from VoSeT Master started to dial a telephone number till VoSeT Slave will pick up the phone.
PESQ or POLQA /MOS/ on both Master and Slave sides	Level of PESQ/POLQA result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying
CSFB redirection from 4G to 3G/2G	It is a time from the end of dialing till modem is registered in 3G or 2G
Fast return from 2G/3G to 4G	It is a time from the end of voice call till modem is registered back in 4G

## Voice call test KPIs for fixed networks

KPI name	KPI description
Calls	Number of all success and failed attempts
Call Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
Post Dial Delay /sec/	An average time of time when VoSeT Master (or Slave) receives back RING tone from Slave (or Master). Post Dial Delay (PDD) is experienced by the originating customer as the time from the sending of the final dialed digit to the point at which they hear ring tone.
Connect time /sec/	An average time taken to establish connection to subscriber. Connect time is a time from VoSeT Master started to dial a telephone number till VoSeT Slave will pick up the phone.
PESQ or POLQA /MOS/ on both Master and Slave sides	Level of PESQ/POLQA result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying

## VoLTE & VoWiFi test KPIs

KPI name	KPI description
Calls	Number of all success and failed attempts
Call Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
Call Setup Time /sec/	CallSetupTime is the interval between sending INVITE message by the originating side and receiving message 180 Ringing from the terminating side
Connect time /sec/	An average time taken to establish connection to subscriber. Connect time is a time from VoSeT Master started to dial a telephone number till VoSeT Slave will pick up the phone.
PESQ or POLQA /MOS/ on both Master and Slave sides	Level of PESQ result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying
CSFB redirection from 4G to 3G	It is a time from the end of dialing till modem is registered in 3G if VoLTE or VoWiFi is unavailable
Fast return from 3G to 4G	It is a time from the end of voice call till modem is registered back in 4G if VoLTE or VoWiFi is unavailable

## Voice call test KPIs for OTT Android services (WhatsApp, Viber, etc.)

KPI name	KPI description
Calls	Number of all success and failed attempts
Call Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
Call Setup Time /sec/	CallSetupTime is the interval between sending INVITE message by the originating side and receiving message 180 Ringing from the terminating side
Connect time /sec/	An average time taken to establish connection to subscriber. Connect time is a time from VoSeT Master started to dial a telephone number till VoSeT Slave will pick up the phone.
PESQ or POLQA /MOS/	Level of PESQ result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying

IVR test KPIs for 2G/3G/4G CSFB	
KPI name	KPI description
IVR Calls	Number of all success and failed attempts
IVR Call Connection Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
PESQ or POLQA /MOS/ for IVR Menu #1	Level of PESQ/POLQA result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying
PESQ or POLQA /MOS/ for IVR Menu #2	Level of PESQ/POLQA result (MOS - Mean Opinion Score) 5 - Excellent Imperceptible 4 - Good Perceptible but not annoying 3 - Fair slightly annoying 2 - Poor Annoying 1 - Bad Very annoying

Voicemail test KPIs for 2G/3G/4G CSFB	
KPI name	KPI description
Voicemail Calls	Number of all success and failed attempts
Voicemail Call Connection Success Rate /%/	Number of all success attempts in percentage: $\frac{\text{All successful attempts}}{\text{All attempts}} \times 100\%$
SMS notification delivery time /s/	Average of delivery time of all success attempts during day.