ΕΠΙΚΑΙΡΟΠΟΙΗΣΗ ΤΩΝ ΤΕΧΝΙΚΩΝ ΠΡΟΔΙΑΓΡΑΦΩΝ ΤΩΝ ΔΙΕΠΑΦΩΝ ΤΟΥ ΔΙΚΤΥΟΥ ΚΙΝΗΤΗΣ ΤΗΛΕΦΩΝΙΑΣ ΤΗΣ WIND ΕΛΛΑΣ

1. ΕΙΣΑΓΩΓΗ

Η παρούσα αναφορά έχει ως σκοπό την επικαιροποίηση των τεχνικών προδιαγραφών των διεπαφών μέσω των οποίων παρέχονται τηλεπικοινωνιακές υπηρεσίες στο κοινό σύμφωνα με την υπ. αριθμόν 294/55 απόφαση της ΕΕΤΤ (Κανονισμός για τη Δημοσίευση Τεχνικών Διεπαφών Δημοσίων Τηλεπικοινωνιακών Δικτύων, σύμφωνα με το Π.Δ. 44/2002). Σύμφωνα με τις γενικές αρχές της προαναφερόμενης αποφάσης, η Wind Hellas υποχρεούται να δημοσιεύει τα τεχνικά χαρακτηριστικά των διεπαφών περιλαμβάνοντας επαρκή και λεπτομερή στοιχεία, ώστε α) να είναι εφικτός ο σχεδιασμός τηλεπικοινωνιακού τερματικού εξοπλισμού, ο οποίος να μπορεί να χρησιμοποιεί όλες τις υπηρεσίες που παρέχονται μέσω της αντίστοιχης διεπαφής, β) να παρέχεται η δυνατότητα στους κατασκευαστές να πραγματοποιούν δοκιμές των εφαρμοστέων βασικών (ουσιωδών) απαιτήσεων για τον τηλεπικοινωνιακό τερματικό εξοπλισμό και γ) να διασφαλίζεται η αποτελεσματική διαλειτουργικότητα του τερματικού εξοπλισμού με το δίκτυο του οποίου τα χαρακτηριστικά των διεπαφών δημοσιεύονται, καθώς και η σωστή λειτουργία του εξοπλισμού. Οι προδιαγραφές βασικών και πρόσθετων υπηρεσιών και λειτουργιών, οι οποίες παρέχονται μέσω διεπαφών των δικτύων όπως αυτές ορίζονται στο άρθρο 3 της σχετικής απόφασης, δημοσιεύονται στο βαθμό που αυτές έχουν σχέση με το σχεδιασμό και τη λειτουργία της τερματικής συσκευής. Τα χαρακτηριστικά των διεπαφών δημοσιεύονται με αναφορά σε δημοσιευμένα πρότυπα ή/και προδιαγραφές, όπου αυτό είναι δυνατό. Το παρόν έγγραφο θα ενημερώνεται σε περίπτωση οποιασδήποτε τροποποίησης ήδη δημοσιευμένης διεπαφής, περιλαμβάνοντας την εκάστοτε τροποποίηση και επισημαίνοντας εμφανώς αυτήν, καθώς και με τα τεχνικά χαρακτηριστικά νέων διεπαφών.

2. ΧΑΡΑΚΤΗΡΙΣΤΙΚΑ ΔΙΕΠΑΦΩΝ

Τα χαρακτηριστικά των διεπαφών του δικτύου GSM/GPRS, UMTS, καθώς και σταθερής ασύρματης πρόσβασης περιγράφονται σύμφωνα με τα ακόλουθα πρότυπα:

- 3GPP 21.905 Vocabulary for 3GPP Specifications
- 3GPP 22.001 Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)
- 3GPP 22.002 Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)
- 3GPP 22.003 Circuit Teleservices supported by a Public Land Mobile Network (PLMN)
- 3GPP 22.004 General on supplementary services
- 3GPP 22.011 Service accessibility
- 3GPP 22.016 International Mobile Equipment Identities (IMEI)
- 3GPP 22.034 High Speed Circuit Switched Data (HSCSD); Stage 1
- 3GPP 22.053 Tandem Free Operation (TFO); Service description; Stage 1
- 3GPP 22.06 General Packet Radio Service (GPRS); Service description; Stage 1
- 3GPP 22.067 enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 1
- 3GPP 22.071 Location Services (LCS); Service description; Stage 1

- 3GPP 22.076 Noise suppression for the AMR codec; Service description; Stage 1
- 3GPP 22.105 Services and service capabilities
- 3GPP 22.129 Handover requirements between UTRAN and GERAN or other radio systems
- 3GPP 22.95 Priority service feasibility study
- 3GPP 22.951 Service aspects and requirements for network sharing
- 3GPP 22.952 Priority service guide
- 3GPP 22.953 Multimedia priority service feasibility study
- 3GPP 22.983 Services alignment and migration
- 3GPP 23.002 Network architecture
- 3GPP 23.003 Numbering, addressing and identification
- 3GPP 23.007 Restoration procedures
- 3GPP 23.008 Organization of subscriber data
- 3GPP 23.009 Handover procedures
- 3GPP 23.012 Location management procedures
- 3GPP 23.014 Support of Dual Tone Multi-Frequency (DTMF) signalling
- 3GPP 23.018 Basic call handling; Technical realization
- 3GPP 23.032 Universal Geographical Area Description (GAD)
- 3GPP 23.034 High Speed Circuit Switched Data (HSCSD); Stage 2
- 3GPP 23.04 Technical realization of Short Message Service (SMS)
- 3GPP 23.041 Technical realization of Cell Broadcast Service (CBS)
- 3GPP 23.053 Tandem Free Operation (TFO); Service description; Stage 2
- 3GPP 23.06 General Packet Radio Service (GPRS); Service description; Stage 2
- 3GPP 23.067 enhanced Multi-Level Precedence and Pre-emption Service (eMLPP); Stage 2
- 3GPP 23.107 Quality of Service (QoS) concept and architecture
- 3GPP 23.108 Mobile radio interface layer 3 specification, core network protocols; Stage 2
- 3GPP 23.11 Universal Mobile Telecommunications System (UMTS) access stratum; Services and functions
- 3GPP 23.207 End-to-end Quality of Service (QoS) concept and architecture
- 3GPP 23.236 Intra-domain connection of Radio Access Network (RAN) nodes to multiple Core Network (CN) nodes
- 3GPP 23.271 Functional stage 2 description of Location Services (LCS)
- 3GPP 24.002 GSM - UMTS Public Land Mobile Network (PLMN) Access Reference Configuration
- 3GPP 24.007 Mobile radio interface signalling layer 3; General Aspects
- 3GPP 24.008 Mobile radio interface Layer 3 specification; Core network protocols; Stage 3
- 3GPP 24.011 Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface
- 3GPP 24.022 Radio Link Protocol (RLP) for circuit switched bearer and teleservices
- 3GPP 24.03 Location Services (LCS); Supplementary service operations; Stage 3
- 3GPP 24.067 Enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 3

- 3GPP 26.071 Mandatory speech CODEC speech processing functions; AMR speech Codec; General description
- 3GPP 26.073 ANSI C code for the Adaptive Multi Rate (AMR) speech codec
- 3GPP 26.074 Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec test sequences
- 3GPP 26.077 Minimum performance requirements for noise suppresser application to the Adaptive Multi-Rate (AMR) speech encoder
- 3GPP 26.09 Mandatory Speech Codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec; Transcoding functions
- 3GPP 26.091 Mandatory Speech Codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec; Error concealment of lost frames
- 3GPP 26.092 Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec; Comfort noise aspects
- 3GPP 26.093 Mandatory speech codec speech processing functions Adaptive Multi-Rate (AMR) speech codec; Source controlled rate operation
- 3GPP 26.094 Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec; Voice Activity Detector (VAD)
- 3GPP 26.101 Mandatory speech codec speech processing functions; Adaptive Multi-Rate (AMR) speech codec frame structure
- 3GPP 26.103 Speech codec list for GSM and UMTS
- 3GPP 26.104 ANSI-C code for the floating-point Adaptive Multi-Rate (AMR) speech codec
- 3GPP 26.171 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; General description
- 3GPP 26.173 ANSI-C code for the Adaptive Multi-Rate - Wideband (AMR-WB) speech codec
- 3GPP 26.174 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec test sequences
- 3GPP 26.19 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Transcoding functions
- 3GPP 26.191 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Error concealment of erroneous or lost frames
- 3GPP 26.192 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Comfort noise aspects
- 3GPP 26.193 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Source controlled rate operation
- 3GPP 26.194 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Voice Activity Detector (VAD)
- 3GPP 26.201 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Frame structure
- 3GPP 26.202 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; Interface to Iu, Uu and Nb
- 3GPP 26.204 Speech codec speech processing functions; Adaptive Multi-Rate - Wideband (AMR-WB) speech codec; ANSI-C code
- 3GPP 26.243 ANSI C code for the fixed-point distributed speech recognition extended advanced front-end

- 3GPP 26.273 ANSI-C code for the fixed-point Extended Adaptive Multi-Rate - Wideband (AMR-WB+) speech codec
- 3GPP 26.274 Speech codec speech processing functions; Extended Adaptive Multi-Rate - Wideband (AMR-WB+) speech codec; Conformance testing
- 3GPP 26.29 Audio codec processing functions; Extended Adaptive Multi-Rate - Wideband (AMR-WB+) codec; Transcoding functions
- 3GPP 26.304 Extended Adaptive Multi-Rate - Wideband (AMR-WB+) codec; Floating-point ANSI-C code
- 3GPP 26.975 Performance characterization of the Adaptive Multi-Rate (AMR) speech codec
- 3GPP 26.976 Performance characterization of the Adaptive Multi-Rate Wideband (AMR-WB) speech codec
- 3GPP 26.978 Results of the Adaptive Multi-Rate (AMR) noise suppression selection phase
- 3GPP 28.062 Inband Tandem Free Operation (TFO) of speech codecs; Service description; Stage 3
- 3GPP 29.01 Information element mapping between Mobile Station - Base Station System (MS - BSS) and Base Station System - Mobile-services Switching Centre (BSS - MSC); Signalling Procedures and the Mobile Application Part (MAP)
- 3GPP 29.060 General Packet Radio Service (GPRS); GPRS Tunnelling Protocol (GTP) across the Gn and Gp interface.
- 3GPP 29.061 Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN)
- Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN)
- 3GPP 29.23 Diameter applications; 3GPP specific codes and identifiers
- 3GPP 29.994 Recommended infrastructure measures to overcome specific Mobile Station (MS) and User Equipment (UE) faults
- 3GPP 32.102 Telecommunication management; Architecture
- 3GPP 32.3 Telecommunication management; Configuration Management (CM); Name convention for Managed Objects
- 3GPP 32.301 Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Requirements
- 3GPP 32.302 Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Information Service (IS)
- 3GPP 32.303 Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 32.311 Telecommunication management; Generic Integration Reference Point (IRP) management; Requirements
- 3GPP 32.312 Telecommunication management; Generic Integration Reference Point (IRP) management; Information Service (IS)
- 3GPP 32.401 Telecommunication management; Performance Management (PM); Concept and requirements
- 3GPP 32.41 Telecommunication management; Key Performance Indicators (KPI) for UMTS and GSM

- 3GPP 32.6 Telecommunication management; Configuration Management (CM); Concept and high-level requirements
- 3GPP 32.601 Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Requirements
- 3GPP 32.602 Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP): Information Service (IS)
- 3GPP 32.603 Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 32.611 Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Requirements
- 3GPP 32.612 Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Information Service (IS)
- 3GPP 32.613 Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 32.615 Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition
- 3GPP 32.621 Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP); Requirements
- 3GPP 32.622 Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Network Resource Model (NRM)
- 3GPP 32.623 Telecommunication management; Configuration Management (CM); Generic network resources Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 32.631 Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP); Requirements
- 3GPP 32.632 Telecommunication management; Configuration Management (CM); Core Network Resources Integration Reference Point (IRP); Network Resource Model (NRM)
- 3GPP 32.633 Telecommunication management; Configuration Management (CM); Core network resources Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 32.651 Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP); Requirements
- 3GPP 32.652 Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP); Network Resource Model (NRM)
- 3GPP 32.653 Telecommunication management; Configuration Management (CM); GERAN network resources Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 3GPP 42.068 Voice Group Call Service (VGCS); Stage 1
- 3GPP 42.069 Voice Broadcast Service (VBS); Stage 1
- 3GPP 43.005 Technical performance objectives

- 3GPP 43.01 GSM Public Land Mobile Network (PLMN) connection types
- 3GPP 43.013 Discontinuous Reception (DRX) in the GSM system
- 3GPP 43.02 Security-related network functions
- 3GPP 43.026 Multiband operation of GSM / DCS 1800 by a single operator
- 3GPP 43.03 Radio network planning aspects
- 3GPP 43.045 Technical Realization of Facsimile Group 3 Service - transparent
- 3GPP 43.05 Transmission planning aspects of the speech service in the GSM Public Land Mobile Network (PLMN) system
- 3GPP 43.051 GSM/EDGE Radio Access Network (GERAN) overall description; Stage 2
- 3GPP 43.055 Dual Transfer Mode (DTM); Stage 2
- 3GPP 43.059 Functional stage 2 description of Location Services (LCS) in GERAN
- 3GPP 43.064 General Packet Radio Service (GPRS); Overall description of the GPRS radio interface; Stage 2
- 3GPP 43.068 Voice Group Call Service (VGCS); Stage 2
- 3GPP 43.069 Voice Broadcast service (VBS); Stage 2
- 3GPP 43.129 Packed-switched handover for GERAN A/Gb mode; Stage 2
- 3GPP 43.903 A-interface over IP study (AINTIP)
- 3GPP 44.001 Mobile Station - Base Station System (MS - BSS) interface; General aspects and principles
- 3GPP 44.003 Mobile Station - Base Station System (MS - BSS) Interface Channel Structures and Access Capabilities
- 3GPP 44.004 Layer 1; General Requirements
- 3GPP 44.005 Data Link (DL) Layer General Aspects
- 3GPP 44.006 Mobile Station - Base Stations System (MS - BSS) interface Data Link (DL) layer specification
- 3GPP 44.012 Short Message Service Cell Broadcast (SMSCB) support on the mobile radio interface
- 3GPP 44.013 Performance requirements on the mobile radio interface
- 3GPP 44.014 Individual equipment type requirements and interworking; Special conformance testing functions
- 3GPP 44.018 Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol
- 3GPP 44.021 Rate adaption on the Mobile Station - Base Station System (MS-BSS) interface
- 3GPP 44.031 Location Services (LCS); Mobile Station (MS) - Serving Mobile Location Centre (SMLC) Radio Resource LCS Protocol (RRLP)
- 3GPP 44.035 Location Services (LCS); Broadcast network assistance for Enhanced Observed Time Difference (E-OTD) and Global Positioning System (GPS) positioning methods
- 3GPP 44.06 General Packet Radio Service (GPRS); Mobile Station (MS) - Base Station System (BSS) interface; Radio Link Control / Medium Access Control (RLC/MAC) protocol
- 3GPP 44.064 Mobile Station - Serving GPRS Support Node (MS-SGSN); Logical Link Control (LLC) Layer Specification
- 3GPP 44.068 Group Call Control (GCC) protocol

- 3GPP 44.069 Broadcast Call Control (BCC) protocol
- 3GPP 44.901 External Network Assisted Cell Change (NACC)
- 3GPP 45.001 Physical layer on the radio path; General description
- 3GPP 45.002 Multiplexing and multiple access on the radio path
- 3GPP 45.003 Channel coding
- 3GPP 45.004 Modulation
- 3GPP 45.005 Radio transmission and reception
- 3GPP 45.008 Radio subsystem link control
- 3GPP 45.009 Link adaptation
- 3GPP 45.01 Radio subsystem synchronization
- 3GPP 45.022 Radio link management in hierarchical networks
- 3GPP 45.05 Background for RF Requirements
- 3GPP 45.903 Feasibility study on Single Antenna Interference Cancellation (SAIC) for GSM networks
- 3GPP 45.912 Feasibility study for evolved GSM/EDGE Radio Access Network (GERAN)
- 3GPP 45.914 Circuit switched voice capacity evolution for GSM/EDGE Radio Access Network (GERAN)
- 3GPP 46.001 Full rate speech; Processing functions
- 3GPP 46.002 Half rate speech; Half rate speech processing functions
- 3GPP 46.006 Half-rate speech: ANSI-C code for GSM half-rate speech codec
- 3GPP 46.007 Half rate speech; Test sequences for the GSM half rate speech codec
- 3GPP 46.008 Half Rate Speech; Performance Characterization of the GSM Half Rate speech codec
- 3GPP 46.01 Full-rate speech; Transcoding
- 3GPP 46.011 Full rate speech; Substitution and muting of lost frames for full rate speech channels
- 3GPP 46.012 Full rate speech; Comfort noise aspect for full rate speech traffic channels
- 3GPP 46.02 Half rate speech; Half rate speech transcoding
- 3GPP 46.021 Half rate speech; Substitution and muting of lost frames for half rate speech traffic channels
- 3GPP 46.022 Half rate speech; Comfort noise aspects for the half rate speech traffic channels
- 3GPP 46.031 Full rate speech; Discontinuous Transmission (DTX) for full rate speech traffic channels
- 3GPP 46.032 Full rate speech; Voice Activity Detector (VAD) for full rate speech traffic channels
- 3GPP 46.041 Half rate speech; Discontinuous Transmission (DTX) for half rate speech traffic channels
- 3GPP 46.042 Half rate speech; Voice Activity Detector (VAD) for half rate speech traffic channels
- 3GPP 46.051 Enhanced Full Rate (EFR) speech processing functions; General description
- 3GPP 46.053 ANSI-C code for the GSM Enhanced Full Rate (EFR) speech codec
- 3GPP 46.054 Test sequences for the GSM Enhanced Full Rate (EFR) speech codec

- 3GPP 46.055 Performance characterization of the GSM Enhanced Full Rate (EFR) speech codec
- 3GPP 46.06 Enhanced Full Rate (EFR) speech transcoding
- 3GPP 46.061 Substitution and muting of lost frames for Enhanced Full Rate (EFR) speech traffic channels
- 3GPP 46.062 Comfort noise aspects for Enhanced Full Rate (EFR) speech traffic channels
- 3GPP 46.076 Adaptive Multi-Rate (AMR) speech codec; Study phase report
- 3GPP 46.081 Discontinuous Transmission (DTX) for Enhanced Full Rate (EFR) speech traffic channels
- 3GPP 46.082 Voice Activity Detector (VAD) for Enhanced Full Rate (EFR) speech traffic channels
- 3GPP 46.085 Subjective tests on the interoperability of the Half Rate / Full Rate / Enhanced Full Rate (HR/FR/EFR) speech codecs, single, tandem and tandem free operation
- 3GPP 48.001 Base Station System - Mobile-services Switching Centre (BSS - MSC) interface; General aspects
- 3GPP 48.002 Base Station System - Mobile-services Switching Centre (BSS - MSC) interface; Interface principles
- 3GPP 48.004 Base Station System - Mobile-services Switching Centre (BSS - MSC) interface; Layer 1 specification
- 3GPP 48.006 Signalling Transport Mechanism Specification for the Base Station System - Mobile Services Switching Centre (BSS-MSC) Interface
- 3GPP 48.008 Mobile Switching Centre - Base Station system (MSC-BSS) interface; Layer 3 specification
- 3GPP 48.014 General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN) interface; Gb interface Layer 1
- 3GPP 48.016 General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN) interface; Network service
- 3GPP 48.018 General Packet Radio Service (GPRS); Base Station System (BSS) - Serving GPRS Support Node (SGSN); BSS GPRS protocol (BSSGP)
- 3GPP 48.02 Rate adaption on the Base Station System - Mobile-services Switching Centre (BSS-MSC) interface
- 3GPP 48.051 Base Station Controller - Base Transceiver Station (BSC-BTS) interface; General aspects
- 3GPP 48.052 Base Station Controller - Base Transceiver Station (BSC-BTS) interface; Interface principles
- 3GPP 48.054 Base Station Controller - Base Transceiver Station (BSC - BTS) interface; Layer 1 structure of physical circuits
- 3GPP 48.056 Base Station Controller - Base Transceiver Station (BSC - BTS) interface; Layer 2 specification
- 3GPP 48.058 Base Station Controller - Base Transceiver Station (BCS-BTS) Interface Layer 3 Specification
- 3GPP 48.06 In-band control of remote transcoders and rate adaptors for full rate traffic channels

- 3GPP 48.061 In-band control of remote transcoders and rate adaptors for half rate traffic channels
- 3GPP 48.071 Location Services (LCS); Serving Mobile Location Centre - Base Station System (SMLC-BSS) interface; Layer 3 specification
- 3GPP 48.103 Base Station System - Media GateWay (BSS-MGW) interface; User plane transport mechanism
- 3GPP 49.031 Location Services (LCS); Base Station System Application Part LCS Extension (BSSAP-LE)
- 3GPP 51.021 Base Station System (BSS) equipment specification; Radio aspects
- 3GPP 51.026 Base Station System (BSS) equipment specification; Part 4: Repeaters
- 3GPP 52.008 Telecommunication management; GSM subscriber and equipment trace
- 3GPP 52.021 Network Management (NM) Procedures and messages on the A-bis interface
- 3GPP 52.402 Telecommunication management; Performance Management (PM); Performance measurements - GSM
- 3GPP 55.205 Specification of the GSM-MILENAGE algorithms: An example algorithm set for the GSM Authentication and Key Generation Functions A3 and A8
- 3GPP 55.216 Specification of the A5/3 encryption algorithms for GSM and ECSD, and the GEA3 encryption algorithm for GPRS; Document 1: A5/3 and GEA3 specification
- 3GPP 55.217 Specification of the A5/3 encryption algorithms for GSM and ECSD, and the GEA3 encryption algorithm for GPRS; Document 2: Implementors' test data
- 3GPP 55.218 Specification of the A5/3 encryption algorithms for GSM and ECSD, and the GEA3 encryption algorithm for GPRS; Document 3: Design and conformance test data
- 3GPP 55.919 Specification of the A5/3 encryption algorithms for GSM and ECSD, and the GEA3 encryption algorithm for GPRS; Document 4: Design and evaluation report

2.1. Δίκτυο Τρίτης Γενιάς (3G)

- 3GPP 25.308 "High Speed Downlink Packet Access (HSDPA); Overall description;"
- 3GPP 25.309 "FDD Enhanced Uplink; Overall description; Stage 2"
- 3GPP 25.321 "Medium Access Control (MAC) protocol specification"
- 3GPP 25.323 Packet Data Convergence Protocol (PDCP) specification
- 3GPP 25.331 "Radio Resource Control (RRC); Protocol Specification"
- 3GPP 25.410 "UTRAN Iu Interface: general aspec3GPP and principles"
- 3GPP 25.413 "UTRAN Iu interface RANAP signalling"
- 3GPP 25.415 "UTRAN Iu interface user plane protocols"
- 3GPP 25.423 "UTRAN Iur interface Radio Network Subsystem Application Part (RNSAP) signalling"
- 3GPP 25.425 "UTRAN Iur interface user plane protocols for Common Transport Channel data streams"
- 3GPP 25.427 "UTRAN Iub/Iur interface user plane protocol for DCH data streams"
- 3GPP 25.430 "UTRAN Iub Interface: general aspec3GPP and principles"
- 3GPP 25.433 "UTRAN Iub interface Node B Application Part (NBAP) signalling"

- 3GPP 25.435 "UTRAN Iub Interface User Plane Protocols for Common Transport Channel data streams"
- 3GPP 25.133 Requiremen3GPP for support of radio resource management (FDD)
- 3GPP 25.301 Radio Interface Protocol Architecture
- 3GPP 25.302 Services provided by the physical layer
- 3GPP 25.303 Interlayer procedures in Connected Mode
- 3GPP 25.304 User Equipment (UE) procedures in idle mode and procedures for cell reselection in connected mode
- 3GPP 25.305 Stage 2 functional specification of User Equipment (UE) positioning in UTRAN
- 3GPP 25.322 Radio Link Control (RLC) protocol specification
- 3GPP 23.032 Universal Geographical Area Description (GAD)
- 3GPP 25.104 Base Station (BS) radio transmission and reception (FDD)
- 3GPP 25.141 Base Station (BS) conformance testing (FDD)
- 3GPP 25.211 "Physical channels and mapping of transport channels onto physical channels (FDD)"
- 3GPP 25.213 Spreading and modulation (FDD)
- 3GPP 25.214 Physical layer procedures (FDD)
- 3GPP 25.212 Multiplexing and channel coding (FDD)
- 3GPP 25.426 UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams.

3. ΕΛΕΓΧΟΣ ΚΛΗΣΕΩΝ ΚΑΙ ΔΙΑΧΕΙΡΙΣΗ ΚΙΝΗΤΟΤΗΤΑΣ

Ο έλεγχος κλήσεων και η διαχείριση κινητότητας που παρέχονται μέσω των διεπαφών του δικτύου της Wind Hellas περιγράφονται από τα ακόλουθα πρότυπα:

- 3GPP 24.007: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Mobile radio interface signalling layer 3;General aspects”.
- 3GPP 24.008: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Mobile radio interface Layer 3 specification; Core network protocols; Stage 3“.
- 3GPP 25.331: “Technical Specification Group Radio Access Network, Radio Resource Control, Protocol Specification “.
- 3GPP 23.009: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Handover procedures“.
- 3GPP 22.129: “Handover Requirements between UTRAN and GERAN or other radio systems”.
- 3GPP 23.018: “Basic Call handling-Technical realization”.
- 3GPP 24.022: “Radio Link Protocol for circuit switched bearer and teleservices”.

4. ΥΠΗΡΕΣΙΕΣ

4.1. Κινητή τηλεφωνία

4.1.1.Βασικές υπηρεσίες

4.1.1.1. Κομιστικές Υπηρεσίες

Οι κομιστικές υπηρεσίες (bearer services) που παρέχονται περιγράφονται από τα πρότυπα:

- GSM 02.02: “Digital cellular telecommunications system (Phase 2+) (GSM); Bearer Services (BS) supported by a GSM Public Land Mobile Network (PLMN)”.
- GSM 02.60: “Digital cellular telecommunications system (Phase 2+) (GSM); General Packet Radio Service (GPRS); Service description; Stage 1”.
- GSM 03.60: “Digital cellular telecommunications system (Phase 2+) (GSM); General Packet Radio Service (GPRS); Service description; Stage 2”.
- GSM 09.06: “Digital cellular telecommunications system (Phase 2+) (GSM); Interworking between a Public Land Mobile Network (PLMN) and a Packet Switched Public Data Network/Integrated Services Digital Network (PSPDN/ISDN) for the support of packet switched data transmission services”.
- 3GPP 22.002: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)”.
- 3GPP 23.910: “Universal Mobile Telecommunications System (UMTS); Circuit switched data bearer services”.
- 3GPP 27.002: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Terminal Adaptation Functions (TAF) for services using asynchronous bearer capabilities”.
- 3GPP 27.003: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Terminal Adaptation Functions (TAF) for services using synchronous bearer capabilities”.
- 3GPP 22.060: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS); Service description; Stage 1”.
- 3GPP 23.060: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS) Service description; Stage 2”.
- 3GPP TS22.101: “Technical Specification Group Services and System Aspects, Service aspects; Service principles”.
- 3GPP 27.001: “General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)”.
- 3GPP 23.202: “Circuit switched data bearer services”.

4.1.1.2. Τηλεφωνία

Η υπηρεσία της τηλεφωνίας που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- GSM 02.03: “Digital cellular telecommunications system (Phase 2+) (GSM); Teleservices supported by a GSM Public Land Mobile Network (PLMN) “.
- 3GPP 22.002: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Circuit Bearer Services (BS) supported by a Public
- Land Mobile Network (PLMN) “.
- 3GPP 22.003: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Circuit Teleservices supported by a Public Land Mobile Network (PLMN) “.

4.1.1.3. SMS

Η υπηρεσία SMS που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- GSM 03.42: “Digital cellular telecommunications system (Phase 2+) (GSM); Compression algorithm for text messaging services“.
- GSM 07.05: “Digital cellular telecommunications system (Phase 2+) (GSM);Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS) “.
- 3GPP TS 03.40: “Digital cellular telecommunications system (Phase 2+); Technical realization of the Short Message Service (SMS) Point-to-Point (PP) “.
- 3GPP TS 04.11: “Digital cellular telecommunications system (Phase 2+) (GSM); Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface“.
- 3GPP TR 23.039:“Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS);Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs) “.
- 3GPP TS 23.040: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS);Technical realization of Short Message Service (SMS“).
- 3GPP TS 23.042: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Compression algorithm for SMS“.
- 3GPP TS 24.011. Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS);Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface.
- 3GPP TS 27.005:. Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS);Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE-DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS).

- 3GPP TS 44.012: “Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface”.
- 3GPP TS 03.48 “Security mechanisms for the SIM application toolkit; Stage 2 (Release 1999)”.
- 3GPP TS 23.048 “Security mechanisms for the (U)SIM application toolkit; Stage 2 (Release 5)” .
- 3GPP TS 44.012: “Short Message Service Cell Broadcast (SMSCB) Support on the Mobile Radio Interface”.

4.1.1.4. EMS

- 3GPP 22.140: “Universal Mobile Telecommunications System (UMTS); Service aspects; Stage 1 Multimedia Messaging Service”
- 3GPP 23.140: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Multimedia Messaging Service (MMS); Functional description; Stage 2”
- 3GPP 23.972: “Universal Mobile Telecommunications System (UMTS); Circuit Switched Multimedia Telephony”
- 3GPP 26.110: “Universal Mobile Telecommunications System (UMTS); Codec for Circuit Switched Multimedia Telephony Service; General Description”
- 3GPP 26.111: “Universal Mobile Telecommunications System (UMTS); Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324”
- 3GPP 26.140: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Multimedia Messaging Service (MMS); Media
- formats and codes”
- 3GPP 26.911: “Universal Mobile Telecommunications System (UMTS); Codec(s) for Circuit Switched Multimedia Telephony Service Terminal Implementer’s Guide”
- 3GPP 26.912: “Universal Mobile Telecommunications System (UMTS); QoS for Speech and Multimedia Codec; Quantitative performance evaluation of H.324 Annex C over 3G”

4.1.1.5. MMS

Η υπηρεσία MMS που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- 3GPP TS 22.140: “Universal Mobile Telecommunications System (UMTS);Multimedia Messaging Service (MMS); Stage 1”.
- 3GPP TS 23.140: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS);Multimedia Messaging Service (MMS); Functional description; Stage 2”.
- 3GPP TS 26.140: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Multimedia Messaging Service (MMS); Media formats and codes”.

- 3GPP TS 32.235, 3rd Generation Partnership Project; Technical Specification Group; Telecommunication Management; Charging Management; Charging data description for application services".
- WAP-205-MMS: "Architecture Overview; Wireless Application Protocol; MMS Architecture Overview".
- WAP-206-MMS: "Messaging Service; Wireless Application Protocol; MMS Messaging Service Specification".
- WAP-209-MMS: "Encapsulation; Wireless Application Protocol; WAP Multimedia Messaging Service; Message Encapsulation".

4.1.1.6. Streaming

Η υπηρεσία Streaming που παρέχεται περιγράφεται από τα ακόλουθα ETSI πρότυπα:

- 3GPP TS 23.140: "Multimedia Messaging Service (MMS); Functional description; Stage2".
- 3GPP TS 26.140: "Multimedia Messaging Service (MMS); Media formats and codecs".
- 3GPP TS 26.233: .End-to-end transparent packet switched streaming service (PSS); General description".
- 3GPP TS 26.234: "End-to-end transparent streaming service; Protocols and codecs".

4.1.1.7. Video Telephony

Η υπηρεσία Video Telephony που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- 3G TS 26.111: "Universal Mobile Telecommunications System (UMTS); Codec for Circuit Switched Multimedia Telephony Service; Modifications to H.324".
- 3G TR 26.912: "Universal Mobile Telecommunications System (UMTS); QoS for Speech and Multimedia Codec; Quantitative performance evaluation of H.324 Annex C over 3G".

4.1.1.8. WAP

Οι υπηρεσίες WAP, WAP over GPRS που παρέχονται περιγράφονται από τα πρότυπα του WAP Forum που περιέχονται στην ιστοσελίδα:
http://www.wapforum.org/what/technical.htm

4.1.1.9. JAVAD

Οι υπηρεσίες Java MIDP2 και J2ME που παρέχονται μέσω των διεπαφών του δικτύου της Wind Hellas περιγράφονται από τα πρότυπα της SUN που περιέχονται στην ιστοσελίδα: http://developers.sun.com/techtopics/mobility/index.jsp

4.1.1.10. DTMF

Η υπηρεσία DTMF που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- GSM 03.14: "Digital cellular telecommunications system; Support of Dual Tone Multi-Frequency signalling (DTMF) via the GSM system".
- 3GPP 23.014: "Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Support of Dual Tone Multi-Frequency (DTMF) signalling".

4.1.1.11. Τηλεομοιοτυπία

Η υπηρεσία της τηλεμοιοτυπίας που παρέχεται περιγράφεται από τα ακόλουθα πρότυπα:

- GSM 03.45: "Digital cellular telecommunications system (Phase 2+); Technical realization of facsimile group 3 transparent ".
- 3GPP 43.045: "Technical realization of facsimile group 3 transparent".

4.1.2.Συμπληρωματικές υπηρεσίες

Οι συμπληρωματικές υπηρεσίες που παρέχονται μέσω των διεπαφών του δικτύου της Wind Hellas είναι σύμφωνες με τα ακόλουθα πρότυπα:

- 3GPP 22.004: "General on Supplementary Services".
- 3GPP 23.011:"Technical realization of supplementary services".
- 3GPP 24.010: "Supplementary Services Specification-General Aspects".
- 3GPP 24.080: "Mobile radio Layer 3 supplementary service specification".

4.1.2.1. BAOC, BAIC, BOIC, BOIC exHC, BAIC Roam

- GSM 02.88: "Digital cellular telecommunications system (Phase 2+) (GSM); Call Barring (CB) supplementary services; Stage 1".
- GSM 03.88: "Digital cellular telecommunications system (Phase 2+) (GSM); Call Barring (CB) supplementary services; Stage 2".
- GSM 04.88: "Digital cellular telecommunications system (Phase 2+) (GSM); Call Barring (CB) supplementary services; Stage 3".
- 3GPP 22.088: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Barring (CB) Supplementary Service; Stage1".

- 3GPP 23.088: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Barring (CB) Supplementary Service; Stage2”.
- 3GPP 24.088: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Barring (CB) Supplementary Service; Stage 3”.

4.1.2.2. CLIP, CLIR, COLP, COLR

- GSM 02.81: “Digital cellular telecommunications system (Phase 2+) (GSM); Line identification supplementary services; Stage 1”.
- GSM 03.81: “Digital cellular telecommunications system (Phase 2+) (GSM); Line identification supplementary services; Stage 2”.
- GSM 04.81: “Digital cellular telecommunications system; Line identification supplementary services; Stage 3”.
- 3GPP 22.081: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Line Identification Supplementary Service; Stage1”.
- 3GPP 23.081: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Line Identification Supplementary Service; Stage2”.
- 3GPP 24.081:”Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Line Identification Supplementary Service; Stage3”.

4.1.2.3. CFU, CFB, CFNRY, CFNRC

- GSM 02.82:”Digital cellular telecommunications system (Phase 2+) (GSM); Call Forwarding (CF) supplementary services; Stage 1”.
- GSM 03.82: “Digital cellular telecommunications system (Phase 2+) (GSM); Call Forwarding (CF) supplementary services; Stage 2”.
- GSM 04.82: “Digital cellular telecommunications system (Phase 2+) (GSM); Call Forwarding (CF) supplementary services; Stage 3”.
- 3GPP 22.082: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Forwarding supplementary service; Stage 1”.
- 3GPP 23.082: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Forwarding supplementary service; Stage 2”.
- 3GPP 24.082: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Forwarding supplementary service; Stage 3”.

4.1.2.4. CW, HOLD

- GSM 02.83:"Digital cellular telecommunications system (Phase 2+) (GSM); Call Waiting (CW) and Call Hold (HOLD) supplementary services; Stage 1".
- GSM 03.83: "Digital cellular telecommunications system (Phase 2+) (GSM); Call Waiting (CW) and Call Hold (HOLD) supplementary services; Stage 2".
- GSM 04.83: "Digital cellular telecommunications system (Phase 2+) (GSM); Call Waiting (CW) and Call Hold (HOLD) supplementary services; Stage 3".
- 3GPP 22.083: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 1".
- 3GPP 23.083: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 2".
- 3GPP 24.083: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Call Waiting (CW) and Call Hold (HOLD) Supplementary Service; Stage 3".

4.1.2.5. MPTY

- GSM 02.84: "Digital cellular telecommunications system (Phase 2+) (GSM); Multi Party (MPTY) supplementary services; Stage 1".
- GSM 03.84: "Digital cellular telecommunications system (Phase 2+) (GSM); Multi Party (MPTY) supplementary services; Stage 2".
- GSM 04.84: "Digital cellular telecommunications system (Phase 2+) (GSM); Multi Party (MPTY) supplementary services; Stage 3".
- 3GPP 22.084: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); MultiParty (MPTY) Supplementary Service; Stage 1".
- 3GPP 23.084: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); MultiParty (MPTY) Supplementary Service; Stage 2".
- 3GPP 24.084: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); MultiParty (MPTY) Supplementary Service; Stage 3".

4.1.2.6. USSD

- GSM 02.90: "Digital cellular telecommunications system (Phase 2+) (GSM); Unstructured Supplementary Service Data (USSD); Stage 1".

- GSM 03.90: “Digital cellular telecommunications system (Phase 2+) (GSM); Unstructured Supplementary Service Data (USSD); Stage 2”.
- GSM 04.90: “Digital cellular telecommunications system (Phase 2+) (GSM); Unstructured Supplementary Service Data (USSD); Stage 3”.
- 3GPP 22.090: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Unstructured Supplementary Service Data (USSD); Stage 1”.
- 3GPP 23.090: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Unstructured Supplementary Service Data (USSD); Stage 2”.
- 3GPP 24.090: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Unstructured Supplementary Service Data (USSD); Stage 3”.

4.1.2.7. eMLPP

- GSM 02.67: “Digital cellular telecommunications system (Phase 2+) (GSM); enhanced Multi-Level Precedence and Pre-emption service (eMLPP) - Stage 1”.
- GSM 03.67: “Digital cellular telecommunications system (Phase 2+) (GSM); enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 2”.
- GSM 04.67: “Digital cellular telecommunications system (Phase 2+) (GSM); enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 3”.
- 3GPP 22.067: “ Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Enhanced Multi-Level Precedence and Preemption service (eMLPP); Stage 1”.
- 3GPP 23.067: “ Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Enhanced Multi-Level Precedence and Preemption service (eMLPP); Stage 2”.
- 3GPP 24.067: “Digital cellular telecommunications system (Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); Enhanced Multi-Level Precedence and Preemption service (eMLPP); Stage 3”.

4.1.2.8. CUG

- GSM 02.85: “Digital cellular telecommunications system (Phase 2+) (GSM); Closed User Group (CUG) supplementary services; Stage 1”.
- GSM 03.85: “Digital cellular telecommunications system (Phase 2+) (GSM); Closed User Group (CUG) supplementary services; Stage 2”.
- GSM 04.85: “Digital cellular telecommunications system (Phase 2+) (GSM); Closed User Group (CUG) supplementary services; Stage 3”.

- 3GPP 22.085: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Closed User Group (CUG) Supplementary Service; Stage 1”.
- 3GPP 23.085: ““Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Closed User Group (CUG) Supplementary Service; Stage 2”.
- 3GPP 24.085: “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Closed User Group (CUG) Supplementary Service; Stage 3”.

4.1.3.Υπηρεσίες μισθωμένων γραμμών

Οι υπηρεσίες μισθωμένων γραμμών της Wind Hellas παρέχονται με τους εξής ρυθμούς δεδομένων:

- 64Kbps
- nx64Kbps (n=2….31), X.21 & Ethernet
- E1 (2048Kbps) balanced (120Ohms) & unbalanced (75 Ohms)
- nxE1 (n=2…16), balanced (120Ohms) & unbalanced (75 Ohms)

Οι μισθωμένες γραμμές που παρέχονται μέσω των διεπαφών του δικτύου Wind Hellas περιγράφονται από τα ακόλουθα πρότυπα:

- ITU-T G.702:“Digital hierarchy Bit Rates“.
- ITU-T G.703:”Physical/electrical characteristics of hierarchical digital interfaces”.
- ITU-T G.704 “Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels“.
- ITU-T G.706: “Frame alignment and cyclic redundancy check (CRC) procedures relating to basic frame structures defined in recommendation G.704”.
- ITU-X.21:”Interface between Data Terminal Equipment and Data Circuit Terminating Equipment for Synchronous operation on Public Data Networks”.

4.1.4.Υπηρεσίες δικτύου δεδομένων

4.1.4.1. Υπηρεσία Πρόσβασης Χρηστών & Εταιρικών Πελατών στο Διαδίκτυο (ISP)

Η Wind Hellas παρέχει υπηρεσίες πρόσβασης χρηστών και εταιρικών πελατών στο Διαδίκτυο μέσω των διεπαφών του δικτύου της σύμφωνα με τα ακόλουθα πρότυπα:

- Internet Engineering Task Force (IETF) Request For Comments (RFC) 1661 “The Point to- Point Protocol (PPP)”.

- International Organization for Standardization (ISO) 3309 “Data Communication - High level Data Link Control Procedures - Frame Structure”.
- International Organization for Standardization (ISO) 4335 “Data Communication - High level Data Link Control Procedures - Elements of Procedures”.
- ITU-T Q.921 “ISDN user-network interface - Data link layer specification“.
- ITU-T Q.931 “ISDN user-network interface layer 3 specification for basic call control“.
- Institute of Electrical and Electronics Engineers (IEEE) 802.3 “Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications”.
- IEEE 802.11b “Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Higher Speed Physical Layer Extension in the 2.4GHz Band”.
- IEEE 802.11g “Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment 4: Further Higher Data Rate Extension in the 2.4 GHz Band”
- 10/100BaseT-SU Ethernet 10/100
    - IEEE 802.3 (IEEE) 802.3 «Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications»
    - RFC 2684 for bridged protocols
    - Peak rate shaping
    - Συνδετήρας τύπου RJ-45
    - Αμφίδρομη ή μονόδρομη γραμμή

5. ΣΥΝΤΟΜΟΓΡΑΦΙΕΣ

ATM Asynchronous Transfer Mode
3GPP Third Generation Partnership Project
BAIC Barring of All Incoming Calls
BAOC Barring of All Outgoing Calls
BOIC Barring of Outgoing International Calls
BS Base Station
BS Bearer Services
BSS Base Station System
CB Cell Broadcast
CES Circuit Emulation Service
CF Call Forwarding
CFB Call Forwarding on Mobile Subscriber Busy
CFNRC Call Forwarding on Mobile Subscriber Not Reachable
CFNRY Call Forwarding on No Reply
CFU Call Forwarding Unconditional
CLIP Calling Line Identification Presentation
CLIR Calling Line Identification Restriction
COLP Connected Line Identification Presentation
COLR Connected Line Identification Restriction
CW Call Waiting
DTMF Dual Tone Multi Frequency
ETSI European Technical Standards Institute
GPRS Global Packet Radio Service
GSM Global System for Mobile communications
ISP Internet Service Provider
MMS Multimedia Messaging Service
MO Mobile Originated
MPTY Multi Party Service
MS Mobile Station
MSC Mobile Switching Centre
MT Mobile Terminated
m-VPN Mobile Virtual Private Network
PLMN Public Land Mobile Network
PP Point-to-Point
SGSN Serving GPRS Support Node
SMS Short Message Service
SMSCB Short Message Service Cell Broadcast
UE User Equipment
UMTS Universal Mobile Telecommunications System
USSD Unstructured Supplementary Services Data
UTRAN UMTS Terrestrial Radio Access Network
WAP Wireless Application Protocol