



b%; ~rf/ ; j fsf]lj : tf/df ; L8LPdP gbj s{



0-cgGtksfz dINns
6f6; ld; g ofhgf ljefu

bzf]/fli6 ofhgfsf]nlocg'k cf=j=@)^#÷^\$
sf]cGto; Dddf cfw/e't 6]hknf; j]ftkm(6]hknf; 3gTj
(Tele-density) lj Bdfg\!-& nf0{ j [4 u/l #=* kltzt
k%ofpg] tyf dfaf0n ; j]ftkm(lj Bdfg\3gTj ! nf0{@
k%ofpg] nlo /xsf] 5 . o; afx\$ clw/fhosf] %)
kltzte6bf a9L 6]hknf; ; j]faf6 lj dv ufldof lfgdf
6]hknf; ; j]f lj :tf/ ug[clw/fhosf ; DkOf{kdv zx/x' df
ufxsn] lgj hg lbPsf] Ps xktfleq ; j]f kbfq ug
jftfj/0fsf]l; hgf ug[cfib /xsf 5g\

ljutsf jifx' df tf/hl8t 6]hknf; nf0g j flif\$
'kdf sl/a \$) xhf/ nf0g lj t/Of ePsf]b]v65 . oxl
tf/hl8t klj lw lj :tf/d]ge' /xg]xf]eg]bzf]ofhgfsf]
\$,!)) nf0g lj :tf/ ug[nlo kllkt ug{cem}!@ j if{
nflvg\$. t; y{pQmnl0 kllkt ug{tf//lxt klj lw ckgfpg'
Psdq lj snk /xsf]5 .

of]j:tljstfnf0{cftd; ft u/l gkfn 6]hnsdn]
clw/fhoel/sf ; DkOf{ufx'x'nf0{t/lo tyf ; j {he
'kdf 6]hknf; ; j]f kbfq ug{xfn; Dd cgt/fli6 ahf/df
pknAw cTofwlg' t//lxt klj lw (Wireless Tech-
nology) cyf{\3G -t] f]k'tf_ df cfwfl/t EV-DO
; d] ePsf]CDMA 2000 1X Network sf]:yfkf
ug{nfu\$}5 .

; L=8L=Pd=P= eg\$}f]s]xf]<

6]hknf; ; j]sf nflu tf//lxt ljleGg kOfnldw0]
CDMA (Code Devision Multiple Access) Ps kdv
tyf nf\$lkp klj lw xf]. CDG (CDMA Develop-
ment Group) sf]; j [f0fcg'; f/ ; #f/el/ &) e6bf a9L
/fi6 of]klj lwdf cfwfl/t @@ s/f\$ &) nfv ufxs
:yflkt e0; s\$} 5g\ CDMA ufx'ssf]j flif\$ j [4b/nf0{

b]out ubf{ September, 97 df \$@ nfv %) xhf/
ufxs ; wof dfq /x\$}df ; [6]a/, ((df @ s/f\$ *%
nfv tyf xfn @@ s/f\$ &) nve6bf a9L klu; s\$}5 .
of]cf\$8faf6 CDMA klj lwsf]nf\$lkp'tfnf0{cf\$ng
ug{; ls65 .

of] klj lw ; jkyd 0\$; #!(*(df cdv/sfsf]
Qualcomm Inc. eGg] ; yfn] Military Satellite Sf
nflu kltkfbg u/\$f]l; 4f6t xf]. tTkZrft\of]l; 4f6tn]
!((# df IS 95A sf]kdf TIA (Telecommunica-
tion Industry Association) af/f dfGotf kfof/ 0\$; #
!((% df x^as^a sf]xlr; g gfd' 6]hnsd sDkgl]
; jkyd Jofj; flos 'kdf CDMA ; jf z' u'of].
Voice telephone -jfofl ; Dk]fof_ sf nflu dfq z'
ul/Psf]of]; jf 0\$; #!((& df cgt/fli6 b%; ~rf/
; \$sf]dfGotf'kt u/[15 IS 95B sf]kdf ^\$ kbps
8f6f ; j]f; lxt kl/dflh' eof]. lj sf; sf]qmdf 0\$; #
@)) df Packet Switching df cfwfl/t !%#^ kbps
data lfdt' ePsf]IS 2000 sf]kdf lj sf; u/l cgt/fli6
ahf/df k'ngdf cfof]. o; }kOfnlnf0{CDMA 2000
1X cyj' CDMA IXRTT eg] kl/eflft ul/65 .
CDMA 2000 1X System sf]cem]lj sl; t 3G ; j'k
CDMA 2000 IX EV-DO tyf 1X EV-DV/EV-
DO n]2.4 MB/S DATA SPEED kbfq ug{; S5 eg]
EV-DO n]4.8 mb/s . s'xl lgdf'f sDkgl]EU-DV
klg pTkfbgdf Nof0; s]tklg Jofj; flos 'kdf eg]of]
cgt/fli6 ahf/df cem]k'ngdf cfPsf]5g .

gkfn 6]hnsdn]; ~r'ngdf Nofpg nfu\$}k4lt 3G
df cfwfl/t cTofwlg' EV-DO ; lxtsf]CDMA 2000
1X System xf].

; L=8L=Pd=P=kOfnLsf]krfObfx'z

-s_ ; j]f kmfj 6 lfg lj :t[ePsf] t; y{sd BTS
(Base Transceive Station) dfq h8fg u/[kdg].



- v_ k|o\$ BTS n]a9L u|f|sx;nf0{; }f k|f|g ug{ ; Sg](High Traffic Capacity) . t; y{PS}k6sdf w|}hgfn]; }f pkef| ug{; Sg].
- u_ BTS X;Sf]Frequency Planning ul//fVg'gkg]. t; y{sd ; dod}hg; s}7fp|f BTS ykg ; lsg]. Frequency h:t|f/i6sf]; lldt ; f|:sf]plrt k|f|u xg].
- 3_ pRr uof:t/sf]Wj lg tyf 8f6f lfdtf ePsf](High quality voice and data Service)
- a_ Soft / Softer b| }sl; dsf]Handoff sf]Jo| : yfn] ubf{c; km sn ; wof (call drop) Gog xg]. (Reduce call drops) .
- r_ cGo klj lwsf] thgdf Handset Sf] Transmit power Hofb}y|}xgsf]clt/Qm Power control sf]klg Joj : yf ePsf]:j f:Yosf]b|6s|fn]xflgsf/s gePsf](Green Communication)
- 5_ 3G df cfwf/t ePsf].

g|kfn 6]hnsdsf]; L-8L-Pd-P-cfof]hgfsf]; k/vf tlj 6f g|j s{tyf kfF r/0fdf lj eflht of]cfof]hgf ; DkGg ePkI5 sh !* nfv nf0g lj t/Of ug{; lsg\$. sh !* nfvdf !) nfv nf0gsf]; jlr lfdtf /x\$|5 . To; }u/l * nfv Prepaid ; }fsf]lfdtf /x\$|5 . !) nfv :jlr lfdtf]Wo]#) kl|tzt cyf{# nfv WLL Subscriber nf0g /x\$|5 eg]&) kl|tzt cyf{& nfv kf|6k\$ df|f0nsf]nf0g /x\$|5 .

klyd r/0fdf d|wodf-rn ljsf; l|qdf ! nfv, k|f{rn ljsf; l|qdf &% xhf/ tyf klZrdf-rn, d|woklZrdf-rn Pj +; b/ klZrdf-rn l|qdf klg &% xhf/ u/l hDdf @ nfv %) xhf/ nf0g lj t/Of ul/g]of]hgf /x\$|5 . o; cfof]hgfsf]cGto; Dddf tl l|qdf qm|ds ; kdf nf0g yk u/l qm|z| \$ nfv, # nfv, # nfv u/l !) nfv nf0g k|f0f0g]5 . kl-k\$; }ftkm(c|w/f|hoel/sf nflu kyd r/0fd)% nfv nf0g tyf cGo r/Of u/l hDdf * nfv nf0g lj t/Of ul/g]nlo /x\$|5 .

klyd r/0fdf sf7df8f}pkTosfleqsf ; Dk0f{ pks/0fx; -a] :6]g, :jlr, kfj/_ h8fg, ; ~rfng tyf handover cfl|t\$tf{rlrgofFsDkgl ZTE Corporation n] ug\$. ; fy}lj /f6gu/ / e}xj]fsf] pks/0fx; klg pQm sDkgl]g} ; DkGg ug\$. sf7df8f}pkTosfalfx/sf cGo BTS tyf bf] f]r/Ofb|v kfFf}r/Of; Ddsf]cGo ; a}h8fgsfo{g|kfn 6]hnsds} k|lj lw1n] ug\$g\

- ; L-8L-Pd-P=sf]u|f|sx;nf0{k|f|g ul/g]; }fx; (a) Voice, Fax, SMS, VMS cflb cfwf/et ; }fx; .
- (b) High speed data : 14.4 kbps, 153.6 kbps tyf 2.4mbps
- (c) Number Portability (NP) : hxfFs}; yfgf|t/Of u/]tfklg gDa/ kl/j t|g gxg]; }f .
- (d) Free Phone Service (FPS) : km|g ug\$|f]gfp|f x|f0g ls, h; nf0{k|f|g ul/Psf]xf] p; sf]gfp|f lan r9g]; }f .
- (e) Cell and Time Discount (CTD): tf]sPsf]BTS tyf tf]sPsf]; dodf lj z|f dx; h b/ sfod ug]; }f .
- (f) Wireless virtual private network (WVPN) : PABX h:t}5f|f]gDa/ k|f|u u/l clw/f|hoel/sf] clk| cfa4 ug{; lsg]; }f .
- (g) cGo lj ljw ; }fx; -u|f|ssf] dfucg'f/_ h:t} MMS, CRBT, GPS positioning location ; }f, VoD cflb ; }fx; -lgs6 elj iod}

; L-8L-Pd-P=sf]km|g; f|df ; Ld sf8{/fVgk5{l s kb\$ <

CDMA sf]; f|df /flvg]SIM card nf0{RUIM (Removable Users Identification Module) eG]rng 5 . ahf/df b| }sl; dsf ; f|x; pknAw 5g\ RUIM Card k|f|u ubf{GSM df|f0n ; }fsf]; f|df h:t}Pp6} RUIM sf8{/fv] cfj Zostfcg'f/sf]; f|x; 5gf| ug{kf0G5 eg]RUIM sf8{gePsf]; f|sf]km|0bfrflx|F olb ; f x/fof] eg]Tof]; f|nf0{g}k|f|u ug{cgkoQm agfpg ; lsg5 . RUIM /fVgkg]f g/fVgkg]b| }sl; dsf ; f|x; u/l g|kfn 6]hnsdn]! nfv @% xhf/ ; f vl/b u/|f]/ u|f|sn]RUIM sf8{gePsf]; f| ahf/af6 vl/b u/|f g|kfn 6]hnsdsf]u|f|s ag]ahf|df c|c|g]; f|sf] MSN (Mobile Serial Number) Cyj f ESN (Electronic Serial Number) gDa/ btf{u/fp/ ; f|nf0{Activate ug{; lsg5 .

sg b|zdf **CDMA sf]Roaming** xg ; S5 <

g|kfn 6]hnsdn]CDMA ; }fsf nflu k|f|u ug] 800MHz band xfn ; #f/el/ ef/t, rlg, cd|/sf, c:6|nof, b= sf|/of, x^as^a, dn]; of, sj |, lk|nlkG; cflb dh'snufot \$) eG|f a9L /fi6df ; ~rflnt 5 . tl ; a)/fi6df Roaming xg ; S5 . Multi-band df rN] CDMA ; f|x; ; he ; kdf ahf/df pknAw xg yfn|k|5 CDMA network ePsf lj Zj sf ; Dk0f{/fi6x; alr



Roaming xg ;S5 . gkfnleq clw/fhosf krxQ/} lhNndf Roaming xg ;Sg\$ tyf kl5 GSM 1X Switch /flVPdf CDMA / GSM sf]alrdf klg Roaming xg ;Sg\$.

slxnaf6 nf0g lj t/Of ugI<

CDMA cfofhgfsf]; jf @)^@ c; f/ d; fitleq kf/De ugInlo ln0{sfok; tlj |;kdf cufl8 al9/xsf]5 .

cfpff]c; f/-; fpgl/ sf7df8f)pkTosfdf / To; kl5 ;Dkof{; b/dsf tyf t/f0{lfqdf qndzM nf0g lj t/Of ul/g\$. o; kl5 qndzM dh\$sf cGo efudf tyf 5fofF lfqx;df l/lk6/ tyf BTS x; :yfkgf u/l clw/fhoel/sf] nf0g lj t/Of ul/g\$.

o; cfofhgfsf rbf]Lx;

-s_ dh\$sf]lj Bdfg lj ifd\kl/l:yltdf Transmission link x; lft e0{; jf lj R5\$ ePsf kxf8l lfqx;df cem]g\$ s{lj :tf/ ug{ck77f]xg}.

-v_ Wireless k\$[tsf]ePsf]FWT (Fixed Wireless Terminal) kofu ug]ufx;x;sf]kofu:yfg 7Dofpg lgs]ufx;xg]ePsf]Call-bypass xg]vt/f /x\$].

-u_ CDMA sf]knf; ;x; j tdfg cj:yfdf ahf/df pknAw Goftd b/df kf0g]; ;x;eGbf dxef]xg] ePsf] u]xsnf0{ ; /n ls:tfaGblf pknAw u/f0gkgI.

-3_ EV-DO Service h:t}VoD, Interactive Gaming cflb ;]fsf nflu Content provider x;Sf] vfFf]xg]ePsf]To:tf ;]fsf nflu e/kbf];]f kbfos; E; Denf]f ul/gkgI.

CDMA tf//lxt klj lw ePsf]xgfn] 7fpFf/lsf] ;d:of, nf0g, lj t/Of ugI; d:of, u]dlOf lfqdf 5l/P/ /x\$ a:tlnf0{Cover ugI; d:of cflbaf6 lgs}/fxt klG]ck]ff ul/Psf]5 .

gkfnsf]b/; ~rf/s)0ltxf; df clxn]Ddsf]; aGbf axt tyf dxG]fsf#l cfofhgfsf] ;kdf /x\$] of] CDMA cfofhgfsf]elj io; E]gkfn 6]nsdsf]elj io klg ufF/P/ /x\$] 5, t/ /fli6e k]ff/ tyf blf hgziQmsf]cefj g/x\$]o; sDkgn]pks/Of h8fg ug{c; xh kl/l:ylt g/xdf lgwf/t ; dod}cjZo klg cfG]nlo kkt u/] byfpg\$.

Pre-Paid ;] fsf]Pre-Paid Cycle

Active Period : SIM Card kofu]stf] klxnf]sn ug{fy ^) lbg; Dd cj lw ePsf]Active Period Z' xG5 . o; cj lwsf u]xsn] CfG]Call Charge afE] /x] Dd Local, STD / ISD Call ug{; lsg\$. Active Period Sf] ^) lbg jf Call Charge Sf]; dflktdf Pre-paid Card nf0{Re-charge ugkg\$.

Pre-Paid SIM Card Recharge ug{Re-charge Card ?= %!) / ?= !,)@) (TSC, VAT / 6]hknf; j fldTj zNs ;dfj z ePsf] df vl/b u/l qndzM ^) lbg / !#% lbg yk kofu ug{ ; lsg\$. pbfx/Ofsf nflu- Pre-paid SIM Card Package vl/b u/l # lbgdf Initial Talk Value (Call Charge) ; dflkt e0{?= %!).- sf]sf8{ vl/b u/l l/-rfh{u/df k'/fg]afE] %& lbg / yk ^) lbg u/l hDdf !!& lbg Active Period xg\$.

Suspend Period : Active Period ; dflkt ePk5 Z' xg]Suspend Period Sf]!% lbgleq u]xsn]/-rfh{sf8{vl/b u/l l/-rfh{

u/df l/-rfh{sf8{dNo -?= %!) jf ?= !,)@) df SIM sf8{ k'/fg] sn rfh{afE] /x\$] /sd; d] hf]Bgf, t/ Suspend Period leq l/-rfh{gu/df k'/fg]afE] /sd zGo xg\$.

Disable Period : Suspend Period ; dflkt ePk5 Z' xg]#) lbgdf]Disable Period df l/-rfh{ubf{k'/fg]dfaf0n gDa/ oyfj tVxg\$ cGoyf ePdf dfaf0n gDa/ :j tM/2 xg\$.

; 8sdlg la5df0Psf]6]hknf; s;hx; # ; ob]v !* ; o kof/; Ddsf]xG5 . ; 8s vGbf Ps 7fp" dfq s;h gf\$; fg ePdf !* ; o hgf u]xssf]6]hknf; nf0g Ps;N6 laug] ; Defj gf xg]/ ; :yfgnf0{; r'gf gu/l s; h]T; : tf]gf\$; fgl xg]sfid u/]sf] kf0Pdf lghn]xhgf Itgkg]xG5 . To; h]; 8s vGgcuff8 glhs\$sf] 6]hknf; PS; r'gh sfoffodf va/ u/] xhgf Itgaf6 aRg cg/vw 5 .