



سلطة التنظيم

التقرير السنوي 2005



3	.....
4	.....	:
	2005	
5	.....	:2
6	.....	:3
6	.....	.1
7	.....	: 1.1
8	.....	: 2.1
10	.....	: 3.1
11	.....	: 4.1
12	.....	.2
12	.....	: 1.2
18	.....	: 2.2
22	.....	: 3.2
22	.....	: 4.2
23	.....	.3
23	.....	: 3.3
24	.....	.4
24	.....	: 1.4
29	.....	: 2.4
30	.....	.5
30	.....	.6
30	.....	: .7
31	..... (FRATEL)	.8
32	.....	:4
32	.....	: 1.4
32	..... ( )	: 1.1.4
33	.....	: 2.1.4
33	.....	: 3.1.4
33	.....	: 2.4
33	.....	: 3.4
34	.....

كلمة الرئيس

2005
14 13
2001/18

:

%42
.%72

%25

2005

.(GSM)

51

2006

2004



:

2005

:

2005

424

2005

624

%47

2004

%1,525

2005

.2004

%1,325

%2

2004

385

2005

473

%22,86

%93

:

8

2005

70

11

()

.1

:

2005

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" : 2005 2 15 •
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" : 2005 31 30 •
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" : 2005 16 5 •
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" : 2005 12 10 •

: 2005 12 11 •

" : 2005 19 - 15 •
"(CMDT - 06)

- " : 2005 11 6 •
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" : 2005 17 14 •

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" : 2005 20 17 •

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" : 2005 24 20 •

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" : 2005 8 3 •

(1)

" : 2005 9 6 •
"

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" : 2005 15 13 •

" : 2005 16 14 •
 " : 2005 15 10 •
 " :2005 29 24 •
 " : 2005 25 11 •
 " :2005 16 12 •
 " : 2005 4 27 •

:

1

1-1
 1.1.1

	2005	2004	
%39	786615	566325	
23	26,4	21,5	

: _____

2005 2004 220.000
 2003 2000 100.000
 .2004 2003 170.000

%94

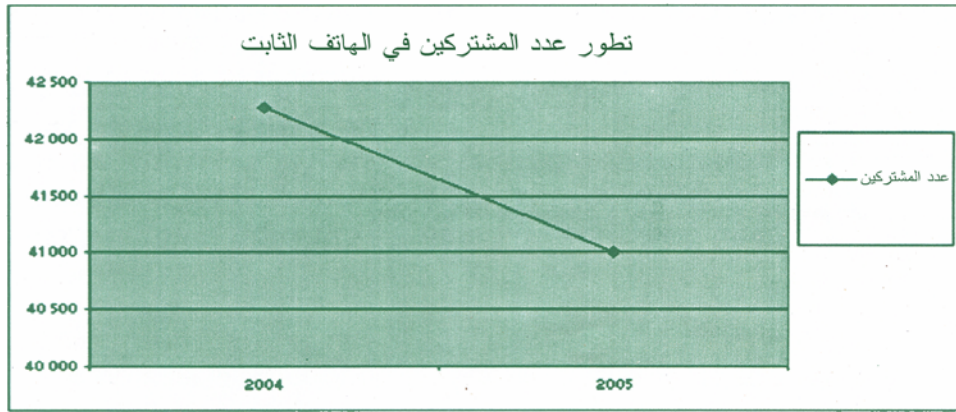
.1

2.1.1

1.2.1.1

	2005	2004	
%3 -	41000	42282	
6 -	1,4	1,5	

: _____



2005 2004

()

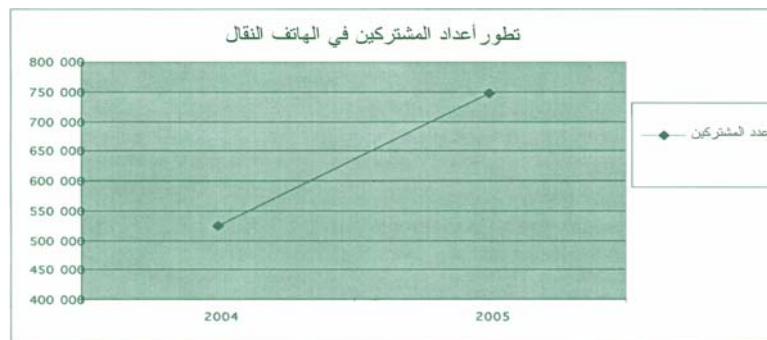
.(2005 %1,4)

2.2.1.1

	2005	2004	
%42	745615	524043	
%25	%25	%20	

: _____

²Off- net On -net



Off- net

On -net

2

2005

.2005 (%42)
%25

3.2.1.1

	2005	2004	
%33	2121	1600	³ Maurnis RTC
%44 -	164	294	(LS) ⁴
%21	2285	1894	
%9	%0,08	%0,07	⁵

: _____

(2005 %0,08)
ADSL⁶

(%0,34)

(%0,19)

2006

:

.2.1

	2005	2004	
%12	33596876	29873352	
% 5 -	9423029	9953500	
%21	24173846	19919852	

:

.⁷2004 2000

: Maurnis

: RTC³

(...)

RTC

⁴

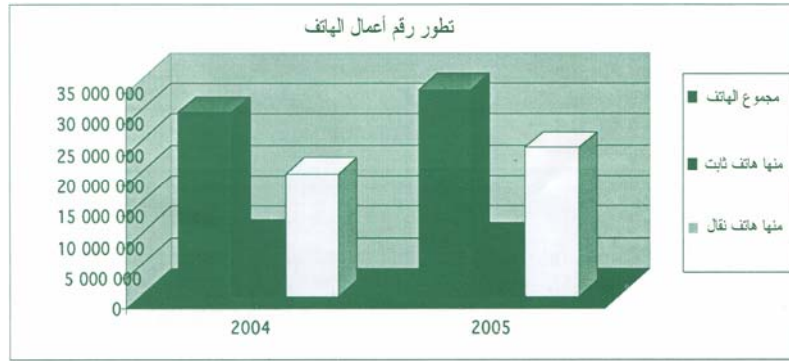
⁵

⁶

⁷

2004

1.2.1



:

2005 2004 %12

8

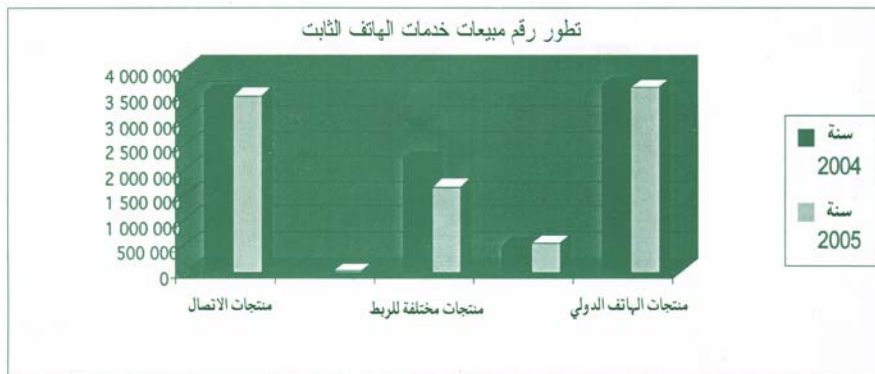
(2005 % 21)

2.2.1

1.2.2.1

	2005	2004	
% 1 -	3497528	3545348	
% 16 -	5629	6680	
% 23 -	1697474	2216665	
% 11	567507	510944	
% 1 -	3654892	3673863	

:



()

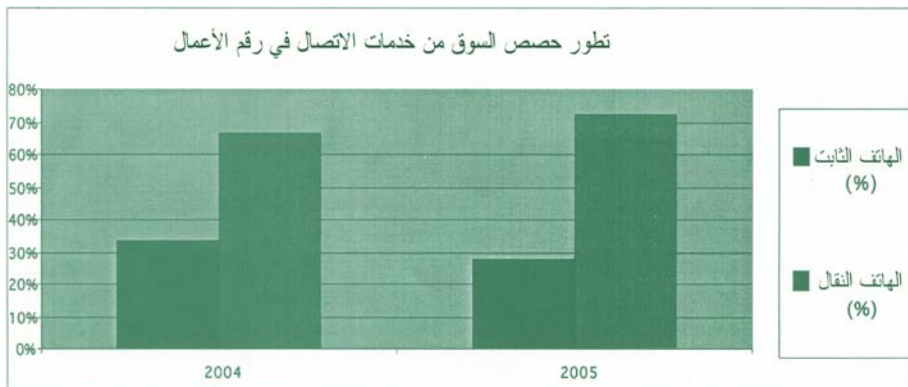
2005

.(%5 -)

2.2.2.1

2005	2004	
%28	%33	
%72	%67	

:

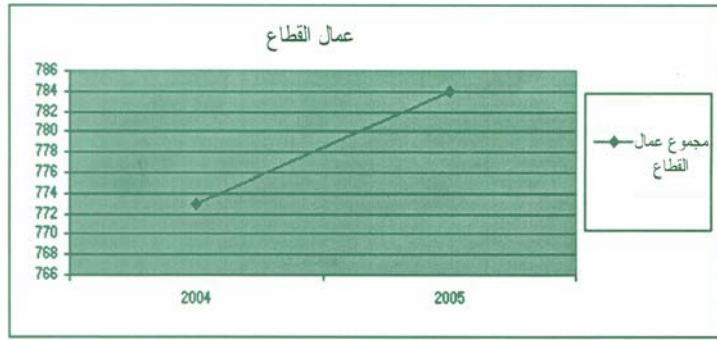


2005 2004 %5

.3.1

	2005	2004	
%1,42	784	773	

:



2005

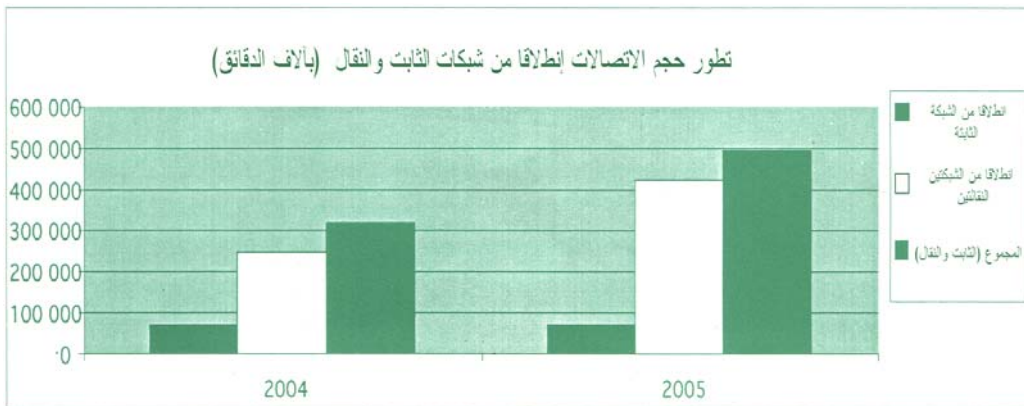
.4.1

()

1.4.1

	2005	2004	
%3 -	71032	73054	
%72	421081	244895	
%55	492113	317949	()

:



(%72)

(%42)

2.4.1 . RTC ¹⁰) (:

	2005	2004	
%27	40860	32210	RTC

:



RTC

2005 %27

.2

.1.2

.1.1.2

2005/12/31

10.000

19

:

، أبي تلميت، تمبده، مكطع لحجار، گرو، الطينطان،

35

40

: RTC ¹⁰

2.1.2. المستغل في الهاتف الثابت موريتل

2005.

	كول

2005

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37

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3.1.2

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				43
				44
				45
				46
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				48
				49
				50
				51

.4.1.2

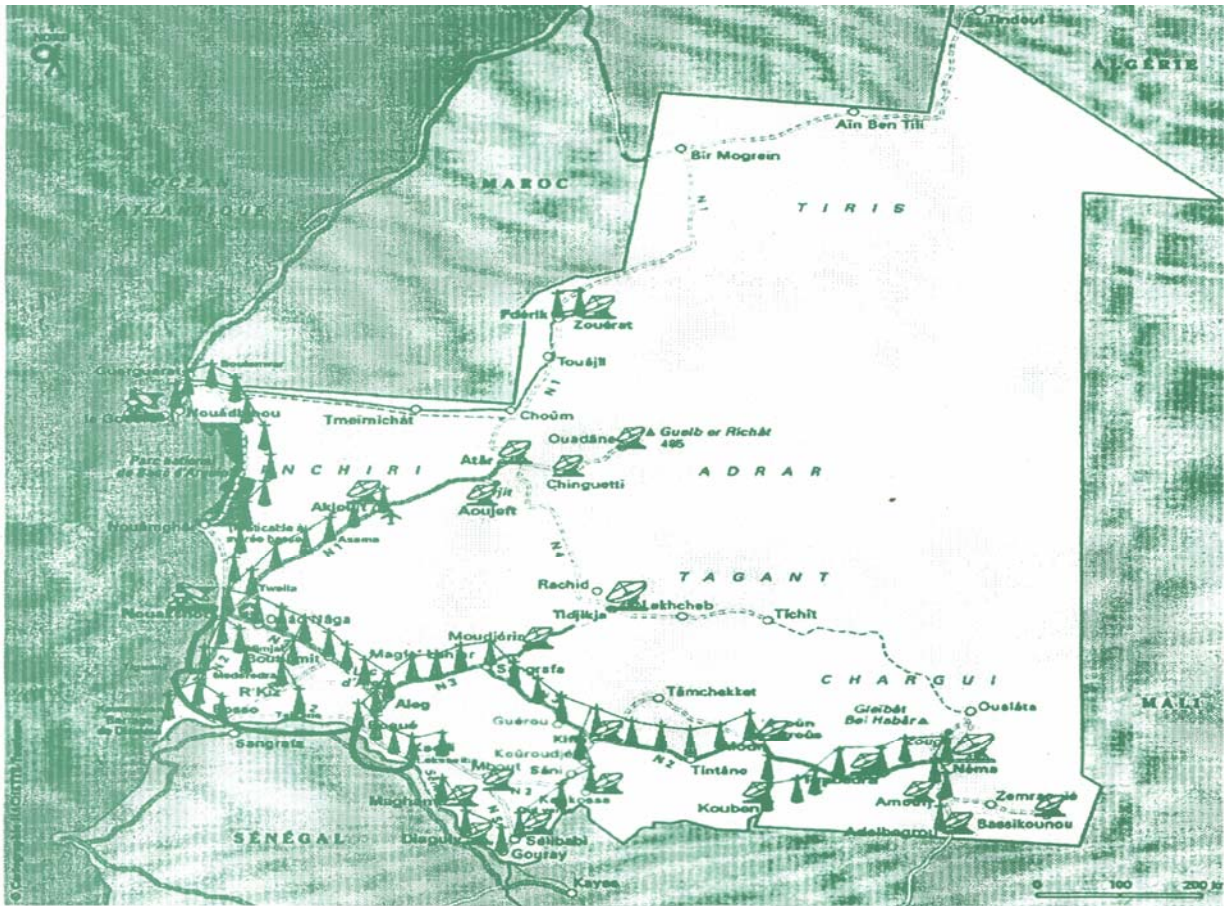
3200 .
 6 ¹¹ VSAT :
 38
 16
 600
 .()

/	3413×2	1365×2 /		/	2048×2		
/	768×2			/	768×2		
/	1536×1	/	512×1	/	1024×1		
/	1792×2	/	512×1	/	1024×2	/	256×2
/	1280×2			/	1024×1	/	256×2
/	1537×1	/	256×1	/	1024×1	/	256×1
/	384×2					/	384×2
/	1280×2			/	1024×1	/	256×2
/	1024×2					/	1024×2
/	1537×2	/	256×1	/	1024×2	/	256×2
/	2304×2	/	512×1	/	1024×2	/	768×2
/	256×2					/	256×2
/	1024×1			/	1024×1		
/	1280×2			/	1024×2	/	256×2
/	256×2					/	256×2
/	1920×2	/	512×1	/	1024×2	/	384×2
/	256×2					/	256×2
/	2816×2	1024×1 /		/	1024×2	/	768×2
/	256×2					/	256×2
/	256×2					/	256×2
/	384×2					/	384×2
/	2816×2	1024×1 /		/	1024×2	/	768×2
/	1536×2	/	256×1			/	1280×2
/	1280×2			/	1024×2	/	256×2
/	1024×1			/	1024×1		
/	256×2					/	256×2

	/ 2×8		/ 2×8		-
	/ 2×24	/ 2×16	/ 2×8		
	/ 2×16	/ 2×16			
	/ 2×64		/ 2×64		
	/ 2×16	/ 2×16			
	/ 2×8	/ 2×8			
	/ 2×8	/ 2×8			
	/ 2×8		/ 2×8		
	/ 2×8			/ 2×8	
	/ 2×16			/ 2×16	1
	/ 2×8	/ 2×8			
	/ 2×8		/ 2×8		
	/ 2×8		/ 2×8		
	/ 2×16		/ 2×16		
	/ 2×16		/ 2×16		
	/ 2×16		/ 2×16		
	/ 2×16		/ 2×16		
	/ 2×16		/ 2×16		

E1 16 ¹²	
E1 32	
E1 48	

13() PDH



- | | | | |
|---|--|---|--|
|  | Stations Terriennes
Nouakchott & Nouadhibou |  | Site en Faisceau Hertzien |
|  | Stations VSAT
Pour les liaisons satellitaires des Villes
(256 Kbps) |  | Station FH 16X2 et 8X2
Mbps (PDH) |
|  | Liaisons en FO de E1 |  | Station FH 16X2 Mbps
(Projets en cours) |
| | |  | Station FH 64X2 Mbps
(SHD) |

64 56

2,048 Mbps

12

64

: PDH¹³

.2.2

.1.2.2

2005

2005 17 11

%100

.%75 %85 %95

%13
%2

%27
%5

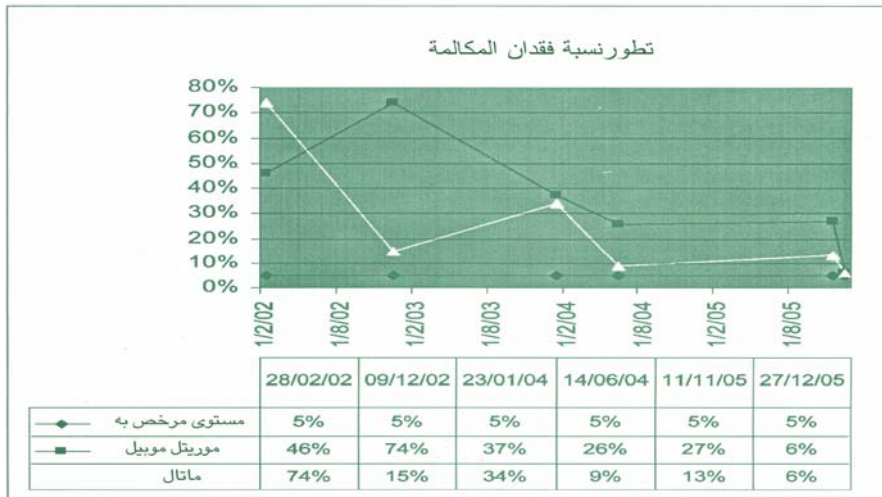
) 2005 23
(.2

27

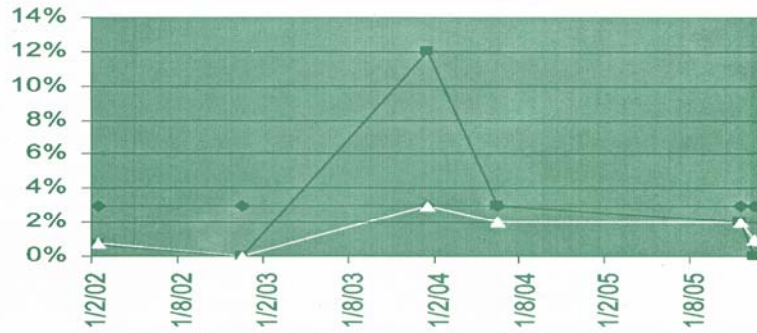
2006 6 2005

.3

(%6) 2002

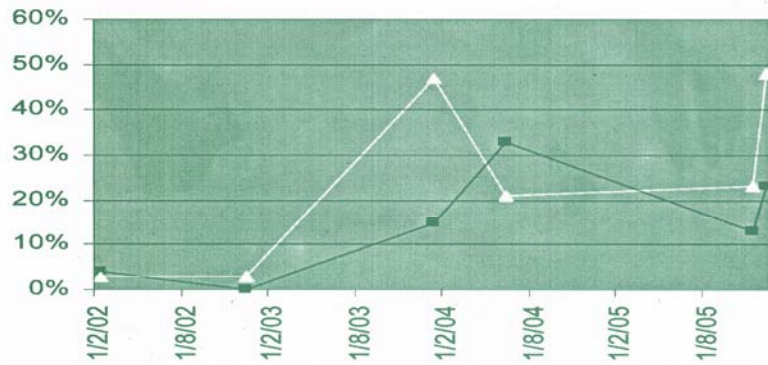


تطور نسبة انقطاع المكالمات



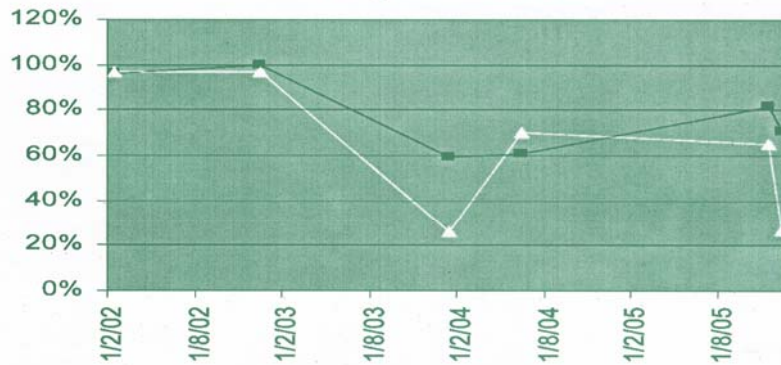
	28/02/02	09/12/02	23/01/04	14/06/04	11/11/05	27/12/05
مستوى مرخص به	3%	3%	3%	3%	3%	3%
موريتل موبيل	0,70%	0%	12%	3%	2%	0%
ماتال	0,80%	0%	3%	2%	2%	1%

تطور نوعية السماع المقبولة

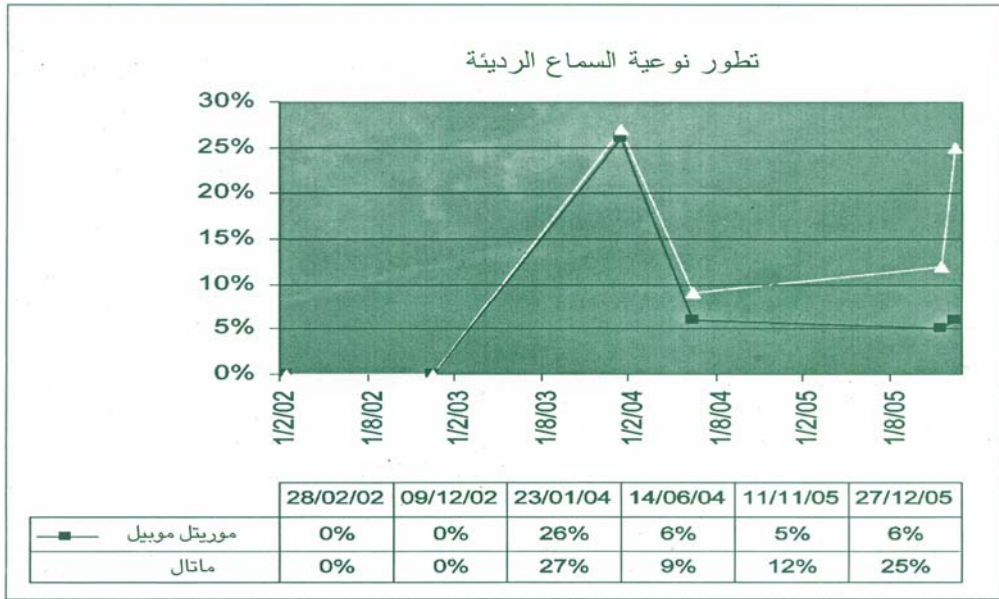


	28/02/02	09/12/02	23/01/04	14/06/04	11/11/05	27/12/05
موريتل موبيل	4%	0%	15%	33%	13%	23%
ماتال	3%	3%	47%	21%	23%	48%

تطور نوعية السماع الجيدة



	28/02/02	09/12/02	23/01/04	14/06/04	11/11/05	27/12/05
موريتل موبيل	96%	100%	59%	61%	82%	71%
ماتال	97%	97%	26%	70%	65%	27%



BSS¹⁴ NSS
¹⁵(TRX) BTS BTS BSC VLR / MSC :

2006

2005

2.2.2

19

(2004)

() BTS () BSC () VLR () :MSC :

14
15

.2005

2003 2002

2005

) 2005 ()	2004 ()	() 2003	() 2002	
20	30	45	90	DMR
42	15	30	60	DMR -N
%5.5	%10	%10	%30	SI
%95.93	%95	%95	%85	VR2
%99.24	%99.9	%99	%98	VR8
%99.88	%75	%70	%65	ETL
%99.15	%65	%60	%55	ETN
%98.71	%65	%60	%55	ETI
8	15	20	20	QOP
%0.01	%0.5	%0.5	%1	REC

() : DMR
 () : DMR -N
 () : S.I
 () : VR2/VR8
 .() : ETL/ETN/ETI
 .() : QOP
 .() : REC

() 2004 2003 2002 2001
2005

2005	2004	2003	2002	2001	
%98,68	%97	%95	%90	%85	
%98,87	%98	%97	%95	%90	

%15

%42

3.2

43

.2000/13

5

1999

11

2005

99/019

4.2

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-
-

2006

.3

16

3.3

1.3.3

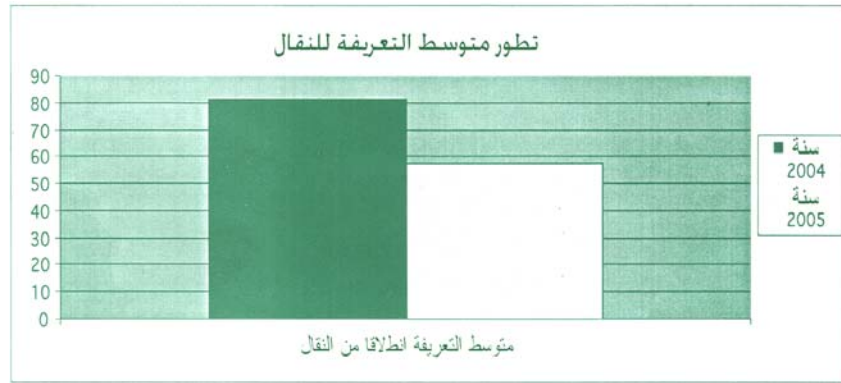
	2005	2004	
%1 -	3497528	3545348	()
%3 -	71032	73054	()
%0	49	49	

:

49

2.3.3

	2005	2004	
%30 -	57	81	



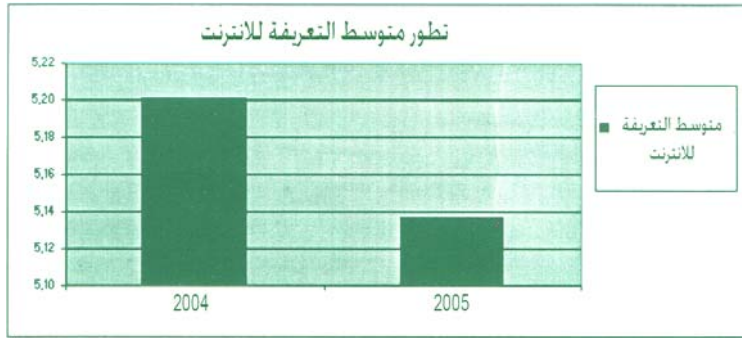
RTC

3.3.3

	2005	2004	
%1 -	5,14	5,20	

:

16 يعني



2005 2004
 .2004 30

.4

1.4

: 2005

.1

862 470 230 170

.2

.3

470 230 174

680

¹⁷(BR IFIC)

.4

MMSI¹⁸

.5

.6

(¹⁹ SMS)

170

1.5

862 470 230

17
 18
 19

(VHF) 230 174

(UHF) 862 470

.(T-DAB²¹) DT1 1086

1152) DSI 66 (DVB-T²⁰

15 .(4 %70 VHF VHF²² UHF %30) UHF 2006 16

2.5

UHF VHF

HF

3.5

: 2005 14

(1

100

80 : (PAR30dBW)

-
-

20
21
22

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(2

(CRR-06)

(3

2005

13

.2005

14 10

(

)

89 84

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2005

(CNR)

(MRC)

2005/06/28

2547

BRFIC)

(2004/08/23

2551

2005/07/12

2548

4.5

2005

()

MMSI

5.5

:2005

FH

13

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(GFO)

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34

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7

FH

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13

BTS

6

94

.VSAT

14

VHF HF

12

MMSI

.

MMSI

MMSI

116

.

.6.5

.1.6.5

627

VSAT	35	-
BLR	59	-
HF	250	-
VHF	283	-

BLR	VSAT
-----	------

2006

ADSL	-
45	-
	-

/SAT3/ WASC

.2.6.5

2005

6

BTS

()

.5

CDMA²³

.3.6.5

CDMA

2005

23

22

.4.6.5

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-

.()

GSM 900 UHF FM VHF HF

GSM 1800

.2.4

2005

		/	CDU	M	Q	P	B
			XXX	3	0	1	5
			XXX	6	0		
			XXX	8	5		
			XXX	0	3	3	
			XXX	0	4		
			XXX	5	4		
			XXX	2	6	4	
			XXX	7	6		
			XXX	2	4	5	
			XXX	4	4		
			XXX	0	6		
			XXX	7	3	6	
			XXX	4	3		
			XXX	7	9		
		GSM	XXX	X	X	1	6
		GSM	XXX	X	X	0	
		GSM	XXX	X	X	9	

.5

2005 9

(EASYCALL ENGINEERING SARL)
call back

EES

2006 16

2006 EES
19
133

14

.6

2005

Novavision)

:

2005
(Yellowonline

2005

250

30550

2005

.7

:

.24

3

2004
2004 30
.2000 4

2000/128

2004

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2005

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2006

FRATEL

.8

FRATEL²⁵

2005

31 30

52

15

2003 28

FRATEL²⁵

2002

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24

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1.4

()

1.1.4

1998

%54

.2002

(Data Room)

2004

2.1.4

2001 28

2001/25

.2006

3.1.4

2004

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()

5 -

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6 -

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6 -

.2006 (

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2.4

2005

3.4

2005

2005 : 1

17 11) : 2
(2005

2005/12/27) : 3
(2006/01/06

VHF UHF : 4

: 5

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2005

: 1

2004/12/31	2005/12/31	
10165628	14383295	
12028598	17542122	
50770062	80237505	
1646434	403800	
165961879	177548773	
177460	191600	
1833533		
142476109	101011725	
	81363473	
385051703	472682293	
182738836	251790127	
567790539	724472420	

2004/12/31	2005/12/31	
383790510	585557798	
3700000	3140000	
387490510	588697798	
142352912	100335591	**
1191781	570865	**
36755336	34868165	**
180300029	135774621	
567790539	724472420	
567790539	724472420	

17 11)

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(2005

.I

2005

17 11

.II

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.III

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%95

5)

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7

.IV

www.ars.mr

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%100)

%2

%3

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%13

(%5)

%27

2005/12/27)

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(2006/01/06

.I

.2005

17

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23

.2005

.2006/01/06 2005/12/27

.II

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-
-
-
-
-

.III

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-
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%95

5)

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-
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.IV

www.ars.mr

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-
-
-

%100)

%1

%3

(

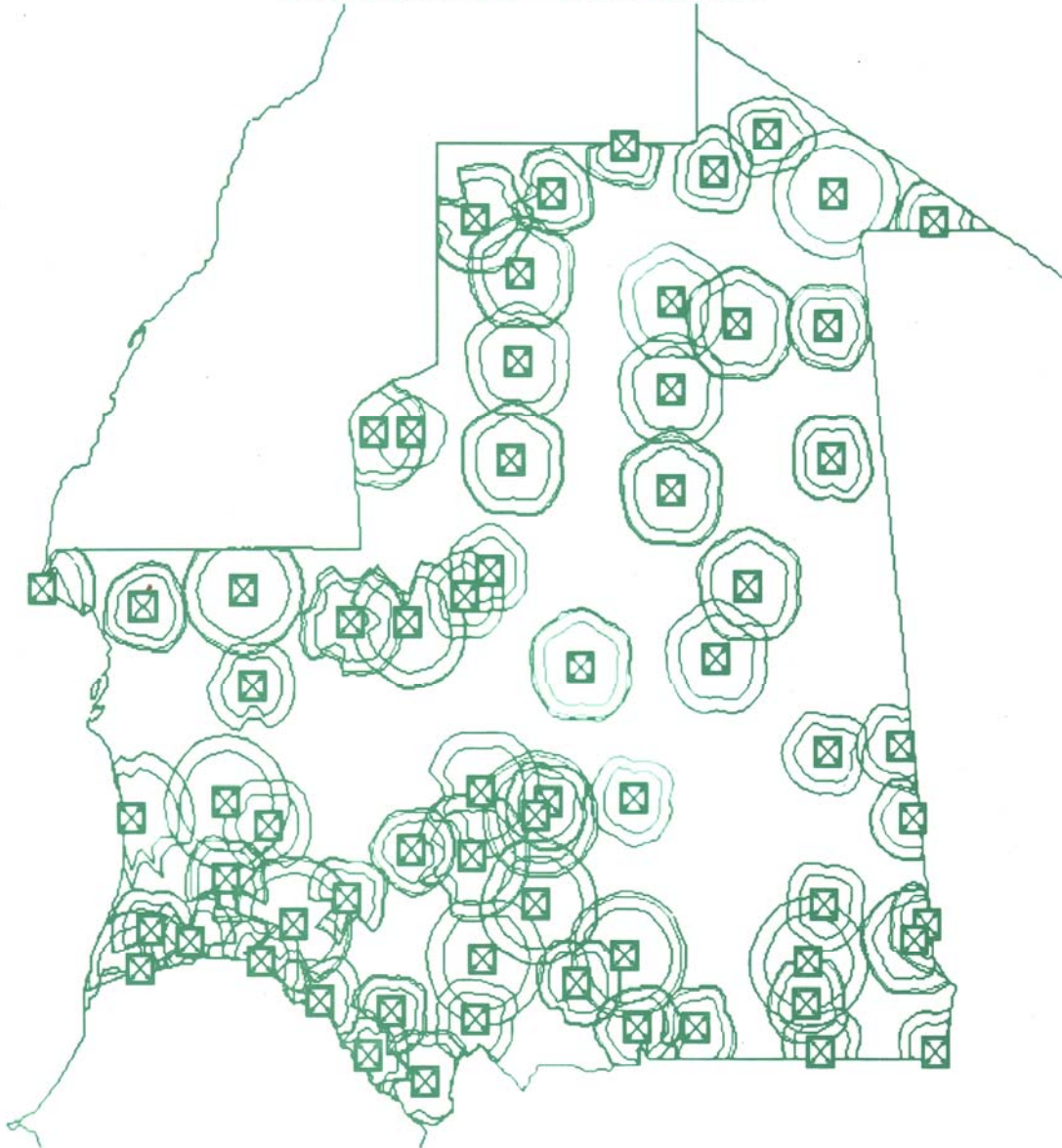
%0

.(%5)

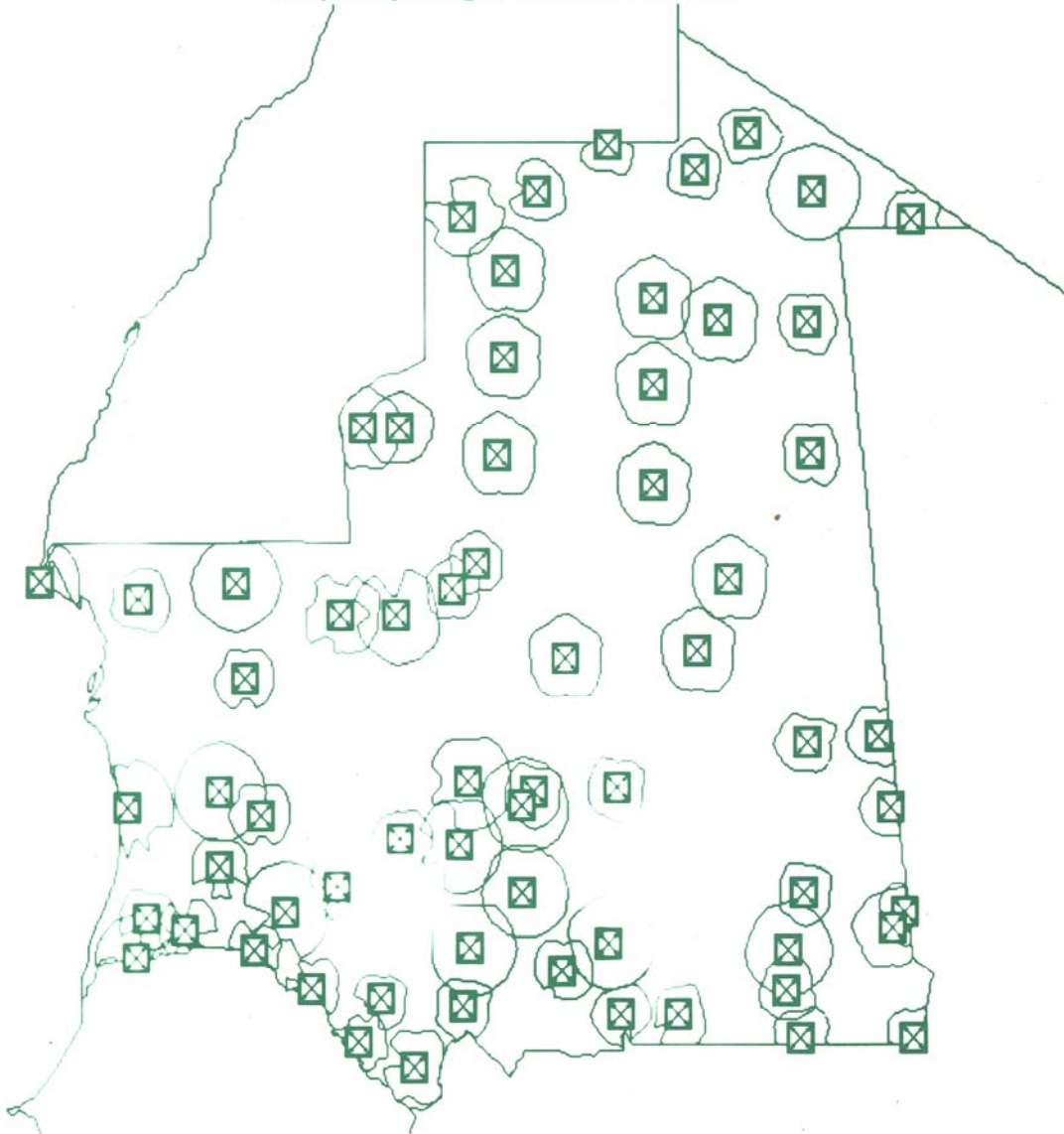
%6

%.30

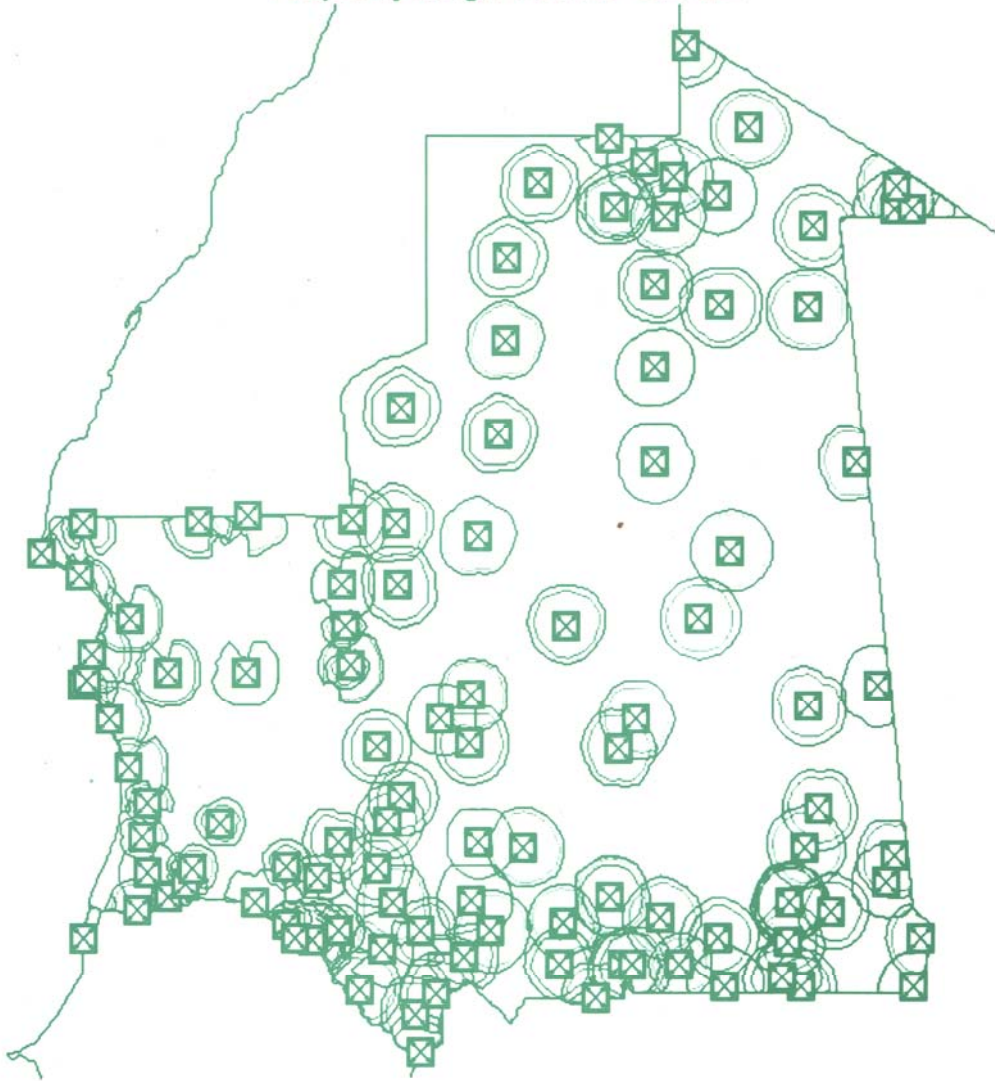
Service/Coverage Areas
Frequency Range: 174 MHz - 230 MHz



Service/Coverage Areas
Frequency Range: 174 MHz - 230 MHz



Service/Coverage Areas
Frequency Range: 470 MHz - 862 MHz



: 5

8		BTS 18 : 06.982 15 : 002.57
BTS 100	(CID) 13208 13207 13209	(BTS) 16
		BTS BTS 25071

:

:

(BTS 100) (1

	(V/m)	= EI (V/m)		()
623	42.44	0,0681	GSM 900	952.8
163	42.45	0,2589	GSM 900	953.2
212	42.43	0,2001	GSM 900	952.2

(2)

	(V/m)	= EI (V/m)		()
2481	42.44	0.0171	GSM 900	952.8
404	42.45	0.1050	GSM 900	953.2
1964	42.43	0.0216	GSM 900	952.2

()

(3)

	(V/m)	= EI (V/m)		()
586	42.44	0.0724	GSM 900	952.8
905	42.45	0.0469	GSM 900	953.2
4611	42.43	0.0092	GSM 900	952.2

(4)

	(V/m)	= EI (V/m)		()
577	42.44	0.0735	GSM 900	952.8
905	42.45	0.0469	GSM 900	953.2
322	42.43	0.1317	GSM 900	952.2

:6

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EASYCALL ENGINEERING SARL

2005 9

2005 8

EASYCALL ENGINEERING SARL
(call back)

2005 9

EASYCALL ENGINEERING SARL

call back

/ / 05/01

2007 25

2007 18

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1999 11

019 99

-

2007 28

/133

-

3

/229

-

2005 8

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4350 : EASYCALL ENGINEERING SARL

www.easycall.mr

5255447

5297720 :

(call back)

. 2005 7

:

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EASYCALL ENGINEERING SARL

(call back)

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2005 9

2005 23

17 11

2005

%2
%100)
%3

(

%5

%13

%27

.2005 23

2005 19

2005 18

: .(2004 6)

2005

: GSM

-
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-
-

2005 8

: .

0022252291279 :

14 4908

.kerkoub@are.mr

2005

.() :

13

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14

4908 : .

002225242607 :

.002225257762 :

amoctar@are.mr :

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" "

2005 31 30

2003 28 2005 31 30

2002

15

52

2005
2005

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(Wifi, Wimax, ADSL, BLR, CPL,)

IP

IP

FRATEL

.(ENST)

(ESMT)

2005

FRATEL

. www.fratel.org

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019 99

2005

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BPQMCDU

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2005 22 21

21

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2005 22

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" ...

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15

2004 16

2004 2003

.2005

(11)

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سلطة التنظيم
الهاتف: 529 12 41 – 529 12 70 (222)
فاكس: 529 12 79 (222)
ص.ب: 4908 – انواكشوط
www.are.mr
