

# Information Technology Observatory

Survey on ICT access and usage by households and individuals in Morocco, 2014

June 2015

### **SUMMARY**

1	INTE	RODUCTION	2
2	METHODOLOGY		3
	2.1	Population and scope of analysis	3
	2.2	Adjustment variables	4
3	MAI	N ICT EQUIPMENT AND USES IN MOROCCO IN 2014	5
	3.1	Mobile telephony equipment and uses	5
	3.1.1	1 Individual's equipment with mobile telephony	5
	3.1.2	2 Individual's equipment with smartphones	7
	3.1.3	3 Individual's intentions to equip with mobile telephony	7
	3.2	Fixed line equipment and usage within households	8
	3.2.2	1 Household's equipment with fixed line	8
	3.2.2	2 Barriers to household's equipment with fixed line and intentions to equipment .	9
	3.2.3	<i>Household's motivations for fixed telephony equipment1</i>	0
	3.3	Computer equipment and usage within households 1	0
	3.3.1	1 Household's equipment with computers <sup>2</sup> 1	0
	3.3.2	2 Average number of computers <sup>2</sup> by equipped household	1
	3.3.3	3 Households equipment with tablets1	1
	3.3.4	4 Intentions to purchase a computer1	2
	3.3.5	5 Barriers to household's equipment with computer1	2
	3.4	Internet equipment and usage within households1	3
	3.4.1	1 Household's equipment with Internet access1	3
	3.4.2	2 The favourite Internet access mode1	3
	3.4.3	3 Intentions to equipment with Internet access at home	4
	3.4.4	4 Barriers to household's equipment with Internet access	4
	3.4.5	5 Number of Internet users 1	5
	3.4.6	5 Internet connection frequency 1	6
	3.4.2	7 Internet uses1	.6
	3.4.8	8 Interest in the local language and the international content	.7
4	QUA	ALITY OF SERVICE	7
	4.1	General satisfaction with ICT services in Morocco	7
	4.2	General appreciation of mobile services1	8
	4.3	General appreciation of the ADSL service1	8
5	SOC	IAL NETWORKS	9
	5.1	Frequency of social networks usage1	9
	5.2	Daily use of social networks	.0
	5.3	The most popular social network	.0
	5.4	Criteria for using a social network	1

### **1** INTRODUCTION

The object of this document is to present the methodology, as well as the main results and outcomes of the eleventh edition of the annual survey conducted by the ANRT on access to and use of information and communication technologies (ICT) by households and individuals in Morocco in 2014.

The study objective is to collect information on the main indicators regarding equipment, access and usage of ICT by households and individuals in Morocco. Moreover, the study also identifies other trends like individuals' intentions to equipment, their perception of quality of service or their use of social networks.

The survey is part of the "The Information Technology Market Observatory" established by the ANRT since 2005.

The aims of this observatory can be summarised as follows:

- Complete information collected from operators in the fixed line, mobile and Internet services markets and to process questions on how ICT is used and how users behave in the context of ICT in order to analyze qualitative aspects such as the drivers or the barriers for access to ICT equipment and its usage;
- Promote accurate, quantitative knowledge of the situation and developments in information society in Morocco;
- Provide communication medium at the national level;
- Feed international databases (in particular ITU databases) to enable Morocco to be included in classifications of ICT indexes which evaluate and compare the level of ICT development in countries on a worldwide scale.

This report is structured into four sections: section one is dedicated to the methodology adopted; a second section presents the state of the main equipment and uses of ICT in Morocco in 2014; the third section covers user perceptions and levels of satisfaction with respect to ICT services, and finally, a fourth and final section is reserved for the use of social networks.

### 2 METHODOLOGY

The 2014 ICT indicator survey is in line with previous editions to enable a comparison over time and monitoring of key indicators. Nevertheless, some methodological improvements were made to this eleventh edition, in particular to revise the indicators and reformulate the questions, in order to guarantee that the results are reliable and representative.

### 2.1 Population and scope of analysis

The survey's population is made up of two targets:

- All households located in electrified areas<sup>1</sup>, in national Moroccan territory.
- Individuals aged between "5 to 75" living in electrified areas, in national Moroccan territory, regardless of their nationality.

The reference population was established in accordance with the first results of the General Census of the Population and Habitat (RGPH) carried out by the *"Haut Commissariat au Plan* (HCP)" in 2014 and with projections for 2014 carried out by the HCP.

On a geographical level, the study's scope covers the whole national territory, differentiating between three types of habitation:

- The urban areas, represented by the Kingdom's main cities.
- The agglomerated rural areas, considered to be located within a perimeter of less than 35 km around an urban centre.
- The remote rural areas, considered to be the area outside a perimeter of 35 km around an urban centre.

The 2014 survey was conducted through face-to-face poll using the soft quota method with dynamic tracking. The questionnaire was delivered in French or dialectal Arabic depending on the respondent's profile. The sample size interviewed was 1820 households, including 1220 in an urban area and 600 in a rural area.

<sup>&</sup>lt;sup>1</sup> 100% of locations in the urban environment and 98.51% of locations in the rural environment are electrified according to the last figures published by the ONEE (the National Office for Electricity and Drinking Water)

### 2.2 Adjustment variables

The survey results were adjusted, using the full population data based on HCP projections for 2014.

For individuals, the sample was adjusted using the following criteria:

- Area of residence (urban/rural);
- Gender;
- Age;
- The type of habitation and the region of residence.

For households, the sample was adjusted using the following criteria:

- Area of residence (urban/rural);
- Type of habitation and;
- The region of residence.

In both cases, the adjustments were made using cross data of the actual population for these variables.

### 3 MAIN ICT EQUIPMENT AND USES IN MOROCCO IN 2014

In 2014, the evolution of the main indicators of ICT equipment and usage by individuals and households in Morocco followed a trend consistent with the developments observed in recent years.

Except from fixed line telephony equipment, which continued the decline noted since 2011, the rate of mobile telephony, computer and Internet access equipment recorded positive developments. The mobile telephony equipment within individuals is 94.1%, whereas the household fixed line telephony equipment fell once again this year to reach 24,1% of households. On the other hand, the computer equipment (52.5%) and the Internet access rate (50.4%) experienced a positive evolution (almost 5 points more compared to 2013).

### HOUSEHOLDS AND INDIVIDUALS EQUIPMENT



(% of individuals aged 12-65 in electrified area; % of total households in electrified area)

### 3.1 Mobile telephony equipment and uses

### 3.1.1 Individual's equipment with mobile telephony

Mobile telephony equipment penetration among individuals living in electrified areas showed a slight rise in 2014, to reach 94.1%. On the other hand, we can still see a gap between the urban and rural areas with a difference of 10.5 points.

INDIVIDUALS EQUIPPED WITH MOBILE TELEPHONY





### Mobile telephony multi-equipment

In 2014, individuals with mobile cards owned on average 1.15 SIM cards, a slight fall compared to 2013 (1.22 SIM cards). The survey results show that 13% of individuals were multi-equipped in 2014 (own at least two SIM cards), whereas this proportion was 17% in 2014.



### DISTRIBUTION OF INDIVIDUALS ACCORDING TO NUMBER OF SIM CARD (% of 12-65 years old individuals with SIM card)

### 3.1.2 Individual's equipment with smartphones

The number of individuals equipped with smartphones continued to grow in 2014. Thus, 38.2% of the individuals equipped with a mobile telephone stated that they have a smartphone, which represents approximately 9.4 million units at whole which corresponds to more than 2 million units compared to 2013.



### 3.1.3 Individual's intentions to equip with mobile telephony

Nearly 41% of individuals who are not equipped with mobile telephones declared their intention to equip with a mobile telephone in the next 12 months, 43% of whom wished to purchase a smartphone.

### INTENTION TO EQUIP WITH MOBILE TELEPHONY (% of individuals aged 12-65 in

electrified area without mobile telephone; 2014)

### INTENTION TO EQUIP WITH MOBILE TELEPHONE BY TYPE OF EQUIPMENT

(% of individuals aged 12-65 in electrified area without mobile telephone; 2014)



### 3.2 Fixed line equipment and usage within households

### 3.2.1 Household's equipment with fixed line

The household's equipment rate with fixed line continued its downward trend to reach 24,1% of households in 2014. This rate fell in both the urban and rural areas with a greater fall in the latter.



**HOUSEHOLDS EQUIPPED WITH FIXED LINE TELEPHONY** (% of households in electrified area)

This further decline in fixed telephony equipment within households was due to the fall experienced by access to fixed telephony via restricted mobility, which equip only 2% of Moroccan households when the traditional fixed telephony continues to increase.



FIXED LINE EQUIPMENT BY TYPE OF TECHNOLOGY (% of households in electrified area)

#### 3.2.2 Barriers to household's equipment with fixed line and intentions to equipment

The lack of need, because of mobile telephony equipment, still represents the main obstacle to household's equipment with fixed line telephony. On the other hand, price or installation difficulties were less important in 2014.

#### **2,0%** 3,3% Problems of illiteracy 13.0% **1,4%** 5,3% scription/installation too long/complicated 19,0% **13,4%** 14,6% High price 2014 39,0% 2013 2012 No need, access to the telephone outside the household 37.0% 59,3% 76,5% 78,0% No need, mobile phone 36.2% Does not want a fixed line 19,9% 32,0%

(% of households in electrified area without fixed line telephony)

**BARRIERS TO FIXED LINE TELEPHONY EQUIPMENT** 

Finally, this downward trend in household's equipment with fixed line is likely to continue in the future, since only 5.3% of households who are not equipped with fixed line telephony willing to be equipped in the 12 next months, against 8% the year before.



INTENTION TO EQUIPMENT WITH FIXED LINE

### 3.2.3 Household's motivations for fixed telephony equipment

The use of fixed line telephony and Internet access via ADSL are the main reasons for households to equip with fixed line telephony.



\* including the Dream Box

### 3.3 Computer<sup>2</sup> equipment and usage within households

### 3.3.1 <u>Household's equipment with computers<sup>2</sup></u>

52.5% of Moroccan households are equipped with computers, a rise of almost 6 points compared to 2013, which represents approximately 3.8 million households equipped at whole (600,000 households more than in 2013). The difference between the two areas of residence remains significant (around 42 points in 2014).



### **COMPUTER<sup>2</sup> EQUIPMENT WITHIN HOUSEHOLDS** (% of households in electrified area)

<sup>2</sup> These could be desktops, laptops or tablets.

### 3.3.2 <u>Average number of computers<sup>2</sup> by equipped household</u>

The average number of computers by equipped household moved from 1.39 in 2013 to 1.63 in 2014. Thus, 41% of households equipped with computers are multi-equipped with 27% declaring that they have two devices and 14% having at least 3 computers at homes.





### 3.3.3 Households equipment with tablets

When analysing household's computer equipment by type of device, it appears that the laptop (51.7% of the total) and the desktop (32.6%), while still representing the majority of devices in households, are losing importance in favour of tablets which account for 15.7% of the total number declared by households in 2014 (against 9% in 2013).



### 3.3.4 Intentions to purchase a computer

The intention to buy a laptop in the next 12 months is stronger (16.6% of Moroccan households). The tablet comes in second position with 12.7% of intentions and the desktop computer in last place with 8.2%.



### 3.3.5 Barriers to household's equipment with computer

The lack of need at home remains the main obstacle to purchase a computer for 65% of the households not equipped in 2014. It is followed by the lack of skills to use a computer, cited by 52.5% of the respondents. Price comes in third position and is losing importance compared to 2013.



BARRIERS TO COMPUTER'S EQUIPMENT

(% of households in electrified area not equipped with a computer)

### 3.4 Internet equipment and usage within households

### 3.4.1 Household's equipment with Internet access

The Internet penetration rate within Moroccan households reached 50.4% in 2014, nearly 5 points more than in 2013. The equipment is higher in the urban are (62%) than in the rural area (24.4%). The difference between the two areas remains significant and is estimated to 37.6 points.



INTERNET ACCESS EQUIPMENT WITHIN HOUSEHOLDS (% of households in electrified area)

### 3.4.2 The favourite Internet access mode

Mobile technology remains the main solution favoured by households to access the Internet service. 35.9% of households affirmed that they use only mobile technology for Internet access whereas 4.9% do so using only a fixed Internet access and 9.6% using both technologies.



# **INTERNET EQUIPMENT BY TYPE OF ACCESS** (% of households in electrified area)

#### 3.4.3 Intentions to equipment with Internet access at home

9.2% of household who are not equipped with Internet access intend to subscribe to this service in the next 12 months. Moreover, among the households planning to be equipped, the mobile connection is preferred (63.4%). The USB modem/key via 3G is at the top of these intentions with 37.1% while the 3G Internet service via mobile telephone is in second place with 26.2%, which represents an increase of 21.4 points for this last option compared to 2013.



#### 3.4.4 Barriers to household's equipment with Internet access

In line with the trends seen in 2012 and 2013, the majority of households without access to the Internet in 2014 declared that the high cost of equipment (47.2%) and the absence of usefulness (46.7%) are the main barriers to equipment. The cost of service reported by households is in third position, but falling compared to 2013.





### 3.4.5 Number of Internet users

The number of Internet users showed a positive evolution in 2014: 56.8% of individuals accessed to the Internet at least once during the last 3 months, which represents 17.3 million Internet users (one million more than in 2013).



### INTERNET USERS IN THE LAST 3 MONTHS OF 2014

By age group, young people show higher rates than the average, in particular for the 15-19 age groups, with 84%.



### INTERNET USERS IN THE LAST 3 MONTHS OF 2014 BY AGE GROUP (% of individuals aged 5-75 in electrified area)

### 3.4.6 Internet connection frequency

More than half of Internet users (56.7%) access the Internet daily and more than three quarters do so from their home. Accessing the Internet from any location using a mobile phone is the second location cited (59% of Internet users).

### INTERNET CONNECTION FREQUENCY

PLACE OF CONNECTION TO INTERNET

(% of Internet users aged 5-75 in the last 3 months)

(% of Internet users aged 5-75 in the last 3 months)



### 3.4.7 Internet uses

Participation in social networks, access to instant messaging, viewing and downloading of multimedia content as well as Internet telephony continue to be the most popular uses cited by Internet users.



INTERNET USES (% of Internet users aged 5-75 in the last 3 months; 2014)

### 3.4.8 Interest in the local language and the international content

The sites visited by Moroccan Internet users are mainly sites with an international vocation and the content viewed is fundamentally in Arabic or French.



### 4 QUALITY OF SERVICE

### 4.1 General satisfaction with ICT services in Morocco

The majority of individuals are very satisfied with their operators, but compared to 2013 the number of very satisfied users was lower in 2014.



## SATISFACTION WITH ICT SERVICES

### 4.2 General appreciation of mobile services

Analysis of the level of satisfaction with the various mobile telephony services shows a decline in 2014.

### APPRECIATION OF MOBILE SERVICES

(% of individuals aged 12 - 65 in electrified area equipped with mobile telephone)



### QUALITY OF MOBILE COMMUNICATIONS

(% of individuals aged 12 - 65 in electrified area equipped with mobile telephone)



### **APPRECIATION OF 3G SERVICES**

### (% of individuals aged 12 - 65 in electrified area equipped with 3G Internet access; 2014)



### 4.3 General appreciation of the ADSL service

The ADSL Internet access is the service which shows the highest level of satisfaction for all of the criteria analysed.

### **APPRECIATION OF ADSL SERVICE**

(% of individuals aged 12 - 65 in electrified area equipped with fixed Internet; 2014)



### 5 SOCIAL NETWORKS

### 5.1 Frequency of social networks usage

The frequency of social network usage remains similar regarding gender (with 55% of daily use frequency for men and 53.7% for women). On the other hand, daily use of social networks is more popular in the urban area (60%) than the rural area (36.4%). By type of equipment, the mobile telephone comes fist for daily access to social networks.



### FREQUENCY OF SOCIAL NETWORKS USAGE

(% of Internet users aged 5-75 in electrified area during the last 3 months; 2014)

### **FREQUENCY OF SOCIAL NETWORKS USAGE** (% of Internet users aged 5-75 in electrified area during the last 3 months)



### 5.2 Daily use of social networks

The majority of Internet users access to social networks less than two hours per day on average, using all types of equipment. However, the time spent on social networks using a mobile telephone is longer than when using a computer.



### 5.3 The most popular social network

The Chat, the search for information and sharing photos or videos are the main uses of social networks. Facebook with 92.8% users and WhatsApp with 56.7% users remain the most frequently used networks by Moroccan Internet users.

### SOCIAL NETWORKS USED MOST OFTEN

(% of social network users aged 5-75 in electrified area)

### MAIN REASONS FOR USING SOCIAL NETWORKS

(% of social network users aged 5-75 in electrified area)



### 5.4 Criteria for using a social network

Free use is the main criteria for choosing social networks, followed by ease of use. Nevertheless, the loss of time remains the most significant obstacle for using a social network.



(% of social network users aged 5-75 in electrified area, 2014)

**BARRIERS OF USAGE** (% of individual's not using social network aged 5-75 in electrified area)

