# ACCESSIBILITY OF INFORMATION AND COMMUNICATION TECHNOLOGY BY THE NIGERIA SECURITY AND CIVIL DEFENCE CORPS IN SOUTH WESTERN NIGERIA

#### Andrew O. OKWILAGWE

## Mega EGBEREDU

Department of Library, Archival and Information Studies University of Ibadan, Ibadan

#### Abstract

The Nigeria Security and Civil Defence Corps (NSCDC) mandate is to develop structures and training strategies that would contribute to national security by using modern technology. However, in spite of the establishment of the NSCDC, crime rate has been increasing in Nigeria. This could be attributed to poor accessibility to ICT by NSCDC. Studies have been conducted on the Nigeria Police and the military with little attention given to security management by the NSCDC. This study, therefore, was designed to investigate accessibility to ICT as a determinant of security management by the NSCDC in South-western Nigeria. The study was hinged on the Path-Goal Theory. The study adopted the descriptive survey design of the correlational type. Stratified random sampling technique was used to select 939 personnel based on the cadres from the departments of Administration (260), Operations (488), and Intelligence/Investigation (191), in Zone 'F' command of the NSCDC, South-west Nigeria. Majority of the personnel served in the Operations Department (52.0%) while the Intelligence Department had the lowest (20.3%). Most personnel fall under the Inspectorate (38.0%) and the Corps assistant (27.3%) cadres respectively. Males represented 62.8%, while the females 37.2%. Majority of the personnel fall within the age range of 26-30 (55.3%) followed by 21-25 (28.2%). Level of accessibility to ICT by NSCDC personnel was on the average ( $\bar{x} = 2.19$ ); however, the ICT gadgets needed for core security duties ranked low. Computers ranked highest by the mean score  $(\bar{x} = 3.00)$  followed by mobile phones,  $(\bar{x} = 2.99)$  and laptops  $(\bar{x} = 2.95)$ , while CCTV (x = 1.91)and spy video sunglasses (x = 1.91) ranked low, among others. Accessibility r = .550\*) to ICT had significant relationship with security management by the NSCDC.

Keywords: ICT Accessibility, Security management, NSCDC, South-west, Nigeria.

#### Introduction

Security is indispensable in nation building. This is because a well secured nation guarantees protection and safety of the citizens who constitute the development process. There are easily recognisable diverse security problems confronting Nigeria. These are kidnapping, terrorism, vandalism, armed robbery, militancy, child trafficking, ritual killing and assassination, among others.

Security management which can also be referred to as crime management is basically concerned with the management of inherent issues that fuel and sustain criminalities in the society (Aremu and Ahmed, 2011). Security management in the context of this study entails steps taken by security agencies in safeguarding lives and property of the civil populace, which includes maintaining public order, enforcing the law,

information and intelligence gathering, as well as detecting, investigating, and preventing crime.

Surveillance technology plays an important role in security management. Surveillance is defined as any covert watching of people, places, and vehicles, usually undertaken by law enforcement agencies and private detectives to investigate allegations of illegal behaviour. These techniques can either be physical observation or electronic monitoring of conversations. (Heibutzki, n.d.). Observatory technique can also include electronic equipment such as CCTV cameras or bugging and interception of phone calls (Leighton and Maximino, 2014). Criminal investigation is also important in security management. O'Hara and O'Hara (1994) described criminal investigation as a science encompassing studying facts with a view to identifying, locating and proving the guilt of someone suspected to have committed a crime. A thorough investigation is bound to involve searching, evidence collection and preservation, interviews as well as different means of investigation.

In security management, intelligence gathering and crime prevention are crucial. While intelligence gathering is the process of collecting information (Collins English Dictionary, 2017), crime prevention according to English Oxford Dictionary (2017) involves adopting measures intended to decrease or stall criminal activity, especially by implementing programmes to deter potential offenders or to enhance the security of potential targets.

The Nigeria Security and Civil Defence Corps (NSCDC) is one of the security agencies mandated to ensure security of the people in Nigeria. The NSCDC is a paramilitary agency established to safeguard the civil populace under the Nigerian Government. In 1967 during the Civil War in Lagos, the NSCDC started as a voluntary organisation. The NSCDC was appropriated as a statutory security outfit by virtue of an establishing Act No. 2 of 2003 and as amended by Act 6 of 4 June, 2007, by the Federal Government under the administration of President Olusegun Obasanjo and brought under the supervision of the Federal Ministry of Interior. The NSCDC is divided into eight (8) zones, (Zones A-H), which cuts across the federation. The Zone 'F' Command of the NSCDC cuts across five (5) states in South-West Nigeria – Oyo, Ogun, Ondo, Osun, and Ekiti.

Information and Communication Technology accessibility is a term used to describe the extent of availability of ICT to all and sundry in a society. Accessibility is viewed as a situation where all derivable benefits and usage of the technology is achieved by users. Accessibility does not translate to usability. Accessibility is about making ICT available to all people irrespective of age, gender, and other related factors (Czerniewicz and Cheryl, 2005). Access to ICT is significant in the world principally because of the likely opportunities it can provide. Access to ICT encourages more opportunities as well as provides information to people, which can be used in decision making. Hence, age, income, gender, motivation, profession, location, skills/education, and perceived importance of ICT were identified as determinants of ICT access.

Security is fundamental need of all regardless of an individual's position or status in society. Therefore, to curtail crime to the barest minimum, the need for security agencies to have easy access to ICT tools and be able to utilise same to detect, prevent, and manage responses to such attacks for optimum result cannot be overemphasised. It is against this background that this study examined the relationship between ICT accessibility and security management in the Nigeria Security and Civil Defence Corps, Zone 'F' Command.

# Objectives of the study

The main objective of this study is to investigate the extent to which accessibility to Information and Communication Technology (ICT) could enhance security management by the Nigeria Security and Civil Defence Corps, Zone 'F' Command, in South-west, Nigeria. The specific objectives of the study are to:

- 1. describe the demographics of officers and men of the NSCDC Zone 'F' Command, in South-west, Nigeria
- 2. find out the extent to which ICT is accessible to officers and men of the NSCDC Zone 'F' Command, in South-west, Nigeria;
- 3. identify the ICT deployed for security operations by the NSCDC, Zone 'F' Command, in South-west, Nigeria, and
- 4. identify constraints to effective security management through the deployment of ICT by the NSCDC Zone 'F' Command, in South-west, Nigeria.

# **Hypothesis**

There is no significant relationship between ICT accessibility and security management by the Nigeria Security and Civil Defence Corps Zone 'F' Command, in South-west, Nigeria.

## Literature Review

Information and communication technology accessibility and security management Access to information and communication technology is significant in the world today principally because of the potential opportunities that it provides. It should be noted that having access to information and communication technology helps to expand choices made by people by providing more information, knowledge and opportunities. Access to ICT is the ability of officers and men of security agencies to have the right to use ICT gadgets and tools coupled with perspective and technical skills in its application in their day to day affairs to safeguard the populace. Alampay (2003) adopted "Capabilities Approach" of Amartya Sen's to the access and use of ICT. He submitted that usage of any good or innovation (in this case Information and Communication Technologies) is determined by access. Other significant factors which can also affect usage, application of a technology and value placed on a technology include choice, individual differences and capabilities. The United Nations Commission for Science and Technology for Development (UNCSTD) in Mansell et al (1998) posit that experience, skills and knowledge are critical components in the growth of information societies. These components are obviously capabilities that are needed to function effectively in today's information society. Hence, Alampay (2003) buttresses the fact that it is not such a leap to argue that CA can be applied to ICT.

Hence, age, income, gender, motivation, profession, location, skills/education, and perceived importance of ICT were identified as determinants of ICT access and usage. Security agencies perform a wide range of functions; hence, they need to have access to modern ICT tools and gadgets which would enhance their operations. The police according to Were, Gakure, Kiraithe and Waititu (2012) performs broad duties which include crime investigation, public order maintenance, traffic direction, patrolling to promote peace, security provision to state officials, among others.

Were et al., (2012) in their study to determine how availability and utilisation of resources impact performance of Police Force in Kenya identified some challenges affecting performance in the country's Police Force especially with respect to human capital management. In addition, six major categories of resources were suggested by Were et al., to include: financial resources, physical resources, human resources, technological resources, reputation, and organisational resources. According to them, "It was found that technology-context factors including integration, user friendliness, accessibility, efficiency, and vendor support can positively impact organisational adoption of HRIS. These technology-context factors can strengthen the business case for management to become committed to support HRIS adoption". They concluded that resources in the form of ICT have led to enhanced policing in other countries. In Nairobi for instance, they submitted that ICT is not utilised apart from the Police head office. Other assets such as phones and vehicles were found to be few. Resources however determine how quickly and proficiently officers will react when there are distress calls (Were et al., 2012). From Were et al's study, it is evident that the Nairobi Police Force had inadequate access to ICT tools and gadgets among others, which would have enhanced their security operations. This study however, is examining ICT accessibility as determinants of security management by the Nigeria Security and Civil Defence Corps.

## The importance of ICT in security management

For effective security management, ICT plays an important role. The Nigerian government, according to Adegoke et al., (2015) on a yearly basis spends millions of dollars, to acquire weapons and other related items to fight terrible crimes. However, the problem still persists, hence, the government should realise that physical combat alone cannot effectively control contemporary crimes, rather scientific approach is necessary through deploying hi-tech equipment for intelligence gathering and forensics (Adegoke et al., 2015). The researchers are also of the opinion that crimes that could have been controlled go totally unobserved as there are no effective surveillance and tracking tools. Murder cases stay unsolved since there are no reliable database, surveillance, tracking and forensic tools that could help in investigations. They however strongly believed that if ICT is properly utilised in the country, it will curtail crime rate and also help in investigation of crimes.

According to Azazi (2011) in Robert-Okah (2014), in order to arrest the menace of crime across the country, the Federal Government of Nigeria passed the anti-terrorism Act in 2011 to check terrorism, installed computer-based CCTV in some parts of Nigeria to enhance surveillance. The government also moved to provide physical measures with

a view to proactively arrest potential attacks before they are executed while also providing equipment and other facilities that will make the broadcast of security information through the mass media.

According to Reichert (2001), Chan (2001), and Harris (2007) in Byrne and Marx (2011-13), while highlighting efforts by formal security agencies, individual citizens and concerned groups, historical development of crime prevention strategies indicated technological innovations as a catalyst. A review by Goff and McEwen (2008) in Byrne and Marx (2011-2013) underscored the nexus between funding by the Federal Government and use of ICT by security agencies. Goff and McEwen (2008) in Byrne and Marx (2011-2013) indicated the importance of grants in assisting law enforcement agencies in the procurement and utilisation of technologies that support professional police operations citing Office of Community Oriented Policing Services (COPS) programme. Nestlel (2006) in Byrne and Marx (2011-2013) indicated that several large U.S. cities deployed CCTV cameras, including Boston, New York, Los Angeles, Chicago, and Newark New Jersey, and it was estimated that there were roughly 1 million CCTV cameras being deployed across the United States by year end 2006. In addition, billions of dollars were expended by China in 2006 in developing software capable of undertaking facial recognition to create a China national identification database. The technology empowered the police to recognise persons of interest captured during video surveillance (Klein, 2008).

Quarshie (2014) added that law enforcement agencies in Africa can use the social media to fight crime, as it helps in distributing information, and news of crime can rapidly spread across these networks. By sharing a surveillance camera image on social media, law enforcement agents may be able to get tips as to the identity of the perpetrator. Social media can also be used to share safety tips against crime. A consistent and harmonized approach supported by strong ICT security system is needed to fight crime in Africa (Quarshie, 2014).

According to Gottschalk (2007) in Hakan, Serdar and Bahadır (2013), to enhance the likelihood of generating any information that is of quality, the police make use of information technologies. While Eck (1983) in Hakan et al., (2013) submits that information technologies are important instruments of criminal investigations as they help in creating, storing, retrieving, transferring, and applying investigation-related information. Information technologies can aid in reducing the time committed to criminal investigation by automating some routine investigative tasks.

The latest innovations and implementations which enhance service delivery in policing bringing about effective job performance are GIS, crime mapping, biometrics, fingerprints, DNA research, facial recognition, speech recognition, social media policing, shotspotter detection system, and CCTV (Tombul and Cakar, 2015). Stuart (2013) states that the social media is vital in policing as it help in connecting with the general public. By utilising the social media, people in real time send and receive data as well as post pictures, documents and audio recordings that are useful in crime resolution. Community policing has been enhanced through the social media; the law

enforcement agents often maintain communication with communities and individuals who provide valuable information through such platforms. Boston Marathon bombings of 2013 highlighted the importance of social media in disaster management such as earthquakes, tsunamis, and riots etc. The apprehension of the culprits by Boston Police Department was largely due to the use of social media in sharing information with the community about the suspects (Tombul and Cakar, 2015). For pro-active policing solutions, ICT plays essential role. According to Tombul and Cakar (2015), in order to achieve successful policing, there is the need to closely follow the latest technological developments as well as apply same extensively in policing contexts.

Ngugi, Ngugi, Were and Titany (2012) carried out a study on factors that influence service delivery in Kenya Police Service, Nairobi. From the findings, investment in ICT knowledge and ICT skills were low as shown by a mean of 4.6, ICT infrastructure was also rated as poor with a mean of 4.0, while ICT policy was also rated as poor with a mean of 3.7. ICT was perceived as contributing more to service delivery in policing. From their findings, ICT was rated as the most significant factor. The study concluded that the Nairobi police service deployed ICT in its operations therefore, improving service delivery. Findings from the study also concluded that ICT knowledge and skills, ICT investment, ICT policy as well as ICT infrastructure were inadequate. However, it was suggested that more investment should be made towards staff development through training and retraining in the police service, which in turn would enhance staff productivity, increased understanding of the latest technology courses included in the curriculum, and realisation of the institution's goals and objectives.

#### **Theoretical Framework**

## The Path-Goal Theory

The theory adopted for this research is the Path-Goal Theory by Robert House (1996). The Path-Goal Theory merges goal setting and expectation by the organisation. It posits that the management of an organisation must help those they direct to attain their goals. It foists the responsibility of making sure their subordinates have the support and information required to achieve the goal set forth by creating a clear path and removing obstacles that stand in the way. Against this background, the adoption of ICT by the NSCDC is contingent upon the type of security threat, availability of infrastructure in the society (external), the personnel attributes and organisational policies (internal). It is when all these are present that effective security management can be achieved.

# Methodology

The descriptive research design was adopted for the study. The population of this study is made up of personnel of Zone 'F' Command of the Nigeria Security and Civil Defence Corps (NSCDC). Five Commands – Oyo, Ogun, Ondo, Osun and Ekiti – are in this Zone. The study utilised the stratified random sampling technique to select the personnel in the departments under study based on different cadres obtainable in the

service (i.e., Commandant Cadre, Superintendent Cadre, Inspectorate Cadre, and the Corps Assistant Cadre), this was followed by random selection of a proportionate sample of 10% of the personnel in each of the departments, so that each would have an equal chance of being selected.

The purposive sampling was used to select three departments out of the four Departments, namely Operations, Administrative, and Intelligence/Investigation Departments in each of the commands of the NSCDC. The sample size for this study was 1,059 personnel of the Zone "F" Command of the Corps representing 10% of the total population under study. This number cuts across all the cadres and rank structure.

This study made use of both primary and secondary sources of information. The primary data was obtained through the use of questionnaire and in-depth interviews. The secondary data was obtained through published and unpublished sources of information such as textbooks, journals, newspapers, magazines, and online materials. The data collected were analysed using descriptive statistics such as frequencies, percentages, mean and standard deviation for demographic variables in order to provide answers to the research questions while the Pearson Product Moment Correlation (PPMC) was used to test the hypotheses at the 0.05 level of significance.

## **Interpretation of Results**

A total of 1, 059 copies of the questionnaire were administered to officers and men of NSCDC Zone 'F' Command, and a total of 939 which represented 92% of the total number of copies of questionnaire returned were found usable for the analysis.

**Objective one:** The demographics of officers and men of the NSCDC Zone 'F' Command, in South-west, Nigeria

Table 1: Demographics of officers and men of NSCDC

Gender	Frequency	Percentage
Male	590	62.8
Female	349	37.2
Total	939	100.0
Age (Years)	Frequency	Percentage
< 20	21	2.23
21-25	265	28.2
26-30	519	55.3
31-35	50	5.32
36-40	69	7.35
41+	15	1.60
Total	939	100.0

Work experience (Years)	Frequency	Percentage
1-5	395	42
6-10	468	50
11-15	68	7.2
16-20	5	0.5
21-25	3	0.3
Total	939	100.0
Educational qualification	Frequency	Percentage
Ordinary National		
Diploma	177	18.8
Higher National Diploma	262	27.9
Bachelor's degree	358	38.1
Master's degree	112	11.9
Doctor of Philosophy	3	0.3
Others	27	2.9
Total	939	100.0
Command	Frequency	Percentage
Ondo	135	14.4
Osun	179	19.1
Oyo	208	22.2
Ogun	315	33.5
Ekiti	102	10.9
Total	939	100.0
Departments	Frequency	Percentage
Administrative	260	27.7
Operations	488	52.0
Intelligence/Investigations	191	20.3
Total	939	100.0
Cadre	Frequency	Percentage
Corps Assistant	256	27.3
Inspectorate	357	38.0
Superintendent	277	29.5
Commandant	49	5.2
Total	939	100.0

While there are 590 males representing 62.8%, the females constitute 349, which is 37.2%. Majority of the personnel fall within the age range of 26-30 (55.3%), while 468 (50%) of the personnel have 6-10 years work experience, 395 (42%) have 1-5 years work experience. While 177 (18.8%) of the personnel have an Ordinary National Diploma (OND), 262 (27.9%) have a Higher National Diploma (HND), 358 (38.1%) have a Bachelor's degree, and 112 (11.9%) have a Master's degree. Findings revealed that 14.4% of the respondents were from Ondo State Command, 19.1% were from Osun State Command, 22.2% were from Oyo State Command, 33.5% were from Ogun State Command while 10.9% were from Ekiti State Command. 27.7% of the respondents were staff of the Administrative Department, 52.0% were in the Operations

Department, while 20.3% were in the Intelligence/Investigations Department. The study indicated that 256 (27.3%) of the respondents were Corps Assistants, 357(38.0%) were Inspectors, 277(29.5%) were Superintendents, and 49 (5.2%) were Commandants.

**Objective two:** The level of accessibility to ICT by officers and men of the NSCDC Zone 'F' Command, in South-west, Nigeria

Table 2 is on the level of accessibility to ICT by officers and men of the NSCDC Zone 'F' Command, in South-west, Nigeria

Table 2: Level of accessibility to ICT by officers and men of the NSCDC

S/N	Items	Very	Low	Moderate	Not at all	Mean	S.D
		High					
1	Computers	328	379	139	93	3.00	.95
		34.9%	40.4%	14.8%	9.9%		
2	Mobile phones	483	152	111	193	2.99	1.21
		51.4%	16.2%	11.8%	20.6%		
3	Laptops	369	297	164	127	2.95	1.05
		39.3%	29.7%	17.5%	13.5%		
4	Email	308	345	146	140	2.87	1.03
		32.8%	36.7%	15.5%	14.9%		
5	Internet facilities	225	357	205	152	2.70	1.01
		24.0%	38.0%	21.8%	16.2%		
6	Television set	267	275	209	188	2.66	1.09
		28.4%	29.3%	22.3%	20.0%		
7	Photocopiers	215	295	221	208	2.55	1.07
	•	22.9%	31.4%	23.5%	22.2%		
8	Video camera	198	306	188	247	2.48	1.09
		21.1%	32.6%	20.0%	26.3%		
9	Scanners	197	259	261	222	2.46	1.07
		21.0%	27.6%	27.8%	23.6%		
10	Audiotapes	130	350	221	238	2.40	1.01
	1	13.8%	37.3%	23.5%	25.3%		
11	Multimedia	115	297	257	270	2.27	1.01
	projector	12.2%	31.6%	27.4%	28.8%		
12	Interactive radio	111	281	234	313	2.20	1.03
		11.8%	29.9%	24.9%	33.3%		
13	Landline phones	152	188	265	334	2.17	1.08
	1	16.2%	20.0%	28.2%	35.6%		
14	Camera pens	109	246	281	303	2.17	1.01
	1	11.6%	26.2%	29.9%	32.3%		
15	Fax machines	178	117	243	401	2.08	1.14
		19.0%	12.5%	25.9%	42.7%		

16	Wrist phones	86	228	282	343	2.06	.99		
		9.2%	24.3%	30.0%	36.5%				
17	Radios (walkie-	107	171	291	370	2.02	1.02		
	talkies)	11.4%	18.2%	31.0%	39.4%				
18	Video sunglasses	68	168	312	391	1.91	.94		
	_	7.2%	17.9%	33.2%	41.6%				
19	CCTV	103	143	255	438	1.91	1.02		
		11.0%	15.2%	27.2%	46.6%				
20	Teleconferencing	72	172	285	410	1.90	.96		
		7.7%	18.3%	30.4%	43.7%				
21	Electronic	95	143	261	440	1.89	1.01		
	whiteboards	10.1%	15.2%	27.8%	46.9%				
22	Crime maps	89	160	233	457	1.87	1.01		
	_	9.5%	17.0%	24.8%	48.7%				
23	Language	79	137	249	474	1.81	.98		
	translators	8.4%	14.6%	26.5%	50.5%				
24	In-car camera	65	155	244	475	1.80	.95		
	systems	6.9%	16.5%	26.0%	50.6%				
25	Graffiti	57	160	264	458	1.80	.93		
	(Surveillance)	6.1%	17.0%	28.1%	48.8%				
	cameras								
26	Infrared	61	128	225	525	1.71	.93		
	(Thermographic)	6.5%	13.6%	24.0%	55.9%				
	cameras								
27	Thermal imagers	55	111	241	532	1.67	.90		
		5.9%	11.8%	25.7%	56.7%				
28	Speed enforcement	70	92	202	575	1.63	.94		
	(safety) camera	7.5%	9.8%	21.5%	61.2%				
29	Automatic License	61	106	181	591	1.61	.92		
	Plate Recognition	6.5%	11.3%	19.3%	62.9%				
	(ALPR)								
	GRAND MEAN = 2.19, N=939								

Findings (Table 2) revealed that computers  $(\overline{x}=3.00)$  ranked highest by the mean score rating and was followed by mobile phones,  $(\overline{x}=2.99)$ , laptops,  $(\overline{x}=2.95)$ , among others while video sunglasses,  $(\overline{x}=1.91)$ , CCTV,  $(\overline{x}=1.91)$ , teleconferencing,  $(\overline{x}=1.90)$ , electronic whiteboards,  $(\overline{x}=1.89)$ , crime maps,  $(\overline{x}=1.87)$ , and so on ranked low. However, the grand mean  $(\overline{x})$  of 2.19 summarises the result that NSCDC personnel have average level of accessibility to ICT.

Objective three: ICT tools deployed for security operations by the NSCDC, Zone 'F' Command, in South-west, Nigeria.

From Table 2, it is evident that majority of the respondents claimed very high access to computers ( $\overline{x}$ =3.00), mobile phones (mean =2.99), laptops ( $\overline{x}$ =2.95), and email ( $\overline{x}$ =2.87),

while others such as video sunglasses  $(\overline{x}=1.91)$ , CCTV  $(\overline{x}=1.91)$ , electronic whiteboards,  $(\overline{x}=1.89)$ , and crime maps  $(\overline{x}=1.87)$  were rated low and in some cases, not available. Even though the level of accessibility was rated average, accessibility to sophisticated ICT gadgets essential in security management such as the CCTV, camera pens, wrist phones, walkie-talkie, crime maps, graffiti cameras, and so on were relatively low, and in some cases, not available.

Objective four: Constraints to effective security management through the deployment of ICT by the NSCDC Zone 'F' Command, in South-west, Nigeria

Table 4: Constraints to effective security management through the deployment of ICT

S/N	Items	SA	A	D	SD	Mean	S.D	
1	Inadequate funding to provide	234	465	151	89	2.90	.88	
	ICT equipment	24.9%	49.5%	16.1%	9.5%			
2	Erratic power supply	267	380	178	114	2.85	.97	
		28.4%	40.5%	19.0%	12.1%			
3	Organizational factors	174	505	181	<i>7</i> 9	2.82	.83	
	(restrictions)	18.5%	53.8%	19.3%	8.4%			
4	High cost of ICT tools	163	440	225	111	2.70	.89	
		17.4%	46.9%	24.0%	11.8%			
5	Personal factors (perceived	153	479	174	133	2.69	.91	
	benefits)	16.3%	51.0%	18.5%	14.2%			
6	Lack of access to the ICT	153	453	222	111	2.69	.88	
	gadgets	16.3%	48.2%	23.6%	11.8%			
7	Lack of training of officers and	169	367	245	158	2.58	.97	
	men of the Corps by the	18.0%	39.1%	26.1%	16.8%			
	management of Corps							
8	Complexity of ICT factors (ease	102	408	301	128	2.52	.86	
	of use)	10.9%	43.5%	32.1%	13.6%			
9	Not ICT-complaint	102	381	322	134	2.48	.87	
		10.9%	40.6%	34.3%	14.3%			
10	Lack of expertise on the use of	121	317	336	165	2.42	.92	
	ICT tools	12.9%	33.8%	35.8%	17.6%			
11	Inability of officers to operate	105	290	382	162	2.36	.89	
	ICT gadgets	11.2%	30.9%	40.7%	17.3%			
12	Low level of education	100	299	367	173	2.35	.90	
		10.6%	31.8%	39.1%	18.4%			
13	Lack of interest among officers	104	271	397	167	2.33	.89	
	and men of the Corps to adopt	11.1%	28.9%	42.3%	17.8%			
	the use of computers and other							
	modern information technology							
	gadgets for operational							
	efficiency							
	Grand Mean = 2.59, N=939							

Some of the constraints to effective security management as indicated in Table 4 include the following: inadequate funding to provide ICT equipment, ( $\bar{x}$  =2.90) ranked highest by the mean score rating and was followed by erratic power supply, ( $\bar{x}$ =2.85), organizational factors (restrictions), ( $\bar{x}$  =2.82), high cost of ICT tools, ( $\bar{x}$  =2.70), personal factors (perceived benefits), ( $\bar{x}$  =2.69), lack of access to ICT gadgets, ( $\bar{x}$  =2.69), lack of training of officers and men of the Corps by the management of Corps, ( $\bar{x}$  =2.58), complexity of ICT factors (ease of use), ( $\bar{x}$  =2.52), not ICT-complaint, ( $\bar{x}$  =2.48), lack of expertise on the use of ICT tools, ( $\bar{x}$  =2.42), among others.

**Hypothesis:** There is no significant relationship between ICT accessibility and security management by NSCDC

Table 5 showed the relationship between ICT accessibility and security management by NSCDC.

Table 5: Relationship between ICT accessibility and security management by NSCDC

Variable			Mean	Std.	N	r	P	Remark
				Dev.				
ICT Accessibility		56.6028	12.9489					
			25 0050	< <b>₹</b> 000	939	.550*	.000	Sig.
Security	Management	by	35.0958	6.7989				
NSCDC								

Sig. at .05 level

Findings revealed that there was a positive significant relationship between ICT accessibility and security management by NSCDC, the coefficient of correlation showed that 'r' equals .550, and the level of significance was less than .05 (r = .550\*, N = 939, P < .05). It was observed from the result that accessibility to ICT enhanced security management by NSCDC. Therefore, the null hypothesis was rejected.

# **Discussion of Findings**

Research question was on the demographics of officers and men of the NSCDC, Zone 'F' Command. As indicated in Table 1, the demographic information showed that there were 590 males in the NSCDC, Zone 'F' command representing 62.8%, while the females were 349 (37.2%). However, it should be noted that in military and paramilitary services, the women are also regarded as men, so the gender grouping observed here is solely for research purpose. Majority of the personnel fall within the age range of 26-30 (55.3%) followed by 21-25 (28.2%), and 36-40 (7.35%). Findings on work experience showed that while 468 (50%) of the personnel had 6-10 years work experience, 395 (42%) had 1-5 years work experience and the remaining 8% of the personnel accounted for 11-15 years work experience, 16-20- and 21-25-years work experience. The reason for this was because the Corps became a full-fledged paramilitary service in 2003 and majority of the respondents were enlisted into the service as regular recruits after the agency was regularised as a statutory paramilitary outfit. On the educational level of NSCDC personnel, while 177 (18.8%) of the personnel had an Ordinary National Diploma (OND), 262 (27.9%) had a Higher

National Diploma (HND), 358 (38.1%) had a Bachelor's degree, and 112 (11.9%) had a Master's degree. The level of education of the NSCDC personnel could be rated as high. The study also found out that 14.4% of the respondents were from Ondo State Command, 19.1% were from Osun State Command, 22.2% were from Oyo State Command, 33.5% were from Ogun State Command while 10.9% were from Ekiti State Command. 27.7% of the respondents were staff of the Administrative Department, 52.0% were in the Operations Department, while 20.3% were in the Intelligence/Investigations Department. The Operations Department carries out core security duties and this accounted for more personnel in the department.

In the NSCDC, there are four cadres namely the Commandant cadre which is the highest cadre comprising the management staff, followed by the Superintendent cadre, and the Inspectorate and Corps Assistant cadres respectively. While the Commandant and the Superintendent cadres are referred to as officers, the Inspectorate and the Corps Assistant cadres are referred to as men. 256 (27.3%) of the respondents were Corps Assistants, 357(38.0%) were Inspectors, 277(29.5%) were Superintendents, and 49 (5.2%) were Commandants. The commandant cadre constitute those in the management level; they give directives to the other cadres. The inspectorate and the corps assistant cadres are majorly on field operations, while being supervised by the superintendent cadre. From the study, it is evident that age, gender, educational qualification, years of work experience, department, and cadres will determine the level of ICT accessibility by officers and men of the NSCDC. This is supported by Alampay (2003) who stated that age; income, gender, motivation, profession, location, skills/education, and perceived importance of ICT were identified as determinants of ICT access.

Research question two assessed the level of ICT accessibility by officers and men of the NSCDC. As indicated in Table 2, the findings showed that NSCDC personnel have average level of accessibility to ICT. Research question three was on ICT tools deployed during operations and findings revealed that majority of the respondents claimed very high access to mobile phones, computers, laptops, and email, while others such as scanners (metal detectors), camera pens, wrist phones, radio, video sunglasses, CCTVs, and crime maps were rated low and not available. Even though the level of accessibility was rated average, accessibility to sophisticated ICT gadgets essential in security management such as the CCTV, camera pens, wrist phones, walkie-talkie, crime maps, graffiti cameras, and so on was relatively low, and in some cases, not available. However, mobile phones have been very helpful in recording incidences. These findings agreed with the study of Were et al., (2012) and Kumar's (2012) study that officers lack adequate access to ICT in their daily operations. From this study, it has been revealed that officers and men of the NSCDC lack adequate access to essential ICT gadgets which would have enhanced their security operations.

Research question four identified constraints to effective security management through the deployment of ICT by the NSCDC, and some of the constraints identified include the following: inadequate funding to provide ICT equipment, erratic power supply, organizational factors (restrictions), high cost of ICT tools, personal factors

(perceived benefits), lack of access to the ICT gadgets, lack of training of officers and men of the Corps by the management of Corps, among others. When officers lack access to the required ICT tools and training on how to deploy them in daily operations, it will have an effect on service delivery. Also, if there is no constant supply of electricity, it could hamper operations as well as the high cost of the required ICT tools.

The result of the hypothesis showed that the null hypothesis formulated was rejected indicating that there was a strong positive relationship between accessibility to ICT and security management by the NSCDC. In other words, accessibility to ICT enhanced security management by the NSCDC. However, inadequate access to ICT could adversely affect security management.

#### Conclusion

Findings from the study revealed that age, gender, educational qualification, years of work experience, department, and cadres would determine the level of ICT accessibility by officers and men of the NSCDC. In addition, NSCDC personnel had average level of accessibility to ICT. However, accessibility to ICT gadgets required in core security duties such as the CCTV, surveillance camera, walkie-talkie, camera pen, video sunglasses, among others were found to be low and not available, in some instances. Accessibility to ICT ensured security management and there was a positive significant relationship between ICT accessibility and security management by NSCDC, Zone 'F' Command. Inadequate funding to provide ICT equipment, erratic power supply, high cost of ICT tools, lack of access to ICT gadgets, lack of training of officers and men of the Corps by the management of Corps, among others, were identified as some of the constraints to effective security management by the NSCDC.

#### Recommendations

Based on the conclusion of the study which revealed inadequate access to ICT gadgets deployed for core security operations, the management of the Corps should allow the personnel of the Corps to have adequate access to ICT to improve operational efficiency and service delivery; this would enhance security management in the long run. In addition, an ICT policy framework should be developed by the NSCDC in line with national ICT policies, such as policies on procurement, use and maintenance of ICT equipment. And if there is a policy framework already, it should be made available in all NSCDC formations across the country.

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