# Survey on Electrical Counterfeiting in Africa

**March 2015** 

# **Executive Summary**

The purpose of this survey was to identify the most counterfeited electrical products and brands in Africa, as well as, their main roads of entry and distribution. The consequences for people's safety and health, the African economies, were also investigated. The main laws on electrical counterfeiting, and how they are being implemented nationally, as well as, recommendations with regards to organizing awareness campaigns were the other topics visited. The survey took place from December 2013 to March 2014 in eleven African countries: Cameroon, Republic of the Congo, Democratic Republic of the Congo (DRC), Ghana, Guinea, Ivory Coast, Kenya, Nigeria, Tanzania and Uganda. More than 500 «high level» officials and professionals were contacted by 37 African investigators, specifically hired and trained for the survey. They answered a total of 8.185 questions, that were processed to obtain statistical data in order to create a corpus of information -quantitative and qualitativeon electrical counterfeiting. This had never been realized before neither "in" nor "about" Africa at such a scale.



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# Background and Introduction

The Survey on Electrical Counterfeiting in Africa conducted in eleven African countries (Cameroon, Republic of the Congo, Democratic Republic of the Congo (DRC), Ghana, Guinea, Ivory Coast, Kenya, Nigeria, Tanzania, and Uganda) from December 2013 until March 2014 allowed for the opening of a new frontier in the mapping of world flows concerning electrical counterfeits. Indeed, the goal of this survey, -commissioned by Schneider Electric-, was to establish the list of the most counterfeit electrical products and brands in Africa and their roads of entry in order to be distributed and sold in Africa. The consequences that such a large scale smuggling generates for people's safety and health, and on the African economies, were also investigated; as well as the major legislations on electrical counterfeiting, and how they are being implemented nationally, in order to help fight against this issue. Then, a number of recommendations were drawn, including possible awareness campaigns that could be devised to meet the needs for better information on electrical counterfeiting in most African countries.

More than 500 people in high places, including Ministers, Minister Cabinet officers, Heads of Police and Customs, Heads of Fire Brigades, and Heads of Emergency Services in Hospitals, were contacted by 37 African investigators (selected among 650 applicants), specifically hired and trained for the survey. The survey brought back 8.185 validated answers to questions that were asked during a four month period of field investigation. This report is the result of the statistical processing of all the data collected during the survey.

For the survey purposes, we divided the countries into two distinct linguistic zones which are called "French speaking countries" and "English speaking countries" in the text. It was indeed necessary to separate the eleven sampled African countries of the survey in two linguistic groups since the electrical standards as well as brand names or the historical flows of trade are not at all the same depending on which part of Africa, and on which linguistic zone, these African countries belong to. Once results were obtained in one linguistic zone, it was possible to make comparison with the other linguistic zone and, then, to have an overview of the results for the eleven African countries in order to draw general conclusions.

#### • The First Survey Ever Realized in Africa About Electrical Counterfeiting

This Survey on Electrical Counterfeiting in Africa is the first to be realized at such a scale. Surveys on counterfeiting were already conducted at national level in some of the African countries of the survey<sup>1</sup> but never in eleven African countries at once, with such a different historical background and such a different level of development.

When respondents refused to answer some questions or did not know, their returned questionnaire was accepted only if it had at least 75% of validate answers. Otherwise, the questionnaire was taken out of the survey.

#### Detailed Socio-Professional Categories Set for the Survey

Four big categories of respondents were set in order to have the largest possible sample of people interviewed in all of the social and professional categories established for the survey. Those categories are generic because for some of them there are many possible qualification in the same category that are called, for the purpose of the survey: "Officials", "Electricians", "Retailers" and "Others", the latter includes different types of professional categories such as firemen, doctors, lawyers, transporters, contractors, teachers, architects, experts from trade or consumer associations representatives, etc.

<sup>&</sup>lt;sup>1</sup> See notably in Kenya: "The Study to determine the severity of the counterfeit problem in Kenya", Kenya Association of manufacturers, 2012; in Nigeria: "Electrical Safety", Foundation International; in Tanzania: Fair Competition Commission, Tanzania Bureau of Standards, Confederation of Tanzanian industries report; in Uganda: East African policy on anti-counterfeiting, Anti-counterfeiting goods bill for Uganda, Seatini Uganda, Sehurd literature on counterfeits (17/05/2014); in Cameroon: Groupement Inter patronal du Cameroon (GICAM) report 2013 - National Import statistics, Customs statistics.

The task of the investigators consisted in interviewing a minimum of ten relevant people involved in or knowledgeable of the consequences of electrical counterfeiting in their country. Among them, there were "high level" officials involved in fighting electrical counterfeiting locally, law enforcement officers, judges, as well as "high ranking" policeman, Head of Custom Services, Heads of fire fighters brigades or Heads of emergency units in hospitals, in addition to retailers and resellers of electrical goods or industry professionals (installers, electricians, etc.):

- "Officials": Ministers, Directors of Administration, Head of Custom and Police, expert of
  official Bodies and Agencies in charge of fighting Electrical Counterfeit, etc.
- "Electricians": Heads of national Electrical Companies, engineers, installers
- "Retailers": owners of conventional 'and unconventional shops as well as market retailers in the eleven involved countries
- "Others": all the sub-categories in industry, construction, medical, judicial, firemen, Consumers Associations, Trade Associations, etc.

#### Description of the Sampling of the Respondents

As shown in <u>Table 1</u> below, the detailed number of respondents by socio professional categories is much bigger for the French speaking group of the surveyed countries than for the English speaking group. This is mainly due to Kenya, and to a lesser degree Nigeria, for which the return of questionnaire were lower than what had been initially set as a target.

Noticeably, the fact that none of the investigators from the English speaking group could benefit from technical training played a role. Therefore, their performances were much lesser that those of their counterparts in the French speaking zone of Africa, as the figures below show.

Table 1
Respondents'
Distribution in the
Sample by Categories

Respondents by Zone						
Category	English Speaking Countries	French Speaking Countries	Total			
Electricians	16	42	58			
Officials	37	43	80			
Retailers	21	29	50			
Others	21	46	67			
Total	95	160	255			

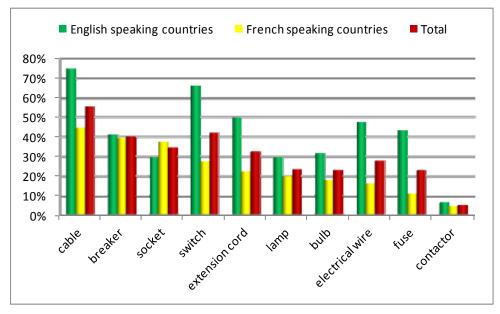
# 1: Electrical Products and Counterfeit Electrical Goods in Africa

The main objectives were to assess the situation in the eleven countries of the survey in order to establish the nature and the scope of electrical counterfeiting in Africa. To do so, respondents were asked to provide "real" figures and statistics -if any- or to estimate how many counterfeit electrical goods are in circulation, and what this illicit trade represents in volume and in value for the local economies. Another objective was to measure the knowledge that different socio professional categories of respondents have concerning specific counterfeit electrical goods; those being counterfeit products, counterfeit brands or both. Finally, a third objective was to assess the perception of damage caused by counterfeit electrical goods in everyday life or in the framework of one's activities.

#### 1. What are the Most Counterfeit Electrical Products in Africa?

As seen in Figure 1 below, cables, switches and breakers came first with respectively 56%, 42% and 40% of the total of answers. These three items scored even higher in the English group of countries (respectively 75%, 66% and 41%), although the respondents in Anglophone Africa chose extension cords (49%), electrical wires (47%), and fuses (43%) as being the most counterfeit items after cables, switches, and before breakers. In the French group of countries, sockets (38%) came in third position after breakers and before switches, while they were less frequently mentioned in the English speaking countries.

Figure 1
Most Quoted
Counterfeit Electrical
Items in Africa (%)



<u>Question:</u> What are the main counterfeited electrical goods that you know of in your country? <u>Method:</u> Keywords searched through respondent's answer.

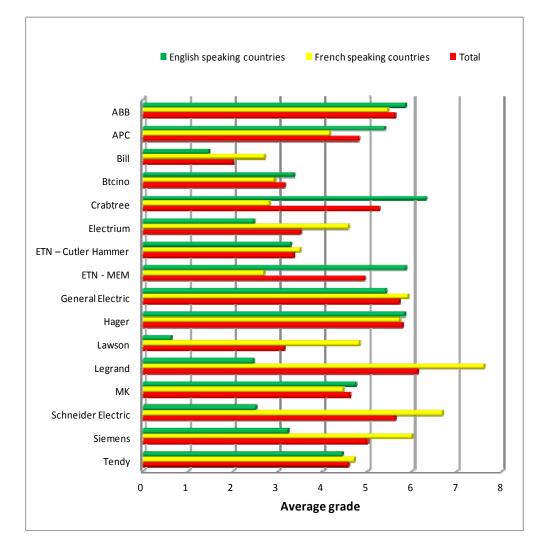
These discrepancies can be explained by different type of norms requiring different type of electrical items. Most respondents agreed that all electrical goods have counterfeit versions, especially when it comes to smaller devices which are easier to counterfeit. "Electricians", "Resellers", "Officials" and "Others" gave a higher percentage to "cable" as being the most counterfeit electrical item in Africa.

The other electrical products mentioned "spontaneously" by the respondents, though not as frequently, were: energy saving bulbs (accounted for as bulbs), small motors, pocket radios, remote controllers, DVDs, TVs, high voltage surge protector, LED lighting.

#### 1.1: Most Counterfeit Brands

Respondents were also given a list of 17 brands of well-known electrical companies being considered as the most counterfeited in the world. They were asked to rank them from 1 to 10 (1 being the most counterfeited and 10, the least counterfeited) and, when possible, to give approximate percentage and value (in local currency). As shown in Figure 2 below, the five brands scoring at the highest position (longer red tubes) for Africa were: Legrand, Hager, General Electric, Schneider Electric and ABB. They were followed by Crabtree, Siemens, ETN-MEM, APC, MK, Tendy, Moeller, Electrium, ETN-Cutler Hammer, Btcino, Lawson, and Bill (in that order).

Figure 2
Electrical Brands
Seen as Most
Counterfeit in Africa
(in Grades)



<u>Question:</u> In the following list, what would you say are the most counterfeit brands? <u>Method:</u> Average grade of all valid answers given by respondents for each of specified brands broken down by zones.

As Table 2 below shows, the overall ranking for Africa changed completely when considering each group of countries separately. In the English speaking group, a brand like Crabtree climbed to the first place; while brands like Schneider Electric or Legrand, widely known everywhere else in the world, disappeared from the top five positions (respectively 25%).

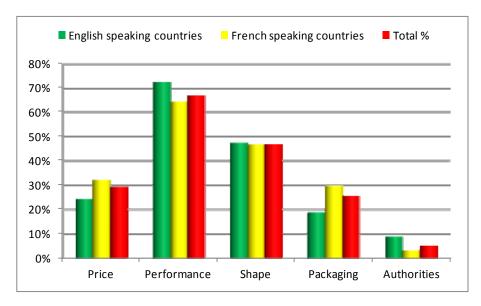
Table 2
Ranking of the Five
Top Brands in English
and French Speaking
Africa
(in % of answers)

Brand French Speaking Countries		Brand	English Speaking Countries
1. Legrand	76%	1. Crabtree	63%
2. Schneider Electric	67%	2. ETN - MEM	59%
3. Siemens	60%	3. ABB	59%
4. General Electric	59%	4. Hager	58%
5. Hager	57%	5. General Electric	54%

#### 1.2: How to Recognize Electrical Counterfeits?

As shown in Figure 3 below, the poor performance of counterfeit electrical items, as well as, their ostensible different shape scored the highest followed by the price (counterfeits are usually much cheaper) and the packaging (or absence of packaging) that the counterfeit electrical products are coming in.

Figure 3
Criteria Used in Africa
to Recognize Electrical
Counterfeits



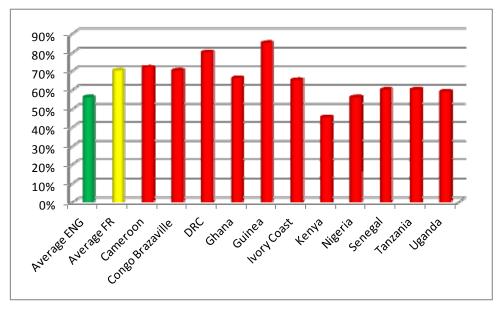
<u>Question:</u> How do you find out when electrical goods are being counterfeited? Method: Keywords search through respondent's answers.

Respondents mentioned "seizures", "market surveys", and "monitoring" or "control" as the way authorities are taking action to fight against this illegal business. Most "Retailers", for example, agreed that the raids conducted by the authorities are the best indicator that one will find counterfeit electrical goods in a given market, at a given time. Differences in price between "fake" and "genuine" were also pointed out, especially for products bought in the streets. When sold "too cheap", -most of the respondents argued-, it means that they are counterfeit. Furthermore, respondents from both the French and English speaking group of countries quoted "errors on labeling", "typos", and "misspelled brands" in the packaging as another good indicator to recognize counterfeit electrical products.

# 2. How Much Do Counterfeit Electrical Products Weight in the African Economies and Which Kind of Damage Do They Cause?

Evaluating the scope of electrical counterfeiting on the African economies was the most difficult question of the survey. For example, lots of respondents in Guinea or in the two Congo made statements such as: "absolutely all electrical products are fake items in our markets" or "counterfeits are everywhere in the economy". Even inside the same linguistic zone, there were some exaggerations depending on the country of origin of the respondents and its socioprofessional category. But, on average, estimates concerning the impact of electrical counterfeiting on the economy were much higher in the French group of African countries (70%) than in the English group (56%).

Figure 4
Weight of Electrical
Counterfeiting i
n French
and English Africa
(in %)



<u>Question:</u> What is your estimate for the total volume of electrical goods being counterfeited in your country?

Method; Based on average of answers given per country.

As for the value (expressed in local currency), there was not enough data to make comparisons. However, based on the few estimates that were given, revenues from electrical counterfeiting were never less than "one billion per month" for all those, traders, retailers, and sometimes officials or politicians, who are profiting from the sales of counterfeit electrical goods. For example, in Kenya, the estimate was: "everywhere from 5 millions to 30 billions!" In Nigeria, it jumped from "1, 5 billion to 40 billions". In Tanzania the overall estimate reached "hundreds of billions". The same is true in the French speaking countries of Africa: in Congo B, revenues from selling electrical counterfeit products are estimated to be at least "100 millions per week" (400 millions per month). In Guinea, they reach the "billion" and are in between "hundreds of millions and tens of billions" in Cameroon.

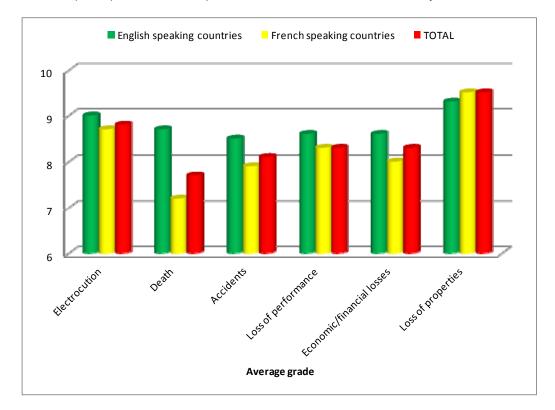
#### 2.1: Main Consequences of Using Counterfeit Electrical Goods

The other big challenge of the survey was to evaluate the level of awareness on the damages that the use of counterfeit electrical products can cause. As shown in Figure 5 below, the evaluation of the biggest damage resulting from the use of counterfeit electrical goods emphasized the "loss of properties" both in English and French speaking countries of the survey. Further evaluations by the two groups of countries showed no significant difference in the way damages previously identified by the respondents were graded. For example, "loss of performance/competitiveness" was mentioned by an average of 63% of the respondents far above "death" (35%), electrocutions (49%) or even accidents (51%) that may result from the use of electrical counterfeit products.

<sup>&</sup>lt;sup>2</sup> The case of Kenya needs to be discussed further since the sample for this country may not have been large enough to reflect the impact of electrical counterfeiting on the economy.

But they were all evaluated at similarly high levels as the grades given everywhere in Africa show. In other words, for the respondents in both English and French speaking countries of the survey, the use of electrical counterfeit goods was firstly associated with bad consequences for the economy. While being aware of their eventual lethal consequences, respondents to the survey emphasized the private and public losses for the African countries of such an illicit trade and widespread presence of fake products in all the sectors of the economy.

Figure 5
Damages
Occasioned
by Electrical
Counterfeit
Goods in Africa



<u>Method:</u> Average grade of all valid answers given by respondents for each of specified type of damage/cosequence broken down by zones.

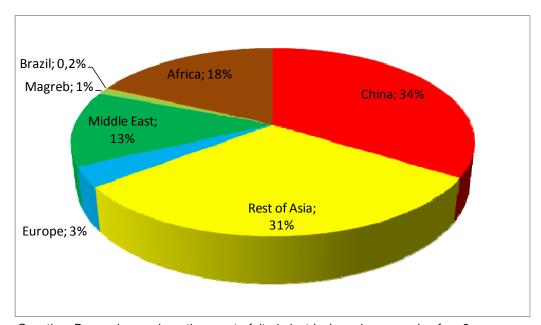
# 2: Origin and Destination of Imported Counterfeit Electrical Goods

Figure 6
Main Regions of
Origins for Imported
Counterfeit Goods
Entering Africa
(in %)

The purpose, here, was to establish the origins and the geographical roads for the entry in the eleven countries of the survey of counterfeit electrical goods. In other words, the task is to discover from where the imported counterfeit electrical goods entering Africa are mainly coming from

#### 1. Where Are Imported Electrical Counterfeits Coming From?

As shown in Figure 6, China was quoted as being the main source of electrical counterfeit goods in Africa in 34% of the answers. Sometimes the respondents selected China, Taiwan and Hong Kong which is also China. The rest of Asia (31%) came second, followed by Africa (18%) and the Middle East (13%). European countries (Belgium, France, Germany, and Spain) did not represent a big chunk (only 3% of the answers). This figure felt as low as 0, 2% in the case of Brazil, the only country from South America mentioned, and was also minimum (1%) in the case of Maghreb (mainly Algeria and to a lesser degree Morocco).

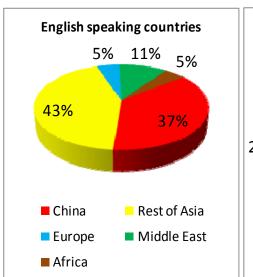


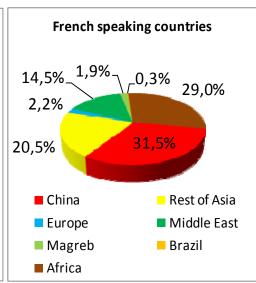
<u>Question:</u> Do you know where the counterfeited electrical goods are coming from? <u>Method:</u> Number of valid answers in percentage given by respondents pointed out where the counterfeit goods are coming from.

# 1.1: Countries of Origin of the Counterfeit Electrical Goods Entering Africa

The importance of "Rest of Asia" is due to Malaysia as being the most often quoted country of origin for counterfeit electrical goods entering Africa (4% of the total answers). This is even more the case when considering the English group of countries alone. In this case, Malaysia accounted for 8% of the answers; while China with 37% of the answers remained the absolute number 1. In the group of French speaking countries, Malaysia dropped to only 1%, while China accounted for 32% of the answers.

Figure 7
Main Regions of Origin
in English and French
Speaking Africa
(in %)







Nigeria was quoted by all other respondents in the countries of the survey as one of the main source for electrical counterfeits sold in their country, but not a single African country was chosen by Nigeria as being a main provider of counterfeit electrical goods on its territory.

versus 24%). One reason may be statistical since numerous African countries were mentioned by the respondents of the survey as being the countries of origin for the counterfeit goods sold in their own country. In comparison, there were fewer Middle Eastern countries mentioned. Therefore, statistically, much more answers were related to Africa than to the Middle East as shown below:

Despite the acknowledged importance of Dubai as being one of the main places for transiting electrical counterfeit goods to Africa, Middle Eastern countries still fell behind African countries in the answers when considering French speaking countries of the survey separately (15%)

- Middle Eastern countries quoted by the respondents in the 11 countries of the survey were: Iran, United Arab Emirates (Dubai), Kuwait, Lebanon, Turkey, and Saudi Arabia.

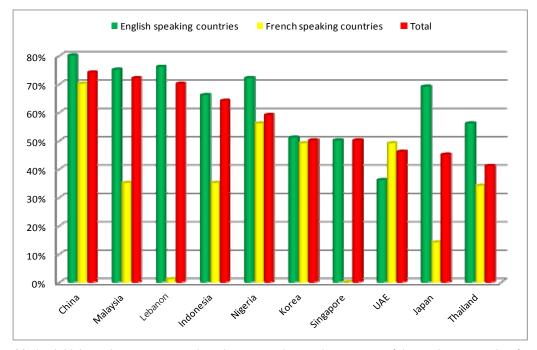
#### 1.2: Countries of Origin by Estimated Volumes

English and French speaking countries of the survey diverged quite a lot as how they saw Africa being the main providers for counterfeit electrical items to Africa (5% versus 24%). This was not the case anymore when comparing estimate volumes given by the respondents. Then, results for Africa turned out to be not only very significant but also much closer (65% versus 50%).

Finally, the number of answers for Malaysia turned out not to be very significant. As Figure 8 below shows, this was very much the case in the English speaking countries of the survey (75%), but at a much lesser degree in the French speaking group (35%). Another very interesting finding is Lebanon appearing to be the third main provider of electrical counterfeit items to Africa (behind China and Malaysia). Interestingly enough, the majority of answers came from the English speaking countries (76%) in the case of Lebanon with an abnormal low level of answers on the part of the French speaking countries (1%). What was truly surprising is Nigeria (59%) taking the fifth place in front of Asian countries as important as Korea (50%), Singapore (50%), Japan (45%) and Thailand (41%).

Those countries are worldly known for their capability of manufacturing electrical products, being genuine or fake products. Results put Nigeria before Dubai (46%) in terms of estimate volumes of fake electrical products re-exported to Africa.

Figure 8
The Top Ten Providers
of Electrical Counterfeit
Goods to Africa
(In %)



<u>Method:</u> Volume in percentage given by respondents where counterfeit goods are coming from (top ten countries of origin).

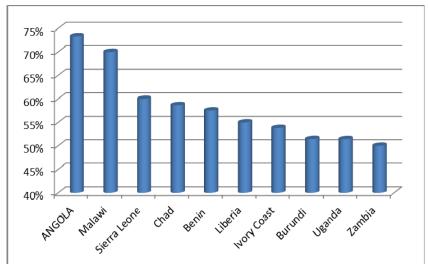
# 2. Are Imported Electrical Counterfeits Staying or Do They Transit Somewhere Else in Africa?

The results to that question returned no less than 30 possible target countries, where imported counterfeit electrical goods are being re-exported after transiting on their territory, without being sold locally. With the exception of Nigeria, one can say that almost all the countries that import counterfeit electrical goods in Africa are targets, as much as their neighbors when re-exporting those fake electrical goods.

#### 2.1: Target Countries for Imported Electrical Counterfeit Goods

Respondents were asked to identify target countries and give percentage of re-exported counterfeited goods when possible. As shown in Figure 9 below, Angola and Malawi came first followed by Western and Central African countries like Sierra Leone, Chad, Benin, Liberia, Ivory Coast, and then Burundi, Uganda, Zambia. Ivory Coast and Uganda were among targets countries of their neighbors.

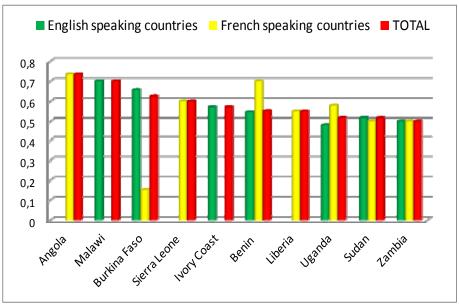
Figure 9
The Top 10 "Target"
Countries
(in %)



Method: Average volume in percentage of re-exported goods given by respondents.

Finally, when considering the main target countries by linguistic group of countries of the survey as shown in Figure 10 below, one can see that some countries are mainly targeted by the French speaking group (Angola, Sierra Leone, Liberia) in terms of volume of re-exports; while others are mainly targeted by the English speaking group (Malawi, Ivory Coast. For the countries that are "targets" of both groups (Burkina Faso, Benin, Uganda, Sudan, and Zambia), the levels of re-export of counterfeit electrical products are quite similar except for Burkina Faso that has bigger re-exports from Ghana or Kenya than from French speaking countries; or for Benin where re-exports of fake electrical goods coming from Cameroon are bigger than the ones coming from Nigeria or Ghana.

Figure 10
Preferred Destinations
by French and English
Zones of the Survey
(in %)



<u>Method:</u> Average volume in percentage given by respondents as to the target countries of reexport.

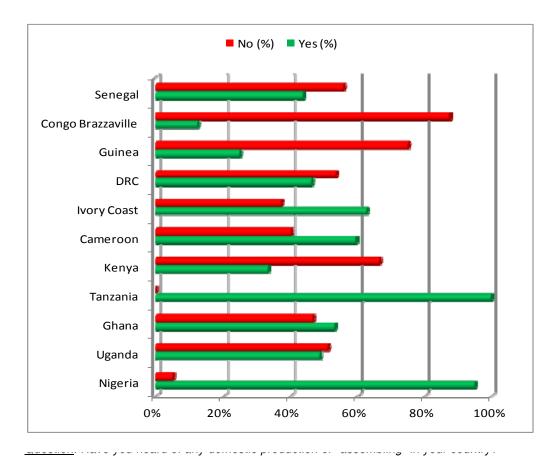
### 3: Domestic Production of Electrical Counterfeits

Most African countries do not have a big enough industrial basis to be able to manufacture electrical goods. Nevertheless, it was important to check if there was any domestic production of counterfeit items, some of them being the product of assembled genuine spare parts coming from somewhere else in order to produce a fake electrical item locally. Electrical products can also be counterfeit when they are "rebranded" or "repackaged" in order to be sold as new, while they have already been used.

# 1. Domestic Production or Assembling of Counterfeit Electrical Goods

As shown in Figure 11 below, the countries with the highest percentage of "Yes" for domestic production or "assembling" of counterfeit electrical goods were identified. Senegal, DRC, Kenya and Congo Brazzaville were said to have the least production of such countefeit products. In Tanzania and Nigeria, the number of answers for "No" was very low. It was also the case in Ivory Coast and Cameroon, and to a lesser degree in Ghana where the "yes" and the "no" almost matched. In Congo Brazzaville, Kenya, DRC and Senegal, the "No" answers were dominant confirming that these countries did not have the ressources for a domestic production, even of counterfeit electrical goods.

Figure 11
African Countries
Manufacturing or
re-Assembling
Counterfeit Electrical
Products
(in % of



Method: Answers of respondents broken down by country, in % of "yes" and "no".

As shown in Table 3 below, when asked to give an estimate on how much they thought these five most counterfeit electrical items, manufactured or re-assembled domestically goods, represented in the overall sale of homemade counterfeit goods, respondents gave the following answers:

Table 3
Estimate Sale
of Domestically
Manufactured/
Re-Assembled Most
Counterfeit Electrical
Items (in %)

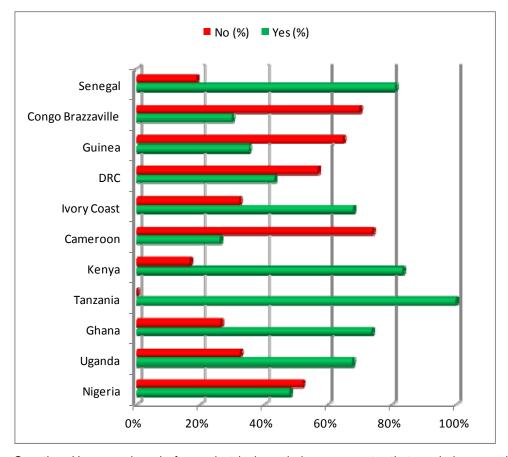
Name of Item	English speaking countries	French speaking countries	Total
Control switches	34%	63%	45%
Electrical receptacles	13%	59%	46%
Extension cords	22%	61%	50%
Circuit breakers	32%	70%	42%
Wire and cable	44%	30%	40%

However, a very few number of respondents believed that domestically manufactured or reassembled wire and cables accounted for a big part of the local sales, especially when comparing with the results for the sale of electrical counterfeits coming from somewhere else.

#### 2. Rebranding or Repackaging of Used Electrical Items

As shown in Figure 12 below, the countries with the highest percentage of "Yes" for rebranded or repackaged counterfeit electrical items turned out to be Tanzania, Kenya and Senegal followed by Ivory Coast, Ghana and Uganda. Unlike for domestically manufactured or reassembled counterfeit electrical goods, Nigeria scored much lower here, as well as Cameroon. DRC, Guinea and Congo Brazzaville were said not to produce such fake items.

Figure 12
Rebranding and/or
Repackaging of
Counterfeit Electrical
Items in Africa
(in % of respondents)



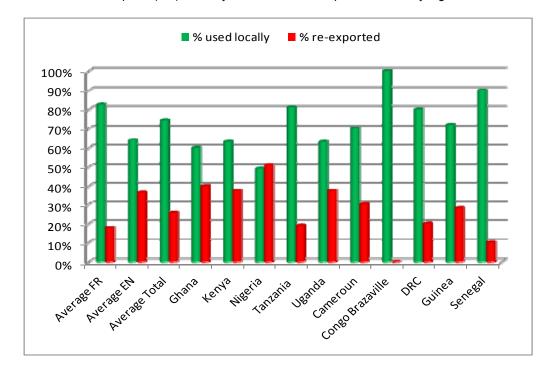
<u>Question</u>: Have you heard of any electrical goods in your country that are being repackaged and resold as new products, whereas they were used?

<u>Method</u>: Answers of respondents broken down by country, in % of "yes" and "no".

As shown in Figure 13 below, these domestic counterfeits can also be re-exported. The survey indicated that 73% of those goods were used locally and 27% were re-exported. In the French speaking group of countries of the survey this percentage of "used locally" averaged 80% versus 63% in the English group. But the percentage of re-exportation amounted to 20% in the French speaking group versus 37% in the English speaking group.

One can see that Nigeria, -to this extent-, is the culprit (50% of re-exports) followed by Ghana (40%), Kenya (38%) and Uganda (38%). French speaking African countries of the survey also re-export homemade production, although to a lesser degree: Cameroon (30%), Ivory Coast (30%), and Guinea (29%) followed by DRC (20%) and Senegal (10%). Tanzania, in the English group, is the only country which re-exports is so low (18%) while Republic of the Congo has almost none re-exports (1%) contrary to its local consumption that is very high.

Figure 13
Local Consumption
and re-Exportation
of Homemade
Counterfeits (in %)



<u>Question</u>: Which percentage of the domestic production of illicit and/or counterfeited electrical goods is being used locally and which percentage is being re-exported? <u>Method</u>: Averages of answers given by respondents.

As shown in Table 4 below, when re-exported, these fake homemade electrical products took many destinations. Indeed, no less than 26 African countries were identified by the respondents to the survey as being target countries. The countries which arrived largely ahead are Guinea, Niger, and Ghana as being the main targets followed by Cameroon, Sudan and Uganda. With the exception of Chad and Rwanda, -that received more homemade re-exported goods from French speaking African countries-, the levels were identical in most of the other countries when looking at the different linguistic zones of the survey.

Table 4

Preferred Destinations for Homemade Electrical Counterfeits in Percentage of Total Local

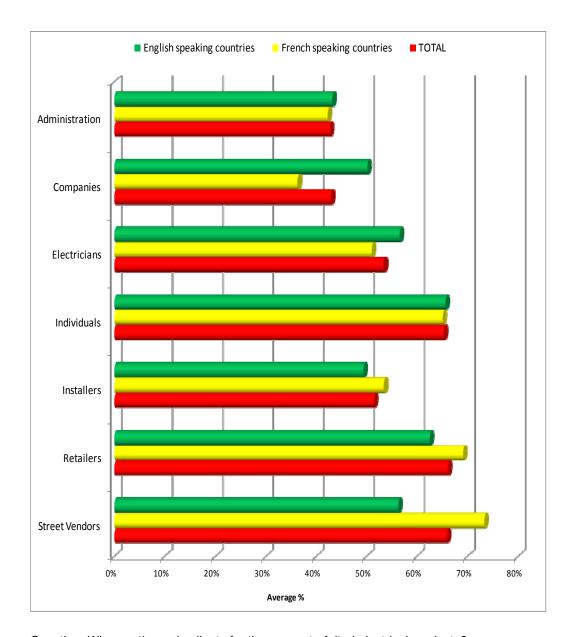
Country of Origin  Country of Destination	Kenya	Ghana	Nigeria	Tanzania	Uganda	Cameroon	DRC	Ivory Coast	Guinea
Benin			21%						
Burkina Faso								21%	
Burundi				18%			6%		
Cameroon			50%						
Central African Rep.						23%			
Chad			9%			40%			
Congo Brazzaville							20%		
DRC	30%			40%	50%	26%			
Gabon						25%	20%		
Gambia			15%						
Ghana			62%						
Guinea			13%			43%			
Ivory Coast		23%							
Kenya				5%					
Malawi				30%					
Mali								21%	5%
Mozambique				10%					
Niger			84%					2%	
Other countries						10%			
Rwanda	20%			11%	20%		22%		
Senegal			5%						
Sierra Leone									10%
Sudan					40%				
Togo		20%	14%					5%	
Uganda	40%			38%					
Zambia				5%					

<u>Question:</u> If re-exported where do locally produced counterfeits go? <u>Metho</u>d: Averages based on respondent's answers per country.

### 4: Where Can Counterfeits Be Bought in Africa

Once established what the most sold counterfeit electrical goods are in Africa, and what damage they may cause, one still needs to discover who the "clients" for those fake electrical products are. As shown in Figure 14 below, the respondents put "Street vendors", "Retailers" (respectively 66%) and "Individuals" (65%) in the three top position followed by "Electricians" (53%) and "Installers" (52%). "Companies" and "Administration" (both at 43%) came far behind.

Figure 14
Main Customers for
Counterfeit Electrical
Goods in Africa (in %)



<u>Question:</u> Who are the main clients for those counterfeited electrical products? <u>Method</u>: Average percentage given by respondents in volume of purchase for each category of identified clients for counterfeit electrical goods. Lots of names of main markets were listed for the first time in Africa, although some of these places are already known locally for selling counterfeit electrical items "openly". What was never done before is the complete mapping of all the black market places that are selling electrical counterfeits in French and English speaking cities in Africa. As shown in Table 5 below, respondents in DRC quoted as being a single place "les marchés de Kinshasa", without naming any market specifically. Therefore, this generic name which means "all Kinshasa markets" accounted for more than two third of the sales.

Table 5
Well-Known Markets
In Africa Selling
Electrical Counterfeit
Items

Country	Markets		
Camaraan	MBOppi 53%		
Cameroon	Marche de Douala 62%		
Congo Prazzavillo	Ouenze 51%		
Congo Brazzaville	PotoPoto 32%		
Ghana	Sunyani Central Market 80%		
	Marche Niger 65%		
Guinea	Madina 79%		
	Matoto 70%		
Ivory Coast	Marche Adjame 70%		
	Gikomba Market (Nairobi) 25%		
Kenya	Nyamakima (Nairobi) 50%		
	Kamukunji (Nairobi) 50%		
	Alaba Market 73%		
Nigeria	Balogun Market Lagos 73%		
	Trade Fair Ojo 63%		
RDC	Marchés de Kinshasa 78%		
RDC	Marche Bayaka 30%		
	Marche Petersen 30%		
Senegal	PackLambaye 80%		
	Marché du Port 75%		
Tanzania	Kariakoo 80%		
Tanzania	Posta 20%		
Uganda	NakaseroMarket 84%		

<u>Method:</u> Average percentage of the volume of counterfeit goods given by the respondents that are being sold at idendified market places in the eleven countries of the survey.

# 4: What Level of Awareness and How to Raise it?

The main purpose, here, was to establish whether any raising awareness campaign against electrical counterfeiting has been put forward by national authorities. If so, we needed to find out in which of the eleven countries of the survey this was the case, what lessons were learnt. As an Honorable Minister of Trade and Industry in Tanzania, who agreed to be interviewed for the survey, declared: "only an alliance between manufacturers, authorities and consumers can help curb electrical counterfeiting."

# 1. What Does the Survey Say About Law Enforcement and Legal Protection in AfricaToday?

#### in English Speaking Africa:

- The official bodies in charge of fighting electrical counterfeiting are well established and, therefore, acknowledged by people in countries like Ghana, Nigeria and Kenya.
- There are quite a lot of actions taken by those countries in order to seize and destroy counterfeit goods or arrest offenders. However, the scope of counterfeiting is so great that even arrests cannot stop it.
- The "changing of the laws" and "more punitive measures" against electrical counterfeiting are the solutions favored in the sampled countries to curb this surge. "Empowering existing agencies", "allocating more financial support and human resource", "reinforcing controls at the borders and other favorite entry points", as well as "raising public awareness" were seen as the best ways to achieve this goal.

#### in French Speaking Africa:

- A better organization of the (electrical) sector, -in addition to a change in mentalities-, were emphasized in the French speaking African countries as well as all the other elements judged necessary to implement change: "law enforcement", "protection", "public awareness", "fight against corruption", "more training", "more funding", "civic education", "agencies' cooperation", "stiffer/tougher penalties", "borders control", etc.
- When anti-counterfeiting laws are mentionned in Ivory Coast, Cameroon, DRC and Senegal, they never display any "specifics" concerning electrical products. Therefore, there is a big confusion on how to react on the part of those who are victims of counterfeiting.
- "Raising public awareness" was the favorite demand for change in Ivory Coast, Cameroon, DRC and Senegal as well as more certification on the electrical imported products that, according to most respondents, could lead to a better organization of the (electrical) sector.

More generally, there are big demands for additional means in order to improve law enforcement in the field in most of the 11 countries of the survey. With the exception of Guinea, all countries also asked for "better trained men/women in the field".

#### 2. Which Actions Do You Undertake to Warn About Counterfeits?

As shown in Table 6 below, to the question: "What Do You Do, Personally, When You Find Counterfeit Electrical Products?", the answers (summarized below in English) are a reason for hope. Indeed, with very few exceptions (Uganda, Republic of the Congo, and DRC), respondents were far from renouncing to take action. Either they refused to buy or they returned the counterfeit goods to the sellers. Their first reaction (of protest), they said, was to inform people around them of the bad quality of the products they had just bought. This means that if the proper structures are in place, they could easily take legal actions or file complaints about counterfeit/defective material.

Table 6
Respondent's Actions
When Confronted With
a Counterfeit Product

Countries	Answers from the Respondents
	English Speaking African Countries
Ghana	Respondents say, they will report to the police, to the Ghana Standards Bureau or to the Ghana Fire Service.
Kenya	Most "Officials" said, they will inform the manufacturer so that "he" can lodge the complaint with the Anti-Counterfeit Agency. Other people said, however, they do not take legal action.
Nigeria	They will call the helpline of the Standard Organization of Nigeria (SON)
Tanzania	They will report to the police and/or to the brand owner so that the counterfeit products are seized and destroyed.
Uganda	Most people say they "do nothing" and use them. Even if they know these counterfeit products are of a lesser quality (). They do it, mostly for price reasons.
	French Speaking African Countries
Cameroon	Most of the respondents say, they just throw the counterfeit product away; and inform those around. But they also regret that there's no structure where to file formal complaints about counterfeit/defective material.
Congo Brazzaville	Respondents say that they buy counterfeits because they're "cheap". They do so even if they have to change the products every few months.
DRC	For most respondents, there's "nothing to be done" other than dealing with it.
Guinea	They will refuse to buy and will inform people around. But most of the respondents do not know how to file a formal complaint or where.
lvory Coast	Most respondents say they will deal directly with the seller/retailers, and not with the authorities.
Senegal	They will return the counterfeit products to the seller, whether it's a shop or a wholesale retailer

#### 3. What to Do Next to Increase the Level of Awareness?

#### 1.1: National Campaigns to Counter Electrical Counterfeiting

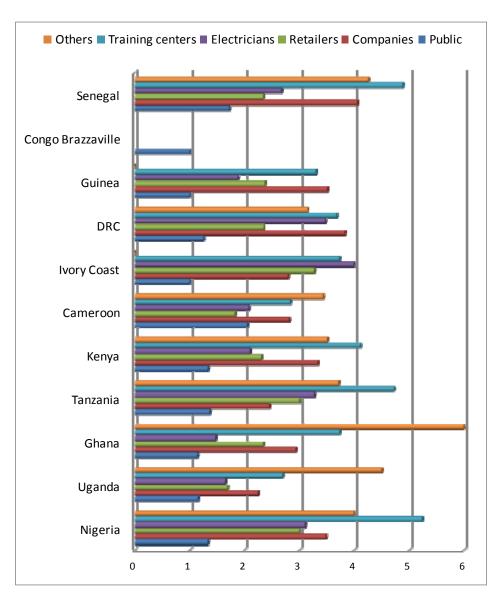
Respondents were asked to name national or international campaigns in their countries aiming at raising awareness among the public regarding counterfeiting. They did it mostly in the countries where the acknowledgement for such campaigns was higher. Actions taken by official bodies to increase the level of information not only for the general public, but for custom or police were also taken into consideration. However, in order to stop the ever increasing selling of electrical "fakes" on African markets, a bigger involvement of the companies that manufacture electrical goods is required.

#### 1.2: Who Should Be the Main Target?

When asked if they think it is a good idea to organize a campaign on "How to Counter Electrical Counterfeiting" in their country, respondents to the survey said "Yes" at an overwhelmingly majority of nearly 95%. The respondents thought such a campaign could be very useful in order to "raise public awareness", "limit the nefarious effects of electrical counterfeit", and "save human lives". Few voices rose, however, to say that such a campaign will have no purpose since the people are still too poor in Africa. And, therefore, they will continue to buy counterfeit electrical goods because they are cheap!

As Figure 15 below shows, in Cameroon, Ghana, and Uganda respondents chose, -as their first choice-, a target that was not listed among the five possible, but concerned "Others". "Training Centers" which, here, means esentially "vocational centers", were also mentioned as being among the first targets in almost all the countries of the survey except in Ivory Coast, DRC, and Guinea. Interestingly enough, "Public" was chosen the least as a possible target. In other words, respondents to the survey did not believe that a campaign of information and raising awareness against electrical counterfeiting should be addressed to a large public in general, but that "Companies" were a much better target to this end in Africa. This was especially true in the group of English speaking countries (almost all countries) in addition to Senegal. In Ivory Coast, respondent emphasized more "Electricians" who are, after all, the first concerned by the sale of electrical counterfeits in Africa. Indeed, more focused targets as "Training centers" were thought to be a better choice for such a campaign in order to be able to explain the technical complexity of counterfeit electrical products, the genuine and the fake.

# Figure 15 Main Targets For a National Campaign to Raise Awareness (in Grades)



<u>Question:</u> In the following list, who is (or should be) the main target for a campaign? <u>Method</u>: Average grade of all valid answers given by respondents to identified target group for a National Campaign to Raise Awareness broken down by countries of the survey.

#### Who are the "Others"

A big majority of respondents to the survey chose "Others" as either their first target for a campaign of information on electrical counterfeiting (Cameroon, Ghana, and Uganda); or it was selected as the second most important target (Nigeria, Tanzania, Kenya, DRC, and Senegal). In the 28 answers out of 432 in the English speaking countries, these "others" were mainly "contractors", "individuals", "media" and "custom". In the 21 answers out of 549 in the French speaking countries, they were mainly "public administration" and "media". The necessity to add the media to the list of possible target for a campaign of information on electrical counterfeiting seems quite obvious. However, to add "street" vendors" (individuals) and "officials" (public administration, custom, etc.) in addition to contractors means that, for the respondents to the survey, those categories are the ones to be mostly in need for information and conscience awareness campaigns concerning the (bad) consequences of electrical counterfeiting on the people safety, and on the economy.

# Executive summary

# Main findings of the survey as far as counterfeit electrical products and brands are concerned

## Concerning the main "products" and "brands" of electrical counterfeits that one may found in Africa:

- Cables, breakers, sockets, switches, extension cords, lamps, bulbs, electrical wires, fuses, and contactors are the ten most counterfeit electrical products in Africa (in that order).
- Legrand, Hager, General Electric, Schneider Electric and ABB were identified (in that
  order) as being the most counterfeit brands in Africa among seventeen widely known
  brands. Furthermore, the electrical items considered as being the most counterfeit in
  Africa belong to: ABB, Hager, Legrand, Siemens, and Schneider Electric or to more
  specific brand like Ingelec (in that order).

## Concerning the capacity of the African professionals and other categories to recognize counterfeit electrical products:

- All the categories of respondents (and not only "Electricians" and "Retailers", but also
  "Officials and "Others") said they are "knowledgeable" about counterfeit electrical
  products. But asked for more technical training and vulgarization on how to recognize
  counterfeit items "at first sight".
- "Poor performance" was the first criteria chosen by the respondents to explain how they
  recognize electrical counterfeits followed by "shape", "price" and "packaging". "Actions
  taken by the authorities" were also mentioned as an important factor of raising
  awareness that there are counterfeits for sale on the markets.
- Even though African "Electricians" and "Retailers" said they know how to recognize "simple" counterfeit electrical products, they want manufacturers of "big brands" who produce more complicated electrical products to teach them how to distinguish "fake" from "genuine".

## Concerning the scope of counterfeiting, and the damages that counterfeit electrical goods may occasion on the economy as well as on the health and safety of the people:

- French speaking African countries sampled in the survey estimated that the scope of counterfeiting in their economies was at a higher level than their counterparts in the English speaking countries, except for Ghana. Respondents in Guinea, DRC, Cameroon, Congo B, Ivory Coast or Senegal, in the French group, were the ones to say (in that order) that the use and/or the selling of counterfeit electrical goods is the most widespread.
- They also all pointed out that the main consequence of using counterfeit electrical products in Africa is economical. The fire outbreaks and/or corporal harms like electrocution, accidents and death came in second position. Therefore, they said fearing more the loss of properties and competitiveness that may result from fire outbreaks than electrocution, accidents or even death.

## Unlike what was thought before, there are African countries which manufacture electrical counterfeit products or make "re-assembling" of spare parts locally:

- Tanzania, Nigeria and Ivory Coast are the biggest counterfeiters for such an illicit production of electrical counterfeit items made in Africa. This mainly concerns: extension cords, electrical receptacles, wire and cables, circuit breakers and control switches.
- Tanzania, Kenya and Senegal. While considered as a champion for domestic manufactured or re-assembled counterfeit electrical goods, Nigeria is far behind when it comes to refurbishing already used products.
- These "homemade" counterfeit electrical goods are being sold mainly in local markets, as
  well as in specific shops. "Street vendors", however, are seen as being a main source of
  distribution for those lower quality goods both in English and French speaking African
  countries.

#### Concerning the countries of origin for all those counterfeit electrical items:

- China remains the main source of electrical counterfeit goods entering Africa (75% of the answers) followed by the rest of Asian countries. African as well as Middle Eastern countries were also mentioned as countries of origin, at a much bigger proportion than European countries or Maghreb. South American countries were the least quoted.
- The English speaking group emphasized more Asian countries in addition to China as
  the main sources of imported counterfeit electrical goods to Africa; while respondents in
  the French speaking group pointed out more African countries in addition to China.

#### The case of Nigeria and Malaysia could be singled out:

- Imported counterfeit goods in Nigeria were said to come mainly from Asian countries
  and, in no cases, from any other African country. In addition to China, Malaysia, and to a
  lesser degree Japan and Hong Kong, were said to be the main providers. Dubai, also,
  was seen as an important source of transiting electrical counterfeit goods before they
  enter Nigeria.
- After China, Malaysia turned out to be the most often quoted country of origin for the imported counterfeit electrical goods entering Africa. Estimates for the volumes of electrical counterfeit goods exported to Africa coming from Malaysia were said to be as big as those coming from China.
- Outside China and the rest of Asian countries, the surveys established that Lebanon, Nigeria and Dubai, in that order, were the three "bigger" providers of counterfeit electrical goods to Africa.

#### The other African transiting countries are:

- In Africa, main target countries to re-export counterfeit electrical goods are to be found in the vicinity. Countries like Ivory Coast or Uganda also became targets of their neighbors in turn.
- Ghana and Tanzania, in the English speaking group, Guinea, Republic of the Congo and DRC, in the French speaking group, were said to be the most important for the volume of counterfeit goods transiting through their territory.

#### Main target countries in Africa and from Africa for re-exporting imported goods:

- Cameroon and DRC are targets for themselves. This is because counterfeit electrical
  goods entering in the country are being re-exported to other linguistic enclaves (English
  speaking Cameroon) or other federal provinces, as Kivu in DRC.
- Angola, Sierra Leone, and Liberia are main targets for re-exported counterfeit electric goods coming from the French speaking countries of the survey.
- Malawi and Ivory Coast are mainly targeted by the English group.
- Others are targeted by both groups with similar levels of re-exports, except for Burkina Faso and Benin, which receive more re-exports coming from Ghana or Kenya (Burkina Faso) and from Cameroon (Benin) than the opposite.

# Likewise, the survey established that twenty six African countries are main targets for reexported domestically/locally produced electrical counterfeit goods:

- Among them, Guinea, Niger and Ghana are largely ahead followed by Cameroon, Sudan and Uganda.
- Republic of the Congo is the only African country of the survey supposedly using the quasi totality of its homemade production of electrical fakes with no re-export at all
- Nigeria has many target countries in Africa, but is itself the target country of no other African country.
- Nigeria is estimated to re-export half of its domestically/locally produced counterfeit electrical products to other African countries.

#### Conclusion

For the first time in Africa, an assessment of the situation regarding counterfeiting of electrical products is available. The most counterfeit products, their consequences on the economy and people's lives, their market share, their supply flows whether they are imported or produced locally and their main clients are henceforth identified.

This picture of reality based on the direct field experience of interviewees from different socio professional categories and perpectives was the necessary first step to any initiative aiming at fighting more broadly against counterfeiting of electrical products.

Based on these results, the first conclusion is that counterfeiting of most common electrical products is widely spread in all African countries, representing 40% to 80% of their markets. At such a scale, as interviewees of the survey stated, the negative economical impact is the first consequence both for the countries (considering the impediment for development, costs of damages or lack of revenues from taxes...) and manufacturers (considering the unbeatable competition counterfeiting represents or the weakening of market prices).

However, the situation is well apprehended by all stakeholders of the sector as all professionals have been struggling against counterfeiting for a very long time, from origin to distribution, the networks are known; impacts are well identified and professionals are mainly calling for two major shifts.

The first one is expected from authorities through reinforcement of legal protections and actions against counterfeiters. For example, we registered many calls for stiffer borders controls, especially when imports come from countries identified in this survey as supplying more than 60 % of counterfeits. They also wish to see more repression against counterfeiters (through increased seizures, destructions or sentencing) targeting distribution network such as those identified in the survey. In some countries, new laws against counterfeiting could also be promulgated to reinforce the legal basis of such actions.

The second shift is expected from main manufacturers and brands of the sector. Interviewees call for a **better coordination between manufacturers to raise awareness through targeted campaigns.** And the survey has identified **three priority audience** categories:

- Electricians, contractors and vocational centers:
   As installers or future-installers of electrical products, this audience is at the forefront to deal with counterfeiting.
- Main end-users like companies and administrations:
   As primary "victims" of counterfeits, they are also a priority audience for such campaigns.
- Media:

Training and teaching media about the role and importance of electrical components in people's daily life seems obvious as they are the most capable of vulgarizing and diffusing the information to the greater number.

Whether professionals may buy counterfeits because of a lack of awareness on their dangers or unsufficient knowledge about how to recognize them or which are the right distribution networks, such campaigns seem indeed necessary.

Their objective would be to demonstrate that financial losses caused by malfunctionning counterfeits will always be greater than the price of a genuine electrical component. Not to mention legal reponsibilities that one could face in the case of corporal damages caused by counterfeits that they have willingly or unwillingly bought or installed.

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- Cameroon: Groupement Inter patronal du Cameroon (GICAM) report 2013 National Import statistics, Customs statistics.

#### **Useful links on Electrical Counterfeiting:**

- On Google: http://bit.ly/16Z96kz
- On Wikipedia: http://fr.wikipedia.org/wiki/Journ%C3%A9e mondiale anti-contrefa%C3%A7on
- International & governmental associations:

http://www.minefe.gouv.fr/sdfervices/rap10/100412rapunifab.p http://www.interpol.int/Crime-areas/Trafficking-in-illicit-goods-and-counterfeiting/Eventshttps://www.youtube.com/watch?v=PgQ-ySvEYyY

#### Tanzania:

http://www.ewura.go.tz/newsite/index.php/2012-03-07-08-18-03/overview http://www.competition.or.tz/ http://www.competition.or.tz/fcc\_files/public/ANTICONTERFEIT-AUGUST%20%202013-ENG.pdf http://www.ippmedia.com/frontend/index.php?l=59210 http://allafrica.com/stories/201305211026.html

#### South Africa:

http://www.instrumentation.co.za/42886n http://www.iol.co.za/business/business-news/counterfeit-electrical-parts-pose-a-large-risk-1.1509019#.UfJPfY30HDk http://e4electricalknysna.com/cbi-electric-counterfeit-products/ http://www.engineeringnews.co.za/article/counterfeit-electric-equipment-in-sa-threatens-lives-2012-07-13

#### Kenya:

http://www.constructionkenya.com/2877/cable-firm-unveils-system-to-curb-counterfeits/ http://www.kam.co.ke/index.php/press-releases/129-press-release-on-the-anti-counterfeit-bill http://erepository.uonbi.ac.ke:8080/handle/123456789/3986 http://www.standardmedia.co.ke/m/story.php?articleID=2000087570&story\_title=Firm-unveils-countrywide-training-for-technicians http://allafrica.com/stories/201302112026.html

#### Ghana:

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#### Uganda

http://corporateforeignpolicy.com/africa/counterfeits-killing-ugandan-industries

#### Other Resources:

http://www.iec.ch/about/brochures/pdf/conformity\_assessment/IEC\_Counterfeiting\_brochure\_LR.pdf http://www.iec.ch/about/brochures/pdf/conformity\_assessment/Fighting\_product\_piracy\_presentation\_w\_notes.pdf http://www.schneider-electric.us/sites/us/en/support/product-support-resources/counterfeiting/counterfeiting.page http://www.havocscope.com/category/counterfeit-goods/ http://ec.europa.eu/internal\_market/iprenforcement/docs/contrafake09/harris\_en.pdf http://www.counterfeit-kills.co.uk/ki/index.php?page=home https://www.google.com/url?sa=t&rct=i&q=&esrc=s&source=web&cd=4&cad=rja&ved=0CFMQFjAD&url=http%3A%2F%2Felectrical.th eiet.org%2Fwiringmatters%2F46%2Fcounterfeiting.cfm%3Ftype%3Dpdf&ei=d0\_yUdLDNInUtQa4slClAg&usg=AFQjCNGpEoi2fhcWBzcn85CY7wgbMv Sg&sig2=7tgeS5FDi7H 4-6o6cVwjg&bvm=bv.49784469,d.ZGU http://www.fluke.com/fluke/usen/community/fluke-news-plus/ArticleCategories/RD/The-Fight-Against-Counterfeit-Electrical-Products.htm http://anticounterfeitingforum.org.uk/counterfeiting.aspx http://thecounterfeitreport.com/product\_details.php?product\_id=350 https://www.google.com/url?sa=t&rct=j&g=&esrc=s&source=web&cd=12&cad=rja&ved=0CD4QFjABOAo&url=http%3A%2F%2Fwww.eaton.com%2Fecm%2Fidcplq%3FldcService%3DGET\_FILE%26dID%3D915839&ei=UlbvUceCMoLWPZzSqMqK&usg=AFQjCNG7XO aton.com%zFedrm%zFidcpig%3FidcService%3DGET\_FILE%zbdiD%3D915839&et=DibyUcec.MoLWPZZSgMgR&usg=AFQLORG
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http://www.icc-ccs.org/news/359-counterfeit-electrical-goods-are-shocking

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