

REPORT OF BURKINA FASO ON REGULATION SITUATION IN NON-IONIZING RADIATION

INTRODUCTION: The Burkina Faso is situated to the center of West-Africa in buckle of Niger. Its surface is 274 200 km². Its population is estimated more than 14 million INSD 2006.

The Burkina Faso is being developed country. The Country knows a boom of usage of electromagnetic field since 2000. That is materialized by the strong installation of the antennas of the radios and the television, the installations of mobile phone antennas.

However, the electromagnetic field exploitation meets too many social problems particularly in telecommunication domains. Regularly, the Authority of Regulation of the Electronic Communications and the National Authority for Radioprotection and Nuclear Safety (ARSN) receive the complaints from the population living vicinity of telecommunication antennas. The complaints rest essentially on sanitary questions connect to the electromagnetic field.

Unfortunately the regulation texts on the establishment, regulation, controls of the electromagnetic sources aren't adopted yet.

To confront this situation of legal empty, the ARSN has undertook some initiatives aiming to get the regulation dispositive.

ARSN has contacted the International Commission on Non-Ionizing radiation protection (ICNIRP) and the World Health Organization (WHO) in order to build a regulation dispositive. As the result of these contacts, WHO has invited the Burkina Faso to participate to the 21st EMF Project International Advisory Committee (IAC) Meeting 2016 to Belgium.

It is in this framework that we write this report to resume the usage state of electromagnetic field (EMF) at the Burkina Faso.

The following points will be boarded in this paper:

- ✓ The usage state of the EMF at the Burkina Faso
- ✓ Research's state of the EMF effect on the human health
- ✓ The regulation's state

1- The usage state of the EMF at the Burkina Faso

a- Sanitary domain

The exploitation of the electric fields and/or magnetic fields in sanitary domain is developing. More sanitary centers use IRM or magnetic resonance to make the diagnostics. Some equipment can have a high magnetism, in order 1.5T. These usages exhibit the health professional and the patients.

b- telecommunication

The increase of telecommunication domain is in full swing at the Burkina Faso. The country has many channels of radio and television. The mobile phone is exploited by three operators. All the territory of Burkina is inundated by emission, reception and relay antennas. The usage of the mobile phone and the Wi-Fi... is become a banality. Then we can enumerate the tele detection for the mine exploration and others researches. We can also add the usage of the radio detection, the radars and many electromagnetic equipment into the airports.

All these exploitations provoke the occupational exposition and public exposition.

a- Researches

The researches activities relating the electric field and/or magnetic field on matter and in the production of the electricity domain appear actually. Many actors intervene in these activities of the researches to take account in the regulation.

b- The transport of electricity

The Burkina Faso is connected to electricity network of neighbor Ivorian. This interconnection line come from the border to Ouagadougou with Ivory Coast passing by Niangologo, Banfora, Bobo Dioulasso, Houndé, Boromo and Sabou. We can add the small commune crossed. Two electricity lines connect the hydroelectric stations of Bagré and of Kompienga to the Capital Ouagadougou. These stations commissioning in 1993 are situated at the East of the Country. Here also there is occupational and the public exposition to the EMF.

2- Researches on EMF effect on the Health at Burkina

Note that there are no researches activities known on the EMF effect on human and animal health. We can't notify no one publication from Burkina Faso on EMF effect actually. However, we know there is a research project had been proposed to National Found of the Research and Innovation (FONRID). Unfortunately it had not been selected. The object of this project was to study the EMF effect on the human health. Now the rules and the standards courses into health schools come from Swiss, Belgium etc.

3- Standards situation

The regulation dispositive is very young. Among the regulatory texts that we can enumerate there is:

- The regulation, the inspection and the protection of the person from the public and the worker are governed by the law **n°032-2012/AN of the 8th June 2012 currying nuclear security, safety and guaranties. This law has created the** National Authority for Radioprotection and Nuclear Safety (ARSN). The ARSN is a national independent institution endowed of the legal personality;
- The environment act translated by the law **N°006-2013/AN of the 2nd April 2013 is instituting the control in its 101 of the ionizing and non-ionizing sources.**

We must note that also the texts of the regulation of electronic communication like:

- The law n°061-2008/AN of 27th November 2008 currying general regulation of network and the electronic communication services;
- The law n°027-2010/AN of 25th May 2010 currying modification of law n°061-2008/AN of 27th November 2008 currying general regulation of network and the electronic communication services;
- The decree n°2000-407/PRES/PM/MC of 13rd September 2000 currying approbation of National Plan of attribution of the radio electric frequencies bands;
- The decree n°2013-147/PRES/PM/MDENP/MEF/MICA/MC of 21st March 2013 currying definition of users of radio electric frequencies exempt from license fees or benefiting of a reduction of their amounts;
- The decree n°2013-452/PRES/PM/MDENP/ of 07th June 2013 currying approbation of National Plan of attribution of the radio electric frequencies bands.

But all these texts make the regulation of the quality of the telecommunication and the exploitation of the radio electric frequencies bands. They not concern the protection aspect against the probably negatives effects of EMF.

Now ARSN proceeds to the writing of the new texts. These texts are:

- The decree n°2016 /PRES/PM/MEEVCC/MEFD/MS/MEMC/MDENP/MESRSI/MICA/MFPTSS currying general principles of workers, publics and environment protection against non
- Common decree n°2016 /MEEVCC/MEFD/currying method of payment, perception and the distribution repartition of the takings from the allowance of ARSN.

All these texts aren't adopted for the moment. We need a very expert of WHO to take in account static field, low frequencies and radiofrequencies for the protection of the works, the public and the environment.

CONCLUSION: The Burkina Faso is resolute to get a regulation dispositive in electromagnetic domain. The adoption of environment ac and the law 032-2012/AN is the beginning of the regulation. However we are limited to pass from law to the decree in non-ionizing radiation to make check, inspection and regulation, especially to make sure of the protection of the person and its environment against a probably negative effect of the electromagnetic field.