# Directive 2004/40/EC of the European Parliament. Text Analysis

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## INTRODUCTION

Some people perceive risks from radio-frequency (RF) exposure as likely and even possibly severe. Several reasons for public fear include media announcements of new and unconfirmed scientific studies, leading to a feeling of uncertainty and a perception that there may be unknown or undiscovered hazards.

In this work we present a study of regulations about the exposure of workers to the risks arising from electromagnetic fields.

Some results obtained by a text analysis of the Directive 2004/40/EC of the European Parliament and of the Council of the European Union are shown and compared to results of the analysis of documents of European Union and World Health Organization.

# MATERIALS AND METHODS

Everyone is exposed to a wide and complex mix of electric and magnetic fields (EMF) at many different frequencies, at home and at work.

Today, communication with the public about environmental risks from technology plays an important role. Risk communication is an interactive process of exchange of information and opinion among individuals, groups and institutions.

Risk communication is therefore not only a presentation of the scientific calculation of risk, but also a forum for discussion on broader issues of ethical and moral concern.

#### RESULTS

The results give insight about the contents that is not possible to obtain using a classical reading.

The top five term used in the *Directive* are shown in figures, the comparison of the *European Directive* with the corpora of *European Union* and *World Health Organization* points out some peculiarities of the document.

**Exposure** is the most used in the three examined contexts, it is remarkable the value of relative frequency in the Directive, about two times the respective value in WHO and EU.

**Fields** is in the 2nd location in WHO and in EU, but the relative frequency value is higher in the European Directive.

### CONCLUSIONS

Scientists must communicate scientific evidence clearly through publications of different scientific value, expert reviews and risk assessments; government agencies must inform people about safety regulations and policy measures; and concerned citizens must decide to what extent they are willing to accept such risk.





Risk assessment is based on information from epidemiological observation and from experimental outcomes. The role of scientific information is very important in developing evidence-based policy.

The approach to risk management for RF exposure has been to establish guidelines based on correct analysis of scientific literature.

## REFERENCES

[1] Directive 2004/40/EC of the European Parliament and of the Council of the European Union, April 2004.