United Nations Division for the Advancement of Women (DAW, part of UN Women) United Nations Educational, Scientific and Cultural Organization (UNESCO)

Expert group meeting Gender, science and technology

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Observer paper

submitted by:

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I thank you for your invitation to be observer of the Expert Group meeting, as President of the French Women Engineers association (Femmes Ingénieurs) and founder President of the Standing Committee on "Women in Engineering" (WiE) of the World Federation of Engineering Organizations (WFEO),

For now about two decades, the increasing number of gender studies, program on girls' access to Science and Technology and on the place of the women in these areas, provide us with a good understanding of the subtle mechanisms and also of the hidden which prevent women to have their place in science and technology.

To date, many local and global programs from private and public institutions as well NGOs and associations are dealing on this matter: the access of girls, the participation of women in science and technology and the usage of technology by them.

Femmes Ingenieurs can testify too with its experiences, its works and practices.

A few words on the double mission of Femmes Ingénieurs www.femmes-ingenieurs.org:

With a large network of partners in France and worldwide, the association of women engineers is focused on

- a. The promotion of scientific women in the working place ;
- b. The promotion of engineering careers for youth, boys and girls, in the educational world;

^{*} The views expressed in this paper are those of the author and do not necessarily represent those of the United Nations.

The situation in France of the women engineers in science and technology is pretty wellknown, based on periodic analysis of the engineers population in France (broken down by gender) carried out over the last fifteen years by Femmes Ingénieurs.

Few occupations have this kind of factual knowledge of their own profession, stretching back several years.

I could add that we lack the worldwide figures of women engineers per country, so how can we count in the eyes of the society if we do not count ourselves!? See the first recommendation below.

Historically, in France, the occupation of engineer was traditionally non-feminine, and training courses only started to open up to women in the 1970s, just a few decades ago!

The feminization of the engineering schools could be greater : whatever they themselves may think, girls are as good at science as boys : in the 2006 scientific baccalauréat, 49 % of the girls, compared to 42 % of the boys, achieved better than "pass" grades. But women make up only 27 % of the students in the engineering schools, and the statistics of Femmes Ingénieurs show a flattening-out of this proportion in the last five to six years, after strong growth in the 1980s and 1990s.

As regards the specialization chosen at engineering school, new trends to environment, quality for instance can be observed although the majority continues to opt for biological science and chemistry.

The knowledge Femmes Ingénieurs have gained through its inquiries enables us to ask : is this great interest of young women for biolo

It is interesting to note that in France, overall, 87 % of women engineers work more than 90 % of full- time, and with a minority exceeding 10 hours overtime a week.

The feminization of the engineering professions also stops where responsibilities begin. While young women engineers occupy posts similar to those of their male counterparts, fewer of them start their careers with executive status. Although their functional and operational competences are recognized, major operational responsibilities and access to higher levels in the hierarchy seem to be distinctly more limited for women. Our Femmes Ingénieurs statistics show that this situation is not changing, despite the increase in the number of women engineers in the last twenty years. The glass ceiling is still in place for years, even in our context of laws, and governmental initiatives. Referring to the salaries figures, the discrepancies do exist also in favor of men.

In 2008, in the questionnaire-survey to the engineers population, a series of questions dealt with the perception of the opening-up of the engineering profession to women: more than 30 % of women and also men have no opinion on greater participation of women in the

• by promoting and monitoring normative and standard instrument for checking the number of the women who will benefit from the projects or programs

Recommendation 2: "help the educators and parents for a better awareness of their influence in terms of the choice for the youth orientation and of the gender dimension in Science and