## 5 Equal opportunity and gender balance

Italian Constitution explicitly calls for an overcome of the discriminating factors affecting the full participation of each and every person to public life and the full affirmation of the human being. Following the prescriptions of Italian laws and of the National Collective Labour Agreement (NCLA) for public administrations, INFN established in 1999 an Advisory Committee on Equal Opportunity (Comitato di Pari Opportunità, CPO). The aims of this Committee are:

- analysing differences in the conditions, participation rates, access to resources and to career development, control of assets and of decision making powers between women and men
- monitoring possible discriminations among members of its personnel
- proposing positive actions to the management to prevent, overcome and offset existing structural, organisational and cultural barriers to people equality.
The CPO is composed by 20 people, 10 nominated by INFN management and 10 by trade union organisations.


### 5.1 The Affirmative Action Plans

The INFN Equal Opportunity (EO) activity relies on the three-year Affirmative Action Plans, proposed by the CPO and discussed with the trade unions.
The work done so far by this Committee is summarized in several reports, which can be found on the web site: http://www.infn.it/cpo/. The plans are inspired to the strategies proposed by the European Commission to remove gender gaps in society and explicitly in science (http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic\&id=1406)
The INFN EO activity, as well as the CPO one for the period 2000-2010, can be grouped into the following main categories: statistical information, awareness, transparency and work to home-life balance.

## Statistical information

CPO promoted gender studies in INFN, analysing the data provided by INFN to the Treasury Ministry, and, recently, gender database available on the INFN web site with the data of the Scientific Committees. INFN develops and maintains a gender-disaggregated data-base containing the full information relative to the staff and associated INFN personnel, both in temporary and permanent positions.
Particularly interesting is a time analysis about gender and age distributions of the employees. In July 2010, INFN full time employees were 1827, divided in researchers (31\%), technologists ( $13 \%$ ), technicians ( $39 \%$ ) and administrative staff ( $17 \%$ ). The fraction of women in the different activities was $21 \%, 14 \%, 5 \%, 83 \%$, respectively.


Figure 17 - Age of the researchers in 2003 and 2008, separately for men (blue) and women (red).

While the number of INFN employees has been pretty constant in the last years, their age distribution is still far from being uniform. As an example, Figure 17 shows the researcher age distribution, separately for women and men, for two different years. In 2003, the age distribution exhibited a peak in the range 40-44. This shape reflected the expansion of INFN at the beginning of the ' 90 s and, at higher ages, the transition of many researchers towards University as professors. A large fraction of researchers was already appointed at 35 years old.

Five years later, in 2008, the shape of the distribution was similar, but the peak was shifted in the slice 45-49, while only 36 people were less than 40 years old. The lower hiring power in the last ten years is the consequence of the governmental policies that limit the number of recruitments to a fraction of the retirements.
Similar trends are observed for the administrative staff, the technologists and the technicians. The small number of new positions foreseen in the coming years could severely affect the continuity of INFN activities and compromise the transmissions of skill and competence between the different generations.

| Age | Men/Women | Women <br> fraction |
| :---: | :---: | :---: |
| $\mathbf{5 0 - 6 4 ( + )}$ | $202 / 39=5.1$ | $16 \%$ |
| $\mathbf{4 5 - 4 9}$ | $124 / 41=3.0$ | $25 \%$ |
| $\mathbf{4 0 - 4 4}$ | $98 / 23=4.3$ | $19 \%$ |
| $\mathbf{3 0 - 3 9}$ | $29 / 7=4.1$ | $19 \%$ |

Table 14 - - Disparity index (DI=number of men/women) and women percentage for researchers at the end of 2008

Data of Figure 17, reported differently in Table 14, reveal that the fraction of women researchers in the different slices of age is decreasing with the shortage of permanent positions: the fraction, respect to the total amount, of women researchers is $19 \%$ between the younger people, while it was $25 \%$ in the years when the number of the INFN staff was expanding. The table shows also another useful indicator, the Disparity Index defined as the fraction of men over women.
But women are definitely present in Physics: they represent $28 \%$ of students obtaining a PhD in physics, a number constant at least from 1998, according the database of the Ministry of Education, University and Research, and 28\% of INFN non-staff researchers.
Table 15 summarizes the percentage of women in the five different INFN Scientific Committees: the same table shows that a large fraction of women is getting a PhD with INFN, from $58 \%$ in CNS3 to $17 \%$ in CNS4; in the CNS2 and CNS3 the number of women obtaining their PhD is larger than the number of men. We have to note in passing that the fraction of women in University is larger than in INFN. The women scientific production, at least by judging on the number of talks, is wide: women seems to present more talks than men at all ages. Women are well represented in almost all CSNs as Coordinators of the Scientific Committees that have the responsibility of proposing funding requests of INFN experiments and projects and monitoring their research activity and achievements.
Unfortunately the women percentage is still lower in the higher researcher position: Table 16 summarizes the disparity index (fraction men/women) and the percentage of women in the top level of the career: only 14 women are there. It should be noted that this number is at least not decreasing in recent years.

|  | CSN1 | CSN2 | CSN3 | CSN4 | CSN5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| National resp. | $22 \%$ | $20 \%$ | $34 \%$ | $6 \%$ | $10 \%$ |
| Local resp. | $23 \%$ | $15 \%$ | $21 \%$ | $11 \%$ | $18 \%$ |
| Coordinators | $31 \%$ | $23 \%$ | $28 \%$ | $9 \%$ | $3 \%$ |
| INFN FTE | $17 \%$ | $15 \%$ | $20 \%$ | $12 \%$ | $12 \%$ |
| University FTE | $21 \%$ | $22 \%$ | $25 \%$ | $13 \%$ | $29 \%$ |
| Talks | $28 \%$ | $29 \%$ | $33 \%$ | $15 \%$ | $35 \%$ |
| PhD thesis | $31 \%$ | $55 \%$ | $58 \%$ | $17 \%$ | $35 \%$ |

Table 15 - Fraction of women for the different scientific commissions, data of 2010

This disparity is true not only for researchers, but even for administrative staff: despite the fact that lower level positions are mostly occupied by women ( $83 \%$ ), the highest levels are occupied by men. Currently, two women have taken over top administrative offices.
Moreover, a comparison between administrative staff (mainly women) and technicians (mainly men) reveals a salary

| Reasercher <br> DI $=$ men/women | Fraction of women <br> researcher in I level | Fraction of men <br> researcher in I level |
| :---: | :---: | :---: |
| $453 / 110=4.12$ | $14 / 110=0.13$ | $116 / 453=0.26$ |

Table 16. Disparity index and women percentage for the researchers at the end of 2008.
gap: for the same contractual level, the salary of an administrative is lower by one step than the one of a technician. For graduate people, the salary is lower by two steps than the one of a researcher or of a technologist. A study is underway in order to understand the distribution of leadership positions, like the presence of women in governing bodies: among the 25 directors of National Laboratories and Sections there are 3 women, the largest number since ever, and a woman is also President of a Scientific Committee. There is still no woman in the INFN Executive board.

## Awareness

In order to raise awareness on the existing disparities, questioning about the causes and presenting possible actions to remove these disparities, INFN CPO, since its establishment, has organized several activities from seminars and workshops to training courses for INFN Personnel on EO and professional development of women (the last one in 2009).
Attention is also given to specific actions proposed in order to ensure an increased involvement of women in training courses. Training courses to increase the awareness on gender issues addressed to the management have been proposed.
Some INFN activity was also addressed to the public, presenting the results obtained by women at LHC, an activity relevant to provide reference models to the young generations and to dismantle gender stereotypes, as the 2010 exposition http://www.ba.infn.it/donne-lhc/

## Transparency

The availability of public information about the Institute responsibility structure and its up-to-date development would facilitate gender analyses, spotting possible anomalies, like a poor presence of women in leadership positions or an excess of responsibilities hold by the same few persons.
In the recent years a gender data-base of staff and associate INFN personnel in both temporary and permanent positions, and containing the data of the Scientific Committees, is available at the Personnel Department. As of today, however, the information is not completely accessible to the public.
CPO is also working towards the full implementation of the European Charter for Researchers and of the Code of Conduct for the Recruitment of Researchers, as indicated by the Human Resources Strategy for Researchers http://ec.europa.eu/euraxess/index.cfm/rights/strategy4Researcher.
To this purpose, CPO has asked also for the publication of the curricula of the participants to recruitment and promotion procedures. Working in this direction, the creation of a public data-base collecting curricula and qualifications of the INFN personnel is under development

## Work to home-life balance

Treating the employee as a whole person implies taking into account his/her family and other aspects of his/her life beyond professional duties. For example, one of the main problems for workers is to entrust their children to reliable structures nearby working places.
CPO performed a full enquire on the existence, inside all INFN Sections, of initiatives to support employees with children at pre-school age, aimed to formulate possible improvement actions. The
location of INFN work sites throughout Italy, also inside University buildings, led to different opportunities and choices: INFN Frascati has established a convention with a kindergarten nearby the laboratory, meanwhile an INFN owned kindergarten is in construction at the Legnaro Laboratories. A summer child centre has been established inside LNGS Gran Sasso site: this centre became really crucial after the earthquake of 2009. On the basis of special economical support for children care, foreseen by INFN and encouraged by CPO, some Sections signed conventions with external kindergartens.
One of the CPO purpose is to raise the administration and the worker awareness about parents' rights as in case of parental leave: since some years fathers are now taking this leave as well as mothers. It is under way a project to extend the leave also to workers which have so-called atypical contracts of employment.

## Work environment and organizational wellbeing

Inside this framework, the CPO developed two lines: one devoted to the protection of dignity and the other one to the organizational wellbeing.
INFN adopted in 2003 a Regulation Code for sexual and moral harassment, elaborated and submitted by the INFN CPO to the management of the Institute. At the moment a new version is underway.
In addition, since 2004, an external Officer Trust Counsellor (the "Consigliera di Fiducia": http://www.infn.it/consigliera/) is regularly hired by the INFN President, with the advice of the INFN CPO, in order to handle possible complaints of harassment, according to the above regulation code. Depending on the seriousness of the case, possible problems can be resolved by informal mediation, mediation with an administrative record or disciplinary actions. According to the work programme proposed by the Counsellor, a research project on the perceived organizational wellbeing is under way, by means of a questionnaire performed on all the INFN employees. Furthermore several seminars have been carried out on Gender Health problems

### 5.2 From CPO to new Committees (Comitati Unici di Garanzia - CUG)

From November $4^{\text {th }}$ 2010, the Italian law (n.183, art.21) has established a new Committee (Comitato Unico di Garanzia per le pari opportunità, la valorizzazione del benessere di chi lavora e contro le discriminazioni --- Single Warrant Committee for equal opportunities, for enhancing the worker's wellbeing and against discriminations) named CUG, which will substitute the CPO absorbing all its functions with the additional tasks of working against discrimination.
The enhanced focussing on EO and Parity inside the work environment is not only a process to ameliorate life quality, but rather it could represent an important tool to allow and to accelerate a cultural transformation process also in scientific institutions. The CUG will have a key role in this process because, even if in continuity with CPO purposes, it is called upon new functions (verification) in all the contexts linked to the personnel policy where systematic discriminations of individuals could be present.
From April 2011, INFN has established his CUG. The new Committee could represent a remarkable methodological innovation, because it can establish a new form of collaboration between all the actors of the political process of the Institute.

