

**ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE
EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH**

TRIPARTITE EMPLOYMENT CONDITIONS FORUM (TREF)

DIVERSITY PROGRAMME

REPORT TO TREF

This report, by the CERN Diversity Office, provides information on the on-going actions undertaken by the Organization in relation to the priority areas identified in 2012 and completes previous diversity reports made to TREF¹.

¹ CERN/TREF/388 (TREF 82nd meeting- October 2012) – CERN/TREF/395 (TREF 84th meeting- October 2013) – CERN/TREF/409 (TREF 87th meeting- October 2014)

I. INTRODUCTION

In 2012, the Diversity report to TREF² introduced the aims, principles, scope and implementation plan of the newly-launched Diversity Programme.

Strategic objectives set for the period from 2012 to 2014 were also presented then³, together with proposals for pro-active measures in the various priority areas identified for action. Since then, the period of implementation was extended, by CERN Management, until the end of 2016, and a number of new measures added. In 2014, the Diversity policy⁴ was published.

Oral and written reports have regularly informed TREF about the actions undertaken in pursuit of the strategic objectives across the three axes of: recruitment, career development and work environment, as well as a set of specific qualitative and quantitative results.

This report outlines the continued implementation of the seven strategic objectives for the period from 2012 to 2016, with an emphasis on the most recent new actions undertaken.

II. STRATEGIC OBJECTIVES RELATING TO RECRUITMENT

# 1	Improve distribution of under-represented nationalities
# 2	Achieve gender distribution in recruitment for all professional categories

Pro-active measures in the sourcing, pre-selection and selection stages of recruitment, with a view to addressing two particular dimensions of diversity (nationality and gender) have continued and new actions initiated.

In the framework of the 2015 five-yearly review, the Organization addressed the challenges identified in the recruitment and retention report⁵. Some measures target directly the attraction of a more diverse workforce, under-represented nationalities and women in the field of science and technology.

(i) Updated employment conditions

- In 2015, CERN became a corporate member of the International Dual Career Network (IDCN)⁶, Lake Geneva chapter. The network aims at facilitating the job search of recently relocated spouses of internationally mobile employees by giving them access to potential employers, HR service providers and other relocated international professionals. In that framework, CERN organised, in April 2016, its first event for spouses in dual career situations, attracting around 100 participants.
- The HR Department is publishing an updated version of the “Your Life @ CERN” brochure, summarising and advertising the major support structures available to employed members of personnel (MPEs) to help them find a balance between professional and private times, providing them with a family-friendly work environment and promoting an inclusive and respectful workplace. The brochure will be made available to applicants as well.

² CERN/TREF/388 – Diversity Programme – Report to TREF – 12 October 2012

³ Appendix : Summary table of ‘Priority areas for action’ identified for Diversity Programme in 2012-2014

⁴ CERN Diversity Policy – HR Department – published on CDS: CERN – HR Note- 2015-031

⁵ CERN/TREF/400/Rev – Five-yearly Review 2015 - Report on recruitment and retention of staff members - 23 April 2014

⁶ International Dual Career Network website: <http://www.idcn.info/>

- The 2016 March edition of “CERN Jobs Insight”⁷, a monthly blog published on the CERN recruitment webpage and targeting potential applicants, was dedicated to diversity at CERN.

(ii) Module to reduce unconscious bias in the recruitment process

The Diversity Office designed a specific raising-awareness exercise on the issue of prejudice and stereotypes in recruitment. It is now included in the existing recruitment training for supervisors and is complemented by a range of post-training material.

(iii) Specific actions to improve the distribution of under-represented nationalities

- In the period from January 2012 to December 2015, CERN participated in events in Austria, the Czech Republic, Finland, Germany, the Netherlands, Norway, Sweden, Switzerland and United-Kingdom.
- In 2015 and 2016, the HR Department supported two Master’s dissertation works aiming at building a better understanding of the motivation behind self-initiated expatriation to work at CERN. One of the two studies examined the specific case of applicants from Nordic countries.

(iv) Specific actions to achieve an optimal gender distribution in all professional categories

- The Diversity Office supported a Master’s dissertation work, published in 2015, on gender representation in STEM⁸. The study could not identify bias in the initial and long-term recruitment of women in comparison to men and concluded that the Organization should focus on increasing the candidate pool.
- In 2015, CERN released a video featuring women, mostly junior scientists, sharing their experience of working within international scientific collaborations⁹ at CERN.
- Four women were recruited in 2014 and 2015 on Post Career Break Fellow positions, allowing them to resume their scientific or engineering career after an interruption for parental responsibilities, associated or not with a dual career situation.
- Updated results on gender distribution across the professional categories (Table 1) demonstrate that, over the years, pro-active measures focused on the sourcing and pre-selection stages of recruitment, as well as improved selection practice, achieve overall sustained effectiveness.

		Research Physicists	Applied Physicists	Computing Engineers	other Engineers	Technicians	Crafts	Prof. Admin.	Admin. Assist.	Admin. Clerks	Total
		Cat 1	Cat 2	Cat 2	Cat 2	Cat 3	Cat 4	Cat 5A	Cat 5B	Cat 5C	
% of women	1995	2.88	2.9	11.11	0.53	2.82	5.81	18.49	78.89	73.11	14.06
	2000	13.33	5.24	11.76	7.16	4.72	5.17	28.46	80.88	70.15	15.99
	2005	6.85	10.59	10.98	10.96	6.24	3.43	36.89	88.31	68.18	19.73
	2010	10.67	13.31	11.7	14.71	6.59	5.1	45.45	94.53	66.67	20.93
	2013	10.39	12.99	10.11	14.29	6.28	7.08	54.2	93.8	58.33	20.45
	2014	11.11	12.84	10	14.72	6.36	6.78	54.48	93.33	54.55	20.68
	2015	9.76	14.07	9.87	14.32	6.19	5.88	54.23	92.40	62.50	20.43
Total Women	2015	8	37	38	61	54	6	77	231	5	517
Total Staff Member	2015	82	263	385	426	873	102	142	250	8	2531

Table 1: Trend in the numbers of women staff members by professional category between 1995 and 2015

Source: Previous TREF reports and CERN Personnel Statistics (31.12.2015)

⁷ CERN Jobs Insight on Careers at CERN website: <http://jobs.web.cern.ch/cern-jobs-insight> - March 2016

⁸ Ensuring optimal gender representation in recruitment and selection: the case of CERN, Margarita Sgouraki, MSc in HR Management and Development, University of Manchester - Faculty of Humanities – published on CDS; [CERN-THESIS-2015-088](#)

⁹Diversity at CERN FCC: [Video available on YouTube](#)

- The data on staff members' recruitment for the period from 2010 to 2014¹⁰ still indicated a lower probability for women applicants to be recruited. In 2015, however, as for previous years, the Organization recruited women at a higher rate than the pool of applicants in science and engineering¹¹. A similar trend is observed in the recruitment of Fellows, Technical and Doctoral Students.
- This is an encouraging sign that CERN is training and building a pool of female talents in science and engineering that will allow the Organization to overcome what seems to be a plateau of 20% of female representation in the staff population and around 13% in the science and technology.
- However, the pool of female applicants to scientific or technical staff positions has remained low in the recent years, below the current proportion of women in the scientific and technical staff population.

III. STRATEGIC OBJECTIVES RELATED TO CAREER DEVELOPMENT

# 3	More gender role models
# 4	Career development for technical and managerial paths in parallel

These two objectives relate to the 'gender' and 'profession' dimensions of the diversity programme and aim at promoting diversity principles in two areas of career development, namely improving the number of gender role models across the Organization and ensuring equal development prospects for specialists and managers.

(v) Update of the senior staff pool

- The proportion of women who are senior staff members remains stable CERN-wide at around 12% of the total population, while that of male senior staff also remains stable at around 22%.
- The proportion of senior staff members among the female professionals of categories 1, 2 and 5A (research and applied physicists, engineers and professional administrators) at around 29% (Table 2) has also remained stable over recent years. The proportion of women in the top career path (4 % in 2015) is slightly higher than in previous years (at around 3.5%).

	Total number of women (W) and men (M)	Total % of women	Total % of men
		Total number of women in professional categories 1, 2 and 5A : 221	Total number of men in professional categories 1, 2 and 5A : 1076
Senior Staff (career paths F and G)	63 W / 461 M	63 / 221 28.50%	461 / 1076 42.84%
Staff in top career path (G)	9 W / 85 M	9 / 221 4.07%	85 / 1076 7.90%

Table 2: Female representation in senior staff population

Source: CERN Personnel Statistics (31.12.2015)

(vi) Update of hierarchical pool

The percentage of women holding a hierarchical position was higher in April 2016 (22%) than it was at the end of 2014 (19%). In the highest managerial positions (Director-General, Directors and Department Heads), there are currently 3 women.

¹⁰ CERN/TREF/400/Rev

¹¹ CERN Personnel Statistics (31.12.2015)

	2000	2016
Female representation in hierarchical positions		
Line Management (Group and Section Leaders)	27 W / 487 M 5% W	76 W / 343 M 22% W
Senior Management (DG, Directors and Division Leaders or Department Heads)	No women	3 W / 12 M

Table 3: Female representation in the management positions

Source: HRT and TREF reports

Other leadership roles held by CERN staff members, such as large project leaders or spokespersons of an experiment, are not taken into account in the above tables. Ways of analysing leadership roles should indeed be reconsidered and widened to take fully into account the influence of women in the Organization’s functioning and decision-making process.

(vii) Women role models

- At the first annual meeting of the Future Circular Collider study in Washington, D.C. in March 2015, Dr Fabiola Gianotti, then CERN Director-General Designate, was invited to speak about her experience at a session dedicated to gender equality in HEP ¹².
- In April and May 2016, the Diversity Office initiated two events paying tributes to the lives and experiences of women in the field of science:
 - a theater play by an Austrian company, “*Curie_Meitner_Lamarr_indivisible*” (event co-organised with the team in charge of the Globe and Local Engagement);
 - a book presentation, “*HEP - still an unfeminine profession?*” by Mary K Gaillard, the first woman on the physics faculty at the University of California, Berkeley, followed by a discussion with Prof Valerie Gibson, LHCb, Head of the HEP group at the University of Cambridge (UK) (event co-organised with CERN Library and Theory Department).
- CERN Director-General is one the International Geneva Gender Champions¹³, a network of senior leaders working to advance gender equality through concrete and measurable commitments.

(viii) Career development for technical and managerial paths in parallel

The question of equal prospects for technical specialists and managerial careers has been studied in the context of the five-yearly review of the CERN career structure. It will be integrated into HR systems in 2017.

IV. STRATEGIC OBJECTIVES RELATING TO THE WORK ENVIRONMENT

# 5	Promote the exchange of ideas and understanding between generations and professions
# 6	Explore ways to improve work/life balance
# 7	Promote a work environment based on mutual respect and inclusiveness

Actions aimed at integrating diversity principles in the work environment have been continued by raising awareness to challenges, promoting understanding across the different dimensions of the

¹² A gender balance roadmap for FCC, Johannes Gutleber, in *Accelerating News*, March 2015

¹³ International Geneva Gender Champions website: <http://genevagenderchampions.com/>

Diversity Programme, improving support structures wherever possible and promoting an enabling work environment for all CERN contributors.

(ix) Understanding between generations and professions

Further to an intergenerational forum for discussion held in 2014 on ‘*Making a career in Science*’, the Diversity Office launched a research study to understand the support needed by junior scientists at CERN with respect to career progression. The results were presented by the two professors and a post-doctoral researcher, from the University of Utrecht¹⁴ (NL) who carried out the study with junior and senior scientists (around 400 participants to qualitative and quantitative investigations).

(x) Explore ways to improve work/life balance

- Since 2014, a breastfeeding room has been available in the CERN Hostel. In 2015, following feedback from users, this room underwent improvements.
- The Post Career Break fellowship programme, the objective of which is to provide opportunities to men or women who have made a break in their scientific career, has been extended by the Director-General and two additional recruitment should take place in 2016.
- The Diversity Office, with the collaboration of Dr Pippa Wells, CERN Senior Physicist at ATLAS and Chair of the Associates and Fellow committee, organised, in September 2015, a conference on “*Promoting sustainable excellence through diversity in research career*”¹⁵ delivered by Dr Claartje Vinkenburg from the VU Amsterdam. The conference was based on an EU funded research on ERC grantees (individual grants based on excellence criteria).

(xi) Environment based on mutual respect and inclusiveness

- In May 2015, a campaign to promote respect in the workplace was launched under the Ombud’s auspices. A conference was organized and various objects referring to Respect@CERN were edited and produced. The campaign is continuing in 2016.
- In July 2015, then Director-General, Prof. Rolf Heuer, published an article in the CERN Bulletin on diversity and respect in which he restated the importance of a work environment respectful of individual differences.
- In March 2016, CERN Director-General published an article in CERN Bulletin, restating that there is no place for intolerance at CERN, in particular against sexual orientation.
- The Diversity Programme, with the support of various CERN’s services, has implemented measures to improve accessibility to CERN’s facilities for persons with disabilities. This includes providing reasonable accommodations for members of personnel with special needs.
- The Diversity Office supervised a Master’s dissertation work on the employment of people with disability at CERN concluding with a series of recommendations.
- In 2015, a course on “*Effective cross-cultural communication*” was introduced in the mandatory training portfolio for MPEs. It is designed to help CERN people understand the challenges of communicating in a multicultural environment and reduce the risk of misunderstandings and conflicts.

¹⁴ *Support for early careers in science at CERN. Understanding expectations.* Conference webcast available [on CDS](#) – April 2016

¹⁵ *Promoting sustainable excellence through diversity in research career.* Conference webcast [on CDS](#) – September 2015.

V. GENDER IN SCIENCE AWARENESS AND OUTREACH

Although the scope of CERN's Diversity Programme covers various dimensions, particular emphasis is placed on the gender dimension. Various types of actions have been taken with external stakeholders to raise awareness and promote for more women in science, as described below:

- Since March 2015, CERN Diversity Office coordinates a gender equality working group and taskforce within the Future Circular Collider¹⁶ consortium with the objective to embed gender equality from the start of the Collaboration.
- In April 2015, CERN joined the ITU for the “*Girls in ICT*” day, aimed at girls aged between 13 and 16. CERN offered a workshop on programming visualisations and took part in a speed mentoring activity in which CERN women talked to the students about their careers.
- In June 2015, the Diversity Programme Leader was invited by the Director of the Mission for the Place of Women at CNRS to be a panelist on gender equality in science together with representatives of the EC Directorate-General-Research & Innovation, the US National Science Foundation and Max Planck Society.
- In addition to the ongoing collaboration with the High School Teacher Programme to promote female lecturers, in July 2015, the Diversity Office and the S’Cool Lab ran a dedicated working group on “*Girls in the physics classroom*”.
- In September 2015 CERN HR Department was invited to join the EC-Joint Research Center initiative “HR Circle”, a platform to exchange good practices in human resources and more precisely in the area of diversity and the related topics of scientific career development and competence management.
- Several CERN physicists, mainly women from the ATLAS Collaborations, supported by the Diversity Office, participated twice (in 2013 and 2015) in the “*Expanding Your Horizons*” event in Geneva aimed at raising awareness among local school girls about the numerous potential careers available in the areas of science and technology.
- In October 2015, CERN joined the EU funded GENERA project as an observer. GENERA is coordinated by DESY and its aim is to support research performing and funding organisations in the implementation of gender equality plans specifically in the physics research field¹⁷.
- In February 2016, CERN hosted in the “IdeaSquare” building a workshop, supported by the IT Department, organised by an association which mission is to introduce women to the world of programming. Several IT Department members, mainly women, acted as mentors to the participants.

VI. CONCLUDING REMARKS

CERN's Diversity Office was launched in 2012 and its Diversity policy published in 2014. The Diversity programme is now firmly established as one of the pillars of the Organization's human resources strategy. It has concentrated its efforts on continuing to gain visibility Organization-wide, working with stakeholders to anchor diversity principles in policies, procedures and practices within the Organization, and engaging more personnel in several initiatives with the objective to of building a collective diversity competency. The Diversity Office has also contributed, through various actions, to promote, on behalf of the Organization, the value of diversity in science in society.

¹⁶ FCC study to make gender equality sustainable – 2016 FCC Week report – April 2016

¹⁷ GENERA project website: <http://genera-project.com/>

With regards to persistent difficulties in improving the representation of some nationalities and to attract female applicants in science and engineering, the Organization will continue to build a better understanding of the drivers of this target population to apply at CERN. It will also refine the understanding of the career dynamics at stake in particular for junior scientists through the monitoring of its demographics.

VII. APPENDIX

Summary table of priority areas for action identified for the Diversity Programme in 2012-2016

		STRATEGIC OBJECTIVES	ACTIONS
RECRUITMENT	# 1	<ul style="list-style-type: none"> Improve distribution of under-represented nationalities through pro-active measures in sourcing and pre-selection – “<i>excellence</i>” remaining over-arching criterion 	<ul style="list-style-type: none"> Reinforce efforts to extend applicant pool in sourcing and short listing stages Monitor to maintain progress and redress anomalies Develop further contacts to attract more applicants through enhanced outreach activities
	# 2	<ul style="list-style-type: none"> Achieve optimal gender distribution in recruitment for all professional categories – “<i>excellence</i>” remaining the over-arching criterion 	<ul style="list-style-type: none"> Reinforce efforts to achieve gender distribution in sourcing and short listing stages Monitor to maintain progress and redress anomalies Explore ways of assuring temporary solutions for maternity leave cover
CAREER DEVELOPMENT	# 3	<ul style="list-style-type: none"> More gender role models 	<ul style="list-style-type: none"> Succession planning (m/w) Leadership training (m/w) Coaching and mentoring (m/w)
	# 4	<ul style="list-style-type: none"> Propose parallel career development (technical and managerial paths in parallel) 	<ul style="list-style-type: none"> Align advancement criteria Provide development planning – technical or managerial as appropriate
WORK ENVIRONMENT	# 5	<ul style="list-style-type: none"> Promote the exchange of ideas and understanding between generations and professions 	<ul style="list-style-type: none"> Workshops within departments, sectors or CERN-wide – facilitated discussions on specific themes related to Organization life
	# 6	<ul style="list-style-type: none"> Explore ways to improve work/life balance 	<ul style="list-style-type: none"> Assess necessity of email / meetings outside working hours – enhance awareness of possible impact within hierarchical relationship Support requests for part-time, SLS, Work from home, in line with individual and service needs
	# 7	<ul style="list-style-type: none"> Promote a work environment based on mutual respect and inclusiveness 	<ul style="list-style-type: none"> Design and deliver events to raise awareness and exchange experience of diversity in the work place Assure regular communication Continually update support structures such as reserved places in local crèche, kindergarten, etc., in line with need Ensure access and equipment as needed for disabled individuals