



**POLITECNICO
DI TORINO**



HR EXCELLENCE IN RESEARCH

**ACTION PLAN
NOVEMBER 2015 – DECEMBER 2018
POLITECNICO DI TORINO**

I. Ethical and professional aspects

1. Research freedom

N°	PROBLEM IDENTIFIED	OBJECTIVE	TITLE ACTION	TIMING	RESPONSIBLE UNIT	INDICATORS/TARGETS
1	Difficulties in fund raising for fundamental research and frontier research	To implement effectively the concept of "research freedom" in domains where the performance of research is conditioned by the difficulties in fund raising	To design and implement actions for promoting curiosity-driven research	December 2017	Research Area	<p>Launch of at least 3 new actions for promoting curiosity-driven research</p> <p>STATUS COMPLETED: 5 new actions for promoting curiosity driven research were launched in 2015-2018 (more details are available in the "Report on Action Plan 2015-2018")</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 WITH A FOCUS ON SUPPORTING FUNDRAISING FOR RESEARCH (Actions 1, 2, 3, 4 Action Plan 2019-2021)</p>

3. Professional responsibility

N°	PROBLEM IDENTIFIED	OBJECTIVE	TITLE ACTION	TIMING	RESPONSIBLE FOR IMPLEMENTING	INDICATORS/TARGETS
2	The University does not have yet at its disposal sufficiently effective tools for the protection of unpublished works	To enhance the ability of the University to protect the unpublished works of its researchers	To adopt the software for detection of plagiarism and to periodically monitor the requests	December 2018	Student Affairs Area, Information Technology Area, Library and Museum Area	<ul style="list-style-type: none"> • Adoption of guidelines for the use of the software • At least 50 MoS and 50 PhD thesis tested <p>STATUS COMPLETED</p> <ul style="list-style-type: none"> • Software for detection of plagiarism are adopted • Guidelines for the use of Compilatio and Turnitin software are available • No. of thesis tested through the software: <ul style="list-style-type: none"> ✓ COMPILATIO (Master thesis) <ul style="list-style-type: none"> - 2017: 376 - 2018: 3382 ✓ TURNITIN (PhD thesis): <ul style="list-style-type: none"> - 2015: 0 - 2016: 0 - 2017: 592 - 2018: 1024
3	Need to enhance awareness on the concept of RRI-Responsible Research and Innovation	To consolidate responsible practices in research and innovation	To provide specific support and training on RRI	December 2018	Research Area, Communication, Events & External Relations Service	<p>At least 5 new specific support and training initiatives launched on RRI</p> <p>STATUS COMPLETED:</p> <p>Number of new training/workshop related to RRI organized by/with the participation of Politecnico</p>

						di Torino: <ul style="list-style-type: none"> • Before 2015: no events • in 2016 - 5 training/workshop/workshop sessions • in 2017 – 5 training/workshop/workshop sessions • in 2018 – 2 training sessions, 1 MOC
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8. Dissemination, exploitation of results

N°	PROBLEM IDENTIFIED	OBJECTIVE	TITLE ACTION	TIMING	RESPONSIBLE FOR IMPLEMENTING	INDICATORS/TARGETS
4	Need for a consolidation of good practices in dissemination and exploitation of results	To strengthen the University mission in the enhancement of the value of research and technology transfer outcomes	To provide support and training for the management of intellectual property, tutoring services and strategic consultancy in the field of spin-off firms and the evaluation of the commercial potential of the research outcomes	December 2018	Technology Transfer and Industrial Liaison Department	To increase the number of training events and meetings compared to the period 2013-2015 STATUS COMPLETED: <ul style="list-style-type: none"> • Number of educational and training events organized: 32 (in the period 2013-2015: 19) • Number of meeting be to be on patents carried out: 196 (in the period 2013-2015: 85) • Number of meeting be to be on spin-off carried out: 35 (in the period 2013-2015: 7)

						THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Action 9)
5	Need for transferable skills in dissemination and exploitation of results	To write competitive proposals in response to Horizon 2020 calls	To provide specific support and training on how to write a Plan for the Exploitation and Dissemination of Results	December 2018	Research Area	<p>Handbook on dissemination strategy in Horizon 2020 projects</p> <p>STATUS COMPLETED: October 2018: delivery of the “Communication and Dissemination in Horizon 2020” Handbook on how to properly approach communication and dissemination activities in Horizon 2020 projects</p> <p>Before 2015:</p> <ul style="list-style-type: none"> • Number of initiatives aiming to support the Plan for Dissemination and Exploitation of Results writing = 0 • Number of dedicated persons in the Research Support Department to promote research = 0 <p>After 2015:</p> <ul style="list-style-type: none"> • Number of organized trainings aiming to support the Plan for Dissemination and

						<p>Exploitation of Results writing =7</p> <ul style="list-style-type: none"> • Number of supported proposals as regards to the Plan for Dissemination and Exploitation of Results =40 • Number of dedicated persons in the Research Support Department to promote research = 2
6	Need for a consolidation of awareness on Open Access issues	To comply with rules and obligations related to Open Access	To provide to researchers and administrative staff specific support and training on Open Access with particular focus on open access requirements in research funding programmes	December 2017	Library and Museum Area	<p>An increase of at least 10% in the number of open access papers deposited and in the number of downloads of open access papers compared with the previous period</p> <p>STATUS COMPLETED:</p> <ul style="list-style-type: none"> • Numbers of papers deposited OA (January 2013 – October 2015): 2.906 • Numbers of papers deposited OA (November 2015 -November 2017): 3.510 • Numbers of downloads of open access papers (January 2013 – October 2015): 418.167 • Numbers of downloads of open access papers (November 2015 - November 2017): 664.477

						<p>In 2018 for the first time a Rector's Advisor for Open Science, prof. Federica Cappelluti, was appointed in order to enhance Open Access at Politecnico di Torino and Politecnico di Torino has now a Policy on Open Access to Scientific Publications</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Action 8)</p>
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9. Public engagement

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
7	Lack of clear and complete information on the research activities carried out at Politecnico and on the research results	To enhance research collaboration between internal researchers and with external stakeholders	To define of a Plan for collecting and promoting communication of research activities and of research results through multiple channels (SUA-RD, media, website, University social network, EU channels, events ...)	December 2017	Research Area and Communication, Events & External Relations Service	<p>Increase in the number of initiatives aimed at communicating the research conducted by the Politecnico di Torino</p> <p>STATUS COMPLETED:</p> <p>The plan for promoting communication of research activities and research results through multiple channels is defined in the “Promoting research and research environment” project (approved by the Board of Governors of Politecnico di Torino on July 27, 2016) is used to monitor and collect information about communication initiatives.</p> <p>Details regarding the number of initiatives aimed at communicating the research are available in the “Report on Action Plan 2015-2018”</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Actions 11, 12, 13, 14, 15)</p>
8	Need for training	To improve skills	To provide support and training	December 2017	Communication, Events &	Support and training offered

	in transferable skills in communication and Public Engagement	for the communication of scientific work	on effective communication of science to non-specialist audiences		External Relations Service, Student Affairs Area	on a continuous basis STATUS COMPLETED THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Action 13)
9	Need to ensure that research activities are made known to society at large in such a way that they can be understood by non-specialists	To contribute to the improvement of the public's understanding of Science and help researchers to better understand public interest in priorities for science and technology and also the public's concerns	To coordinate and strengthen the participation of the University in public engagement initiatives	December 2017	Communication, Events & External Relations Service	Increase in the number of public engagement initiatives STATUS COMPLETED: Increase in the number of public engagement initiatives: +10% (more details are available in the "Report on Action Plan 2015-2018") As regards the quality, we have to underline that we have bigger audience and we focused on more qualified and engaged audiences (seminars, workshop and labs with our researchers are often offered parallel to exhibit in the Politecnico di Torino's stand and to poster sessions). Moreover, when we select in a proper way people from the Departments focusing on specific topics, we always find an enthusiastic feedback, and this is one of the most important goals to

						be reached. THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Actions 14, 15)
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II. Recruitment

13. Recruitment (Code)

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
10	Lack of a comprehensive guide to OTM-R practices already existing at POLITO with regard to all research position	To give evidence of OTM-R practices through a comprehensive guide	To create a comprehensive guide to OTM-R practices already existing at POLITO with regard to all research position	December 2018	Human Resources and Organisation Area	<p>Creation of a comprehensive guide to OTM-R practices and to create a new web page related to OTM-R practices</p> <p>STATUS COMPLETED:</p> <ul style="list-style-type: none"> • OTM-R checklist completed • Creation of a comprehensive guide to OTM-R practices already existing at POLITO with regard to all research position • Creation of a section of the institutional website related to open positions and OTM-R practices (www.careers.polito.it) <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Action 18)</p>

11	Low percentage of research staff coming from abroad compared to the total research staff	To attract researchers from abroad	To design and implement new actions and initiatives to promote Politecnico di Torino as host institution of qualified international researchers	December 2017	International affairs Area, Research Support Area, Communication, Events & External Relations Service, Human Resources and Organisation Area	<p>At least 4 new actions/initiatives designed and implemented</p> <p>STATUS COMPLETED: More than 4 new initiatives for promoting Politecnico di Torino as host institution of qualified international researchers launched in 2015-2018 (more details are available in the "Report on Action Plan 2015-2018")</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Actions 1, 19)</p>
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III. Working conditions and social security

27. Gender balance

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
12	<p>Phd candidates are 667, being female candidates 32% with a positive trend of the percentage of female candidates in the last years</p> <p>The percentage of women among teaching staff according to their professional category is as follows: 36% in Assistant Professor, decreasing to 28% in Associate Professor and to 9,5% in Full Professor</p>	<p>To reduce the career development gap between male and female researchers</p>	<p>To define a plan of actions to support career development of female researchers</p>	<p>December 2017</p>	<p>Equality, Non-Discrimination and Anti-Harassment Committee, Research Area</p>	<ul style="list-style-type: none"> • Participation in the call for proposals under the Horizon 2020 Programme/topic: SwafS-03-2016-2017-Support to research organisations to implement gender equality plans • At least 2 new actions to support career development of female researchers <p>STATUS Several actions have been developed to promote gender equality (more details are available in the “Report on Action Plan 2015-2018”)</p> <p>Moreover:</p> <ul style="list-style-type: none"> • March 2018: the new Rector Prof. Guido Saracco (2018-2024) chose a gender balanced Team of Vice Rectors and Delegates (50/50) • March 2018: for the first time, appointment of a Vice Rector for Quality, Welfare and Equal Opportunities • March 2018: appointment

						<p>of a Rector's advisor for Equal Opportunities</p> <p>ON-GOING:</p> <p>The new Strategic Plan (2018-2024) has a strong focus on gender equality. Dedicated actions will be developed in the new action plan 2019-2021 (Action 20)</p>
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28. Career development
30. Access to career advice
39. Access to research training and continuous development

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
13	Need to strengthen support to career development and job placement for temporary researchers	To strengthen the strategy of the University in relation to career development support and job placement support, especially for temporary researchers	Based on the outcomes of the pilot project "Empowerment for Employability", further actions and initiatives will be designed	December 2017	Student Affairs Area- Job Placement office, Research Support Area	<p>At least 2 initiatives to support career developments of researchers</p> <p>STATUS COMPLETED: Based on the outcomes of the pilot project "Empowerment for Employability":</p> <ul style="list-style-type: none"> • the project "Empowerment for Employability" organizes each year one session for research fellows and temporary researchers • implementation of the new Project "Chi ri-cerca trova!" (Whoever re-searches finds) for PhD candidates • organization of new training courses on self-evaluation of researchers' skills and training needs and providing tools to plan objectives, identify progress and effectively communicate their skills to different stakeholders <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN</p>

						ACTION PLAN 2019-2021 (Actions 8, 17, 25)
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31. Intellectual Property Rights

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
14	Need to ensure appropriate protection of Intellectual Property Rights, including copyrights	To consolidate the ongoing procedures by enhancing them with complementary activities	Improve support service for the author in the negotiating stage with the publisher and periodic update of templates of new contractual formulas	December 2017	Library and Museum Area	<p>Periodic monitoring of support offered to researchers (Number of publisher contacted; number of transactions with authors)</p> <p>STATUS COMPLETED:</p> <p>This action is completed: the revision and update of “publishers’ policies” section in the Politecnico’s website will be carried on as a routine activity together with the frequent transactions with the authors.</p> <p>The training courses about copyright issues will be included as a section of the courses on Open Access, focused on the fulfillment of Horizon 2020 requirements, scheduled in Action 6.</p> <p>Details regarding the number of Number of publishers contacted and the number of transactions with authors by email over the years are available in the “Report on Action Plan 2015-2018”</p>

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33. Teaching

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
15	Lack of teacher training	To increase teaching skills	To extend courses on 'teaching the teachers', 'communicating in the classroom' both to permanent research staff and to temporary research staff	December 2018	Student Affairs Area / Quality Assurance Division, Research Area	<p>Monitoring of delivered courses</p> <p>STATUS COMPLETED:</p> <ul style="list-style-type: none"> • Training courses on Teaching the teachers: 2 editions • Workshops for PhD supervisors: 2 • On line courses for PhD candidates to develop communication skills including how to prepare a lesson/presentation and to interact with the classroom

34. Complains/appeals

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
16	Lack of an impartial person to deal with complaints/appeals of researchers	To ensure the presence of an impartial person able to acknowledge complaints and appeals from the research staff	To appoint a University Researcher Ombudsman	December 2018	Legal Affairs Service	<p>Appointment of a University Researcher Ombudsman</p> <p>STATUS ON-GOING:</p> <p>On 18th December 2018 the Academic Senate decided that the Vice Rector for Quality, Welfare and Equal</p>

						<p>Opportunities will have the role of Researcher Ombudsman.</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Action 7)</p>
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IV. Training

37. Supervision and managerial duties

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
17	Impossibility to express anonymously about the adequacy of supervisors	To create a tool to monitor the satisfaction of the relation between the PhD candidates/ research fellows and the supervisors	To create an anonymous on-line questionnaire on the adequacy of the supervisor based on the guidelines for supervisors and to decide periodical distribution to PhD and research fellows	December 2017	Quality and Evaluation, Research Support Area, Human Resources and Organisation Area, Students Affairs Area- Doctoral School, Information Technology Area	Analysis of the results of the questionnaire STATUS COMPLETED: Creation and distribution of an updated version of the questionnaire to PhD candidates and of the questionnaire to research fellows and analysis of results

40. Supervision

N°	PROBLEM IDENTIFIED	OBJECTIVE	PLANNED ACTIONS	TIMING	RESPONSIBLE FOR IMPLEMENTING	MONITORING PLAN
18	Lack of uniformity in carrying out the supervisor role	To optimize the operational procedures related to the supervisor figure	To adopt guidelines to regulate the relationship between the PhD candidate and the supervisor and guidelines to regulate the relationship between the temporary researcher and the scientific responsible	December 2017	Student Affairs Area- Doctoral Scho (Chiara Lauritano)/ Human Resources and Organisation Area (Francesca Manfroni), Research Area (Chiara Biglia)	Approval of guidelines to regulate the relationship between the PhD candidate and the supervisor and guidelines to regulate the relationship between the temporary researcher and the scientific responsible STATUS ON GOING: Guidelines for Good Practices "PhD and other research

						<p>degree programs supervision” presented to the Board of the Doctoral School</p> <p>THE ACTION WILL CONTINUE AND WILL BE FURTHER DEVELOPED IN ACTION PLAN 2019-2021 (Actions 26, 27)</p>
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