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Researchers' Report 2014

Country Profile: Austria



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1. Key data

National R&D intensity target

“Austria has set a national R&D intensity target of 3.76%, one percentage point above the performance in 2011 and the third highest national target among EU Member States. In the past decade, R&D intensity in Austria has progressed faster than the EU average - reaching 2.75% in 2011¹. Overall, Austria is almost on track to achieve its national R&D intensity target, if the recent slowdown in R&D investment growth can be overcome.

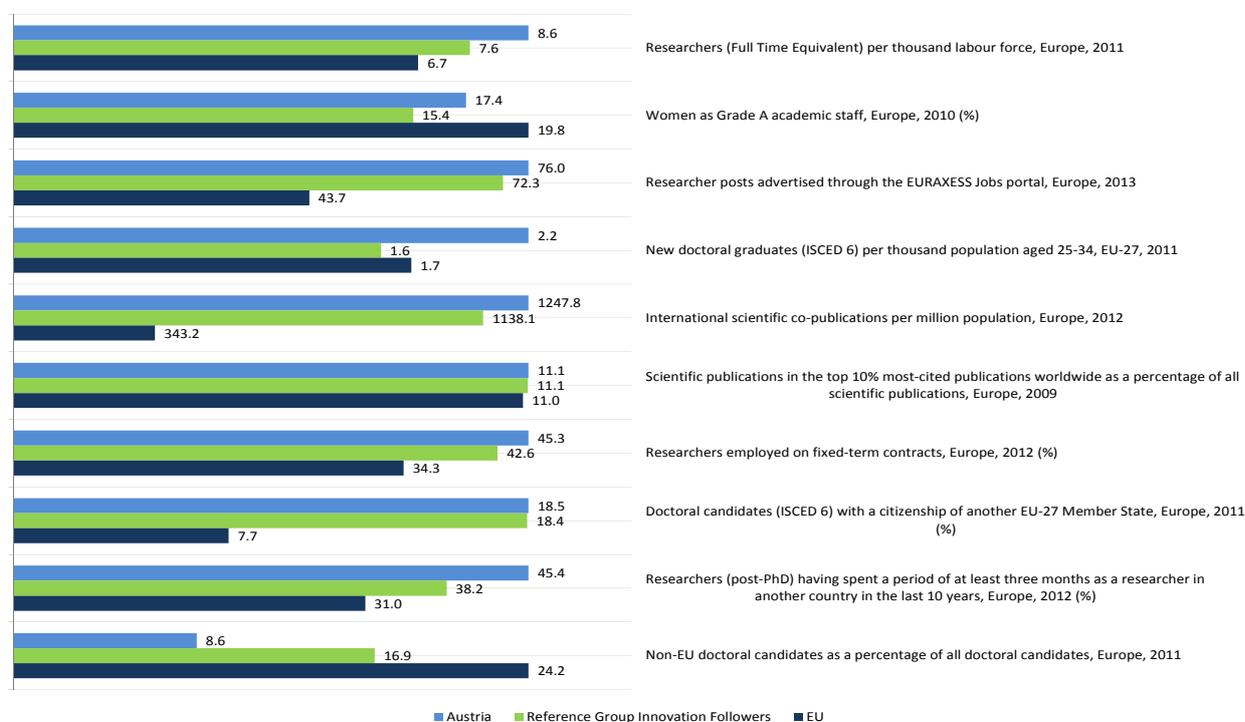
Public spending on R&D as a % of GDP has shown a clear upward trend in Austria since 2002 and increased also during and after the recession of 2009, despite budgetary constraints. Also business R&D as a % of GDP has expanded strongly in the last decade and is now among the highest in Europe. However, in recent years, progress in private spending has decelerated, with stagnation in the share of GDP and no increase in absolute spending in real terms during the recession of 2009 and only a moderate increase in 2011.

Austrian research and innovation are also benefitting from support from the EU budget, via co-funding for private and public R&D investment as well as other innovation, training and entrepreneurial activities. Main instruments are the Structural Funds and the 7th Framework Programme for Research. For the ERDF programme period 2007-2013, nearly EUR 500 million has been allocated from the EU budget to activities related to research, innovation and entrepreneurship in Austrian regions (corresponding to over 70% of the ERDF resources allocated to Austria). Austria still has scope to increase its funding of R&D from the 7th Framework Programme. The success rate of Austrian applicants is 21.7%, slightly lower than the EU average success rate of 22%. Up to mid-2012, over 2 000 Austrian participants had been partners in a FP 7 project, with a total EU financial contribution of EUR 710 million.”²

Key indicators measuring the country’s research performance

The figure below presents key indicators measuring Austria’s performance on aspects of an open labour market for researchers against a reference group and the EU average³.

Figure 1: Key indicators – Austria



¹ In 2012, R&D expenditure was 2.84% (Eurostat, 2014).

² European Commission (2013), “Research and Innovation performance in EU Member States and Associated countries. Innovation Union progress at country level 2013”

³ The values refer to 2013 or the latest year available

Source: Deloitte

Data: Eurostat, SHE Figures, EURAXESS Jobs Portal, UNESCO OECD Eurostat education survey, Innovation Union Scoreboard 2014, MORE2. Notes: Based on their average innovation performance across 25 indicators, Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands, Slovenia and the UK show a performance above or close to that of the EU average. These countries are the "Innovation followers"⁴.

Stock of researchers

The table below presents the stock of researchers by Head Count (HC) and Full Time Equivalent (FTE) and in relation to the active labour force.

Table 1: Human resources – Stock of researchers

Indicator	Austria	EU Average/Total
Head Count per 1 000 active labour force (2011)	15.18	10.55
Head Count (2011)	65 609	2 545 346
FTE per 1 000 active labour force (2011)	8.59	6.75
Full time equivalent (FTE) (2011)	37 114	1 628 127

Source: Deloitte

Data: Eurostat

2. National strategies

The Austrian Government has put in place a range of measures aimed at training enough researchers to meet its R&D targets and at promoting attractive employment conditions in public research institutions. The table below presents key programmes and initiatives intended to implement the strategic objectives to train enough researchers to reach Austria's R&D targets, to promote attractive working conditions, and to address gender and dual career aspects.

Table 2: National strategies

Measure	Description
Austrian RTD Strategy – Working Group (WG) "Human Potential" (2012)	This Working Group of representatives of different ministries who are responsible for HR issues relating to pupils, students and researchers has existed since the beginning of 2012 and at the end of that year it formulated its first recommendations on existing and planned measures in the field of MINT (Mathematics, Informatics, Science, and Technology), e.g. to extend Sparkling Science in terms of the projects approved; to continue the Young People Initiative; to continue and ensure the long-term development of the w-fForte/Laura Bassi Centres of Expertise.
Austrian RTI Strategy – National Strategy for Research, Technology and Innovation of the Austrian Federal Government (2011)	The Austrian RTI Strategy "Realising potentials, increasing dynamics, creating the future – Becoming an Innovation Leader" defines Austria's strategic and operational goals, sets priorities, and sets out support measures aimed at promoting research, technology and innovation over this decade. Austria's objective is to move from the group of Innovation Followers into the group of Innovation leaders, i.e. to be among the most innovative countries in the EU.
Gender Monitoring as part of uni:data (ongoing)	As part of the collection of information for the 'uni:data' data warehouse, the Federal Ministry of Science, Research and Economy undergoes an accompanying monitoring process with regard to the implementation of gender equality and the promotion of women at universities while it also measures the impact of programmes for the promotion of young scientists (Austrian Science Fund-FWF, Austrian Academy of Science-ÖAW). This indicator system integrates the following instruments: the Universities Act 2002, performance agreements with universities, university development plans, gender-specific indicators and EU benchmarks.
Implementation of Gender Budgeting in the Federal Ministry of Science, Research and Economy (BMWF) and at universities (ongoing)	Since 1 st January 2009, Gender Budgeting has been included in the federal constitution and refers to equal resource distribution between women and men. Equal treatment of both genders has to be taken into consideration at federal, regional and community level. Since 1 st January 2012, this concept has been further strengthened with the establishment of 'outcome-oriented budgeting' (<i>zielorientierte Budgetierung</i>) at federal level. This incorporates five core objectives, one of which relates to equal treatment, i.e. a balanced gender ratio

⁴ European Commission (2014), "Innovation Union Scoreboard 2014"

Measure	Description
	in decision- making positions, boards and among young academics (both scientists and artists).
National Action Plan for Researchers (2009-2011)	As a response to the European Commission Communication “Better Careers and More Mobility: A European Partnership for Researchers”, the Austrian government issued a “National Action Plan for Researchers”. The Action Plan was based on a three-year partnership between Member States and the European Commission with the objective of ensuring a sufficient number of researchers in Europe. It aimed to achieve progress in the following areas: <ul style="list-style-type: none"> – Open and competitive recruitment of researchers as well as cross-border portability of research grants; – Social security and supplementary pension needs of researchers; – Attractive employment and working conditions for researchers; – Enhancing the training, skills and experiences of researchers; – Raising and retaining the interest of pupils and young people in science and research.
Strategy for Excellence of the Austrian Council for Research and Technology Development (2007)	The strategy proposes measures for increasing the overall quality of research and boosting the development of top-level international research in Austria. For example, it promotes excellence programmes for training graduates and doctoral candidates, encourages the improvement of framework conditions for foreign researchers and promotes inter-sectoral mobility ⁵ .
Together for Austria – Programme of the Austrian Federal Government 2008-2013 (2008-2013)	The multi-annual Together for Austria Programme aimed to invest in education, science and research with the ultimate goal of securing the foundations of Austria’s future prosperity and thus offering young people optimal opportunities as they embark on a (researcher) career.
White paper on the steering of research, technology and innovation in Austria by the Austrian Council for Research and Technology Development (RFTE) (2013)	The RFTE has analysed the Governance of RTI in the course of its monitoring mandate due to the importance of this matter. This white paper is a collection of recommendations on implementation-oriented steering of research, technology and innovation in Austria. It includes suggestions and positions/approaches for the improvement of RTI governance in Austria and drafts a batch of necessary reform steps and concrete spheres of activity, which are from the Council’s view requirements for the achievement of innovation leadership. The objective of this White Paper is to initiate a broad discussion.
Work programme of the Austrian Federal Government 2013-2018 (Dec. 2013)	The multi-annual work programme “Austria. A story of success” sets out the targets for research and innovation in the coming years. This includes e.g. the creation and improvement of career prospects for young people and fostering the development of outstanding young researchers as well as individual talents and career paths through an additional 2 500 doctoral and post-doctoral positions.

Source: Deloitte

3. Women in the research profession

Measures supporting women researchers in top-level positions

In 2010, the percentage of women grade A academic staff was 17.4% in Austria compared with 15.4% among the Innovation Union reference group and an EU average of 19.8%⁶.

The Austrian Government has introduced a number of measures to raise the proportion of women in high level positions in research, technology and innovation (RTD). The table below provides an overview of key initiatives supporting women in the research profession.

Table 3: Women in the research profession – Key programmes and initiatives

Measure	Description
Amendment to the 2002 Universities Act (2009)	Following an amendment to the Universities Act, at least 40% of the staff of universities and members of university boards must be women. The BMWFV monitors the implementation of the 40% quota annually ⁷ .

⁵ http://www.rat-fte.at/tl_files/uploads/Strategie/070827_Executive%20Summary_engl.pdf

⁶ See Figure 1 “Key indicators – Austria”

⁷ For further information about the results of the annual monitoring, go to: <http://wissenschaft.bmwf.gv.at/bmwf/wissenschaft-hochschulen/gender-und-diversitaet/gleichbehandlung-an-oesterreichischen-hochschulen-und-forschungseinrichtungen/gleichbehandlung-und-frauenfoerderung-an-den-universitaeten/umsetzung-der-40-frauenquote>

Measure	Description
Austrian Universities' Gender & Diversity Task Force (ongoing)	The aim of the Austrian universities (Austrian Rectors' Conference) Task Force is to increase women's share of top-level positions at universities by offering coaching to prospective female heads of universities.
Career Development Programme for Female Researchers (2005-ongoing)	<p>The Austrian Science Fund finances specific career development programmes to enhance researchers' career development. The Career Development Programme for Female Researchers offers to extremely well qualified female scientists the chance of two-stage funding for a total of six years. The programme is divided into:</p> <ul style="list-style-type: none"> - The <i>Hertha Firnberg</i> Programme: for highly qualified female post-docs of any scientific discipline, who have completed their university studies. It aims to support women at the beginning of their scientific careers or following maternity leave. The programme is carried out by the Austrian Science Fund (FWF). To date, 199 <i>Hertha Firnberg</i> fellowships have been granted⁸; and - The <i>Elise Richter</i> Programme: addressed to highly qualified female senior post-docs and scholars, aiming to provide scientists with the necessary qualifications to apply for professorial positions in Austria or abroad ("Habilitation" or equal qualification). The programme is carried out by the Austrian Science Fund (FWF). To date, 116 <i>Elise Richter</i> fellowships have been granted. <p>The programme was evaluated in 2011⁹.</p>
Gabriele Possanner-Staatspreis Gabriele Possanner-Förderungspreise (ongoing)	With the Gabriele Possanner Awards, the Austrian Federal Ministry of Science, Research and Economy honours scientific achievements which promote gender studies. Every two years the State Award (EUR 10 000) and two promotion awards (EUR 3 000 each) are given to scientists and researchers whose scientific achievements promote gender studies.
Industrial PhD Programme of the National Foundation for Research, Technology and Development (ongoing)	The programme supports highly qualified women in working in applied research. The programme motivates female Ph.D. students to choose a career in science and technology, and to enhance their career prospects in applied research by giving them the possibility of working in a company which deals with projects relevant to their doctoral research studies.
Initiative to raise the proportion of women in highly skilled positions in research, technology and innovation (RTD field), Ministry of Transport, Innovation and Technology (BMVIT) (ongoing)	The initiative calls for an increase in the proportion of women project leaders by six percentage points yearly, from 15.8% in 2010. In addition, the proportion of women in selection bodies is to go up by seven percentage points until the year 2013, from 23% in the year 2010, in order to raise women researchers' influence on R&D. By 2012, it had risen to 24%. New targets are under discussion.
Käthe Leichter Award & Government prize (Staatspreis) (ongoing)	<p>There are five <i>Käthe Leichter</i> prizes of EUR 2 500 each. They are awarded by the members of the government responsible for education, labour, and in alternate years the economy, and science and research, as well as the chamber of labour and the Austrian National Bank.</p> <p>The <i>Käthe Leichter</i> State Award for 'Women and Gender Studies' and for 'Equality in the World of Work' (Austria) is awarded for outstanding achievements by women in the social sciences, the humanities and the cultural sciences or outstanding achievements in gender equality. The award is endowed with EUR 5 000 and is conferred by the cabinet member responsible for women's issues.</p>
L'ORÉAL Austria (Fellowships in Basic Research for Young Female Scientists) (ongoing)	Financed by L'ORÉAL Austria as part of the "For Women in Science" initiative and by the Ministry of Science, Research and Economy, L'ORÉAL Austria is a short term fellowship programme (6-12 months) for young, excellent female scientists from medicine, mathematics, natural and life sciences in cooperation with the Austrian Commission for UNESCO and the Austrian Academy of Sciences. The total budget is of EUR 20 000 per fellowship per year. Since the implementation of the programme in 2007, 17 doctoral candidates and 11 post-docs have been granted a fellowship.

(available in German only) and https://oravm13.noc-science.at/apex/f?p=103:6:0::NO::P6_OPEN:N (available in German only).

⁸ Evaluation Report 2011: <http://www.fwf.ac.at/de/downloads/pdf/elita.pdf>

⁹ Evaluation Report 2011: <http://www.fwf.ac.at/de/downloads/pdf/elita.pdf>

Measure	Description
Media Training (ongoing)	As part of this programme, women doctoral candidates and postdocs from 2008-2010 received media training to improve media-related communication. In 2009-10, the training was also opened to male scientists. In 2013, when courses resumed, 121 people participated in 15 sessions. It is planned to offer the media training in 2014 as well.
Performance Agreement with the Austrian Academy of Sciences	The performance agreement with the Austrian Academy of Sciences includes the promotion of gender equality as well as instruments and measures to increase the proportion on women in science (e.g. a Gender Equality Action Plan).
Talents Programme of the Ministry of Transport, Innovation and Technology, administered by the Austrian Research Promotion Agency (FFG) (2011-ongoing)	<p>The Talents Programme aims to encourage the access of women to research positions and improve working conditions in research and technology while motivating women to choose a career in science and technology and enhancing their career prospects. Moreover, it promotes the potential of young female scientists and engineers at the beginning of their career by encouraging close cooperation between businesses and institutes of higher education. As a consequence, companies become more attractive to women and their potential is further deployed to the benefit of the companies and corporate competitiveness.</p> <p>The Talents Programme supports RTD talents (especially women), by offering traineeships and providing financial support for (regional) education projects in schools in the field of mathematics, informatics, science and technology. In particular, it finances traineeships for female students and traineeships for pupils (boys and girls), encourages networking (<i>FEMtech Network</i>), enhances visibility of women experts (<i>FEMtech Female Expert Database</i>), promotes the achievements of successful women in research (<i>FEMtech Female Expert of the Month</i>), offers career support (<i>FEMtech Career Initiative</i>), supports research projects (<i>FEMtech Research Projects Initiative</i>) and seeks to improve especially women's career opportunities in science and technology. It also supports cooperation between academic institutions, research institutes and private companies with schools and kindergartens (<i>Talente regional cooperation projects</i>). In 2013, 1 504 traineeships for pupils were funded under the "discover talents" action line. The budget is about EUR 1 500 000 per year.</p> <p>FEMtech Traineeship Initiative for female students In order to meet the future demand for researchers and R&D experts, Talents supports and mentors female students to take up scientific and engineering positions in industry. The measure aims to encourage young female science and technology graduates to take up a career in research as well as to encourage companies to integrate women in R&D projects and activities. The internship lasts one to six months. The number of traineeships for female students funded between September 2012 and May 2013 was 490. The budget was EUR 3.7 million.</p> <p>FEMtech Network During regular networking meetings, participants exchange relevant information on the topic "Women in research and technology". In addition, these meetings are an opportunity for an informal information exchange and to obtain funding advice from the FFG. Day care services are offered during each of these meetings.</p> <p>FEMtech Female Expert Database The FEMtech Female Expert Database supports women experts in participating in panels and expert discussions with a view to providing a comprehensive and gender-diverse perspective on a wide range of topics. The database is a tool available to institutions and companies wishing to find qualified women experts effectively. Women specialists from the fields of science, engineering or technology can register online. The database enhances the visibility of the expertise and potential available in Austria, and enables women to join and</p>

Measure	Description
	<p>participate in network structures. Registration and search requests are free of charge and can be carried out online on the FEMtech website¹⁰.</p> <p>FEMtech Female Expert of the Month</p> <p>The FEMtech initiative heightens the public profile of successful women in technology-oriented research. Since 2005, the achievements of successful women working in research and technology have been displayed in the national media on a monthly basis. The “FEMtech Female Expert of the Month” is selected from the “FEMtech Female Expert Database” by an independent panel of science and industry representatives, consultants and the media. The profiles of the female experts selected are published online each month¹¹.</p> <p>FEMtech Career</p> <p>FEMtech Career aims to increase the number of and equal opportunities for women scientists employed in industrial research – and thus increase the competitiveness of R&D-intensive companies. In order to increase the proportion of women in research and improve their career opportunities, FEMtech Career supports companies and application-oriented non-university research institutions in implementing structural measures, which:</p> <ul style="list-style-type: none"> - Lead to equal opportunities for women and men (affirmative action plans, flexible working time schemes etc.); - Increase the proportion of female scientists and engineers in the company; - Support female scientists and engineers in their professional careers (coaching, mentoring, further education and training etc.); and - Implement activities which attract women to applied research. <p>FEMtech Career also supports the development and implementation of relevant measures in companies (industry, SMEs) and research institutions on the basis of the organisation's individual situation. These activities include organisation and management, human resources, and research and development. The purpose of this effort is to improve the company's structures in the long term, grant women access to higher positions and improve the general working conditions.</p> <p>FEMtech Research Projects</p> <p>FEMtech Research Projects initiate and support projects with an emphasis on both genders' different needs and demands. The differences between men and women are taken into consideration throughout the development of technologies and products. FEMtech Research Projects aim to increase the level of interest among scientists on the “gender” issue when developing and carrying out research projects, with a view to improving the quality and capability of solutions, products and technologies to meet the needs of all customers.</p>
<p>Training of members of university boards by the Ministry of Science, Research and Economy (ongoing)</p>	<p>The Ministry of Science, Research and Economy strengthens and supports the work of university boards on an ongoing basis by offering training and individual coaching for new board members in order to increase the number of women in leading positions and functions in universities. This initiative aims to support the implementation of the 40% quota with adequate services. Sixty individual training courses were offered in 2013. The total budget for 2013 was EUR 250 000.</p>
<p>w-fFORTE – Wissenschaft(f)t Erkenntnis – knowledge creates insights (ongoing)</p>	<p>The w-fFORTE programme places great emphasis on understanding the different types of culture that exist in research institutions and identifying the resulting challenges faced by researchers working there. For example, w-fFORTE provides grants for studies and spreads this knowledge to the RTI community in order to establish equal opportunities. The total budget allocated to this programme is EUR 17.33 million (including Laura Bassi Centres of Expertise).</p> <p>w-fFORTE – Laura Bassi Centres of Expertise</p> <p>In 2009, eight “Laura Bassi Centres of Expertise” were selected to receive</p>

¹⁰ <http://www.femtech.at/expertinnendatenbank>

¹¹ <http://www.femtech.at/en/activities/female-expert-of-the-month/female-experts-2013.html>.

Measure	Description
	<p>funding via an innovative, two-stage selection process. Highly qualified female researchers manage the centres and guarantee the visibility of the excellent results achieved by women in science and industry. The eight “Laura Bassi Centres of Expertise“ have a term of up to seven years with a total funding budget of EUR 15 million. An interim evaluation was carried out in 2013: there had been 230 publications, 21 dissertations, 2 new patents and 2 licences. These are only selected figures, but which showed that the scientific success of the Laura Bassi Centres had been tangible since the start of the Programme. In spring 2013, following a strict international peer review process, all Centres were therefore recommended for the second funding period.</p> <p>w-fORTE – In focus: Career As part of a series of events, w-fORTE organises workshops supporting women in science and technology in enhancing their strategic competencies, in areas such as strategy, team leadership and development, dealing with power and work-life balance.</p>
University Performance Agreements 2013-2015	The current Performance Agreements, in line with the Agreements for 2010-2012, aim to improve the position of women at all stages of their career and in responsible positions at universities. In addition, they support work-life balance by offering child-care facilities, parental leave and flexible working hours. The implementation of these measures at universities is reviewed annually. The human capital reports envisaged for the period 2013-2015 will be available in autumn 2014.
Women representation on UAS panels	Since 2011 the new legal regulations for Universities of Applied Science provide for a 45% quota for women on academic panels.

Source: Deloitte

Measures to ensure a representative gender balance

Following an amendment to the Universities Act, at least 40% of the staff of universities and members of university boards must be women.

The Austrian government has not, however, introduced specific gender quotas in support of gender equality in the private sector. However, a number of measures such as Talents (see above) aim to ensure a representative gender balance in the research profession. In addition, the Austrian Science Fund (FWF) has introduced a target quota of 30% of female researchers in the total number of applicants for the Special Research Programme and the Doctoral Programme so as to encourage the participation of female researchers within the excellence programmes. Should the quota not be reached, the FWF asks for further explanations.

Parental leave

Women researchers enjoy a set of rights to interrupt or extend a contract in the event of maternity leave:

- Fellowship programmes administered by the Austrian Academy of Sciences (APART, DOC, DOC-fORTE, and DOC-team) allow women researchers to interrupt and extend their contract for a maximum of 12 months during maternity leave. Women researchers receive payments covered by the Austrian social security system;
- Fellows (mothers or fathers) providing proof of care for at least one child under the age of seven are eligible for a part-time fellowship. The duration of the fellowship can be extended;
- Persons receiving grants from the FWF are financed by means of employment contracts. This applies to doctoral students and incoming scholars as well. Women researchers with employment contracts enjoy the same maternity benefits as any other employee.
- The FWF Career development programmes offer project leaders a range of possibilities for maternity leave and ensuing part time employment. Project leaders funded under the FWF’s Career development programme for female researchers who are employed with a 100% employment contract can, after the birth of a child, receive a child allowance of EUR 9,600 per child per year (gross, including all employer and employee contributions and paid in 12 instalments each year) until the third birthday of the child;
- Researchers are protected by Austrian employment law in the event of interruption of a contract during maternity leave;
- Career development programmes offer project leaders the possibility of interrupting and extending a project at no additional cost in the event of maternity;

- OeAD grants do not include benefits for maternity leave. However, interruption is possible if the researcher wishes to continue/finish the project after maternity leave.

4. Open, transparent and merit-based recruitment

Recruitment system

Austria has introduced a set of measures in support of an open recruitment system for researchers. The table below summarises the main components of the system.

Table 4: Recruitment system

Measure	Description
Amendment to the 2002 Universities Act (2009)	Following an amendment to the Universities Act, Austrian Universities must advertise research job vacancies (for scientific and research staff) internationally, at least EU-wide. University institutions decide autonomously on the instrument for advertising vacancies internationally. The Ministry of Science, Research and Economy actively promotes the EURAXESS Jobs portal via brochures, flyers, and newspaper advertisements in order to raise awareness of the European job database among universities and public research organisations.
EURAXESS Jobs & Performance Agreements 2013-2015 with universities	The EURAXESS Jobs portal offers a cost-free platform for posting jobs internationally. This European job database is promoted via articles and newspaper advertisements to raise awareness of its existence among universities and public research organisations. The promotion of the EURAXESS Jobs portal and broader implementation of this tool to advertise jobs at Austrian universities is part of the performance agreements 2013-2015 with universities.
The Austrian Job Exchange for Research, Development and Innovation (part of the Talents Programme) (ongoing)	The Job Exchange is a service provided by the Ministry of Transport, Innovation and Technology and the Austrian Research Promotion Agency, and is available online. As part of the Talents programme, it offers a range of jobs in research and development, and innovation in Austria – from internships and PhD positions to senior posts (some 5 500 job offers in 2013). Information is available at: http://www.ffg.at/jobboerse .
The Austrian Science Fund (FWF) database (ongoing)	The Austrian Science Fund database provides information on research jobs (PhDs, post-docs, etc.) ¹² .

Source: Deloitte

Open recruitment in institutions

The table below presents information on open recruitment in higher education and public research institutions.

Table 5: Open recruitment in higher education and public research institutions

Do institutions in the country currently have policies to ...?	Yes/No	Description
- publish job vacancies on relevant national online platforms	Yes	Online platforms and online publication of jobs is common sense.
- publish job vacancies on relevant Europe-wide online platforms (e.g. EURAXESS)	Yes	
- publish job vacancies in English	-	It is up to the autonomous institutions.
- systematically establish selection panels	-	It is up to the autonomous institutions.
- establish clear rules for the composition of selection panels (e.g. number and role of members, inclusion of foreign experts, gender balance, etc.)	-	It is up to the autonomous institutions.
- publish the composition of a selection panel (obliging the recruiting institution)	-	It is up to the autonomous institutions.
- publish the selection criteria together with job advert	-	It is up to the autonomous institutions.
- regulate a minimum time period between vacancy publication and the deadline for	-	It is up to the autonomous institutions.

¹² <http://www.fwf.ac.at/asp/jobs.asp?L=D>

Do institutions in the country currently have policies to ...?	Yes/No	Description
applying		
– place the burden of proof on the employer to prove that the recruitment procedure was open and transparent	-	It is up to the autonomous institutions.
– offer applicants the right to receive adequate feedback	-	It is up to the autonomous institutions.
– offer applicants the right to appeal	-	It is up to the autonomous institutions.

Source: Deloitte

EURAXESS Services Network

In 2013, the number of researchers posts advertised through the EURAXESS Jobs portal per thousand researchers in the public sector was 76.0 in Austria compared with 72.3 among the Innovation Union reference group and an EU average of 43.7¹³.

In 2013, Austrian organisations posted 1 042 positions on EURAXESS Jobs (in comparison to 779 in 2012 and 525 in 2011). As of 9 December 2013, there were 301 registrations from Austrian organisations on the EURAXESS Jobs portal.

The Austrian EURAXESS Services Network (www.euraxess.at) – consisting of two EURAXESS Bridgehead Organisations and a number of EURAXESS Service Centres – provides information and assistance on the following subject areas:

- Research funding, research job opportunities, legal issues (visa, work permits, entry and residence conditions, social security, tax issues), administrative and cultural issues (housing, language courses, child-care, etc.), the Austrian research landscape (wide scope of research institutions and activities across Austria), women in science (promotion of women, strategic information, activities, databases), potential research partners, access to other countries' EURAXESS portals, and contact details of EURAXESS Services Centres.

5. Education and training

Measures to attract and train people to become researchers

Several Austrian Federal Ministries have created new programmes and improved existing initiatives to increase young peoples' interest in (natural) science and technology. The table below summarises practical measures aiming to attract and train young people to become researchers.

Table 6: Human Resources – Key programmes and initiatives

Measure	Description
Austrian Researchers' Night (<i>Lange Nacht der Forschung</i>) (ongoing)	' <i>Lange Nacht der Forschung</i> ' is the biggest event for Science and Research in Austria to inform the public about current domestic research. It was held for the first time in 2005.
Education Activities in the framework of the national space programme ASAP (ongoing)	These activities support national institutions in their efforts to stimulate interest in space for young people, especially in schools. They serve as a contact and information point for schools and provide them with demonstration and teaching materials via the European Space Agency ESA. They also offer support with courses and studies offered by the International Space University (ISU), support for training and grants available from the European Space Agency (ESA), and support for students' projects and student events.
FIT – Women in Technology Initiative (ongoing)	The FIT Initiative offers (female) pupils information on technical studies with the aim of stimulating girls' interest in technology. In 2011-12, FIT was organised and financed by five Austrian universities (Graz, Innsbruck, Linz, Salzburg and Vienna). In 2013 FIT Infodays were again held at several universities and universities of applied sciences across Austria.
IMST (Innovation Makes Schools Top-Class) Programme (ongoing)	The IMST Programme aims at establishing and structural embedding of a culture of innovation designed to consolidate exemplary teaching in mathematics, information technology, science, German studies and technology.

¹³ See Figure 1 "Key indicators – Austria"

Measure	Description
&	
IMST-New (MINDT) since 2013	<p>The programme is a contribution of the Austrian Federal Ministry of Education and Women's Affairs (BMBF) and it also confers the IMST award on the basis of the following criteria:</p> <ul style="list-style-type: none"> - Innovative character of the project; - Enhancement of the attractiveness of the classes; - Dissemination of innovative ideas/projects; - Sustainability; - Gender sensitivity and gender mainstreaming. <p>In 2013, the programme emphasises fluency in German (referred to by the "D" in MINDT).</p>
Maßnahmenkatalog im Bereich Information, Beratung und Orientierung für Bildung und Beruf (IBOBB) (ongoing)	This is a master plan and list of measures for information, advice and career guidance for pupils in the 7 th and 8 th years of school. The master plan and list of measures promote pupils' 'career management skills' and offer young people the possibility of gaining practical work experience.
Mentoring Programme (ongoing)	The Programme supports mentoring (mainly by women researchers) of young (female) pupils (15-19 years) interested in research, technology and innovation.
MINT (Mathematics, Informatics, Science, and Technology) Programme - Information Campaign (ongoing)	The MINT Programme encourages students to pursue a career in a scientific field (mathematics, computer science, natural sciences and technology).
Summer School Alpbach (ongoing)	The Summer School ¹⁴ Alpbach is organised by the FFG, (as the organisation responsible – in cooperation with ESA (European Space Agency), together with DLR (DE), CNES (FR) and ISSI (CH) as main partners, and other national space agencies. Each year, it provides a unique opportunity for international students to work on a specific space-related topic. Organised for more than 30 years, the summer school lasts two weeks and offers 60 European students the possibility of attending lectures and project-related workshops on different topics related to space. The FFG's annual budget for this is EUR 70 000.
Talents Initiative (since 2011 – ongoing) by the Federal Ministry of Transport, Innovation and Technology, administered by the Research Promotion Agency/FFG	<p>See chapter 3 "Women in the research profession".</p> <p>Talents regional Talents regional offers incentives to build up cooperation between schools and research institutes for children interested in Science and Technology R&D in a geographic region. The duration of the projects is between 12 to 18 months.</p> <p>Talents internships for pupils Talents internships for pupils aim to encourage girls and boys to follow natural sciences, and engineering and technology. Pupils have the opportunity to have an internship in various companies and scientific research institutions for four weeks during the summer time.</p>
Yo!Tech – Lust auf Technik (ongoing)	This is an information/dissemination event for pupils about the various possibilities and opportunities for education in engineering and natural sciences.
Young People Initiative (<i>Jugend innovative</i>) (ongoing)	The Young People initiative was designed to inspire young people to explore technology and innovation, with the ultimate aim of attracting students to pursue a technology-related academic career. It has for the last 25 years been the biggest contest for Austrian young people (aged 15-21). It is run in close cooperation by the Austrian Federal Ministry of Education and Women's Affairs (BMBF) and the Federal Ministry of Science, Research and Economy (BMWFW). The AWS (Austria Wirtschaftsservice) is in charge of organisation and management.
Young Science programme (ongoing)	<p>Young Science includes the following initiatives: Kids and Junior Universities Initiative, Sparkling Science, <i>Nachwuchsförderung im BMWFW</i>:</p> <ol style="list-style-type: none"> 1. Kids and Junior Universities Initiative (2001-ongoing): children between the ages of 7 and 15 explore science with the support of researchers. Since 2008 more than 90 000 children and teenagers have benefited from the initiative.

¹⁴ Available at: <http://www.ffg.at/services/die-weltraum-sommerschule-alpbach>

Measure	Description
	<p>Fifteen Kids Universities took place in Austria in 2013;</p> <p>2. Sparkling Science (2007-ongoing): a research programme which supports (new) methods of promoting young researchers in Europe. It fosters cooperation between experienced scientists and young people. Funding is allocated for projects in which pupils are actively involved in the process of academic work. To date, 57 000 pupils have worked with some 700 researchers and 700 teachers in 211 projects covering current scientific questions in the field of humanities, life sciences, natural sciences, computer sciences, engineering and medicine. The number of schools involved in the project in Austria is 356; there are 38 partner schools located abroad;</p> <p>3. <i>Nachwuchsförderung im BMWF</i> (2011-2014) (pre-university promotion of the next generation of researchers):</p> <ul style="list-style-type: none"> - <i>Studienchecker</i>: this project provides guidance/advice for vocational education and the choice of study programme. It is run in schools in cooperation with the Federal Ministry of Education and Women's Affairs. - <i>Maturantenberatung</i>: this project provides guidance/advice from students to pupils on study areas and daily routines at university. This measure is carried out by the Austrian National Student Union directly at schools. - <i>Studieren probieren</i>: this allows pupils to visit lectures at universities in small groups.

Source: Deloitte

In order to maintain and improve its current standard of living, Austria requires more qualified, motivated and creative workers. It is therefore important to encourage young people to enter the fields of the natural sciences and technology. In the area of human resources, the main objective is to interest young people, and especially girls, in the technical professions. The following trends are of particular importance for human resources funding in the field of research: targeted funding for young people, and especially girls, in the natural sciences and technology throughout their education. Targeted funding for women in research, technology and innovation in order to achieve equal opportunities in industrial and non-university research.

In order to increase the number of doctoral graduates in science, technology, engineering and mathematics (STEM), a number of Austrian universities are establishing new organisational structures for doctoral training (and in particular supervision), e.g. doctoral schools or doctoral centres. In addition, some universities are developing new structural doctoral programmes aimed at supplementing and broadening doctoral training.

Doctoral graduates by gender

The table below shows the number of doctoral graduates in Austria by gender as a ratio of the total population.

Table 7: Doctoral graduates by gender

Indicator	Austria	EU Average
New doctoral graduates (ISCED 6) per 1 000 population aged 25-34 (2011)	2.2	1.7
Graduates (ISCED 6) per 1 000 of the female population aged 25-34 (2011)	1.8	1.6
Graduates (ISCED 6) per 1 000 of the male population aged 25-34 (2011)	2.5	1.8

Source: Deloitte

Data: Eurostat

Funding of doctoral candidates

Of a total of 28 900 doctoral candidates in 2012, approximately 5 000 received funding. The FWF (Austrian research fund) funded 1 967 doctoral candidates in 2013; around 2 000-2 500 received funding from other research institutions; approximately 1 000 were funded by industry.

For funding opportunities and details on the Austrian database for scholarships and research grants, please see Chapter 6 – “Working conditions – funding opportunities”.

Measures to increase the quality of doctoral training

The following table provides an overview of measures designed to improve the quality of doctoral training in Austria.

Table 8: Measures to increase the quality of doctoral training

Measure	Description
Amendment to the Universities Act (2006), Universities Performance Agreements 2010-2012 & 2013-2015	Following an amendment to the Universities Act, doctoral training was extended to three years as of the 2009-10 winter term in order to improve the quality of doctoral training. In addition, universities have established new doctoral curricula and have introduced additional measures to improve quality, skills and supervision of doctoral training.
Award of Excellence (BMWF 2008 - ongoing)	The Award of Excellence of the Austrian Federal Ministry of Science, Research and Economy is a contribution to the promotion of outstanding doctoral theses. The award amounts to EUR 2 500. The number of nominations depends on the number of students at each university. The rectors of the universities propose graduates of each academic year. This award has been made since 2008.
Doktoratskolleg (FWF) (ongoing)	The Doctoral Programme, a joint initiative led by internationally recognised scientists, facilitates work experience abroad for researchers and offers training in support of transferable skills development.
Initiativkolleg (University of Vienna) (2006-2013)	<i>Initiativkolleg</i> fosters researchers' collaboration in research projects and supports networking at international and interdisciplinary level. Doctoral candidates are supervised by a team of top scientists. As of 2013, the <i>Initiativkolleg</i> is being phased out and being replaced by individual funding schemes tailored to talented young researchers: this is the <i>uni:docs</i> fellowship programme. This is an individual scholarship scheme which aims to finance excellent doctoral candidates for a period of three years. Work is under way to prepare the next step for improving the position of doctoral candidates – the “University Doctoral Academies (VDA)”.
Institute of Science and Technology Austria – Graduate School (ongoing)	The Institute of Science and Technology Austria offers an innovative PhD programme combining advanced coursework and research. The Programme aims to attract top national and international scientists.
Qualification Framework for Austrian Higher Education Qualifications (planned for 2013)	The Qualification Framework for Austrian Higher Education Qualifications will define key competencies to be acquired during doctoral training.
Marietta Blau Grant Initiative of the Federal Ministry of Science, Research and Economy, administered by the OeAD-GmbH (ongoing)	The Marietta Blau grant aims to generate internationally competitive PhD diplomas in Austria. It offers financial support to highly qualified doctoral candidates at Austrian universities for carrying out part of their doctoral programme abroad (6-12 months).

Source: Deloitte

Skills agenda for researchers

In addition to measures aimed at improving researchers' research proposal writing skills (see chapter 6 “Working conditions”), the Austrian Economic Service (*Austria Wirtschaftsservice - awsg*) offers services to increase researchers' awareness of intellectual property rights.

6. Working conditions

Measures to improve researchers' funding opportunities

The Austrian database for scholarships and research grants (www.grants.at), Austria's most comprehensive database for scholarships and research grants (in English and German), offers an overview of approximately 1 200 funding opportunities for incoming and outgoing researchers, graduates and students. The Austrian Science Fund runs seminars to explain its funding procedures and thus for researchers to present their own ideas to the reviewers of the FWF programmes. The Austrian Research Promotion Agency (FFG) provides proposal-writing seminars to enhance post-docs' writing skills. The Austrian Agency for International Cooperation in Education and Research (OeAD) provides guidelines, recommendations, and seminars for drafting grant proposals.

Remuneration

Collective agreements determine minimum wages in Austria. Whether a collective agreement is applicable, and which, depends on the legal basis and the type of research organisation.

For further information, see the country profile on remuneration of researchers from the MORE2 study on the EURAXESS website.¹⁵

Researchers' Statute

In 2009, a collective agreement was concluded between university representatives and the public sector employees' union. The agreement provides a basis for improving career prospects and working conditions in universities by offering, for example:

- A standard career model which offers more flexibility, regular evaluation and higher minimum wages for researchers;
- Extension of the duration of short/fixed term contracts by the length of maternity leave; and
- The possibility of study, training or research leave.

The collective agreement gives universities flexibility. The former Austrian Federal Ministry of Science and Research supported implementation of the agreement with additional funds and has included implementation activities in performance agreements with universities for the period 2010-12. Moreover, during 2010, universities started implementing the collective agreement and modifying existing career models. Universities offer transparent career prospects by differentiating between positions which are fixed-term and those which enable the researcher to pursue a career path which includes the possibility of qualifying for a permanent position.

'European Charter for Researchers' & 'Code of Conduct for the Recruitment of Researchers'

The promotion of the 'Charter & Code' and broad implementation of their principles at Austrian universities was part of the 2010-12 and 2013-2015 performance agreements with universities. In Austria, 18 universities have signed the 'Charter & Code', as have three funding organisations, three umbrella organisations, four research organisations, three universities of applied sciences, one private university, one representative of industry and the former Austrian Federal Ministry of Science and Research.

The implementation of the 'Charter & Code' is part of the National Action Plan for Researchers (see chapter 2 "National strategies"). The Medical University of Graz was the first Austrian university to receive HRS4R (Human Resources Strategy for Researchers) acknowledgement from the European Commission. It has been followed by the FWF, the University of Natural Resources and Life Sciences (BOKU) and the University of Salzburg.

Autonomy of institutions

Whether public research institutions are autonomous is a matter for the law and regulation. For example, the autonomy of Austrian universities is defined by the Universities Act. Collective agreements specify the institutional autonomy (within the given legal framework) to allow for different academic staff profiles as well as for differentiation of researchers' salaries, e.g. the above-mentioned collective agreement for universities. Whether a collective agreement is applicable, and which, depends on the legal basis and the type of research organisation.

Career development

The table below provides an overview of measures put in place by Austrian funding agencies to include career development provisions in the evaluation criteria of research proposals.

Table 9: Career development provisions by funding agency

Measure	Description
AplusB business incubator programme of the Federal Ministry of Transport, Innovation and Technology (ongoing)	AplusB Centres promote self-employment as a career path for graduates and scientists. The researchers receive coaching and consulting services, infrastructure facilities (laboratories, offices etc.) and financial support (loan, subsidy). In total, eight regional AplusB Centres ensure a sustainable increase in the number of academic spin-offs from universities, universities of applied science and non-university research institutions by supporting technology transfer through exploitation of research results by industry. An analysis of academic start-ups

¹⁵ <http://ec.europa.eu/euraxess/index.cfm/services/researchPolicies>

Measure	Description
	supported by the AplusB programme from 2002 to 2009 demonstrated that these companies have a high level of research and development intensity in high-tech sectors, employ highly qualified personnel, are engaged in technology transfer and show significant growth and survival rates. The programme will be evaluated in 2014.
OEAW (Austrian Academy of Sciences) APART and DOC Programmes (ongoing)	The APART and DOC Programmes offer fellowships to post-docs and doctoral candidates in all disciplines. Applicants must submit a career plan stipulating the fellowship's relevance for the development for their research career. This is taken into consideration by the international reviewers when evaluating the application.
OEAW New Frontiers Programme (established 2012, ongoing)	With the New Frontiers Programme the Austrian Academy of Sciences established a flexible structure to respond rapidly to cutting-edge developments in science and research, which are largely driven by young researchers. The NFG programme targets investigator-driven innovative research in order to promote promising academic careers and to further strengthen basic research in Austria.
Talents Initiative (ongoing)	The Talents Initiative supports RTD talents (particularly women) by offering a set of support measures dedicated to researchers' career development – see chapter 5 "Education and training".
The Austrian Research Promotion Agency (FFG) (ongoing)	The Agency supports project funding, including employment/training of researchers.
The Austrian Science Fund (FWF) (ongoing)	As part of Austrian Science Fund procedures, international reviewers evaluate the project's importance for the applicant's career development. In the post-doc programmes in particular, there is a specific question on the career development possibilities for the applicant. See also the Career Development Programme, chapter 3 "Women in the research profession".

Source: Deloitte

Shift from core to project-based funding

The shift from core to project-based funding¹⁶ has the following impact on researchers' career paths and working conditions:

- While core research funding is considered to be a prerequisite for innovative research, scholars and scientists have to submit projects to funding agencies at regular intervals in order to be able to finance their research; seeking funding as well as administering a research project ties up expensive personnel as it is time-consuming; scientists and scholars who finance research mainly through project-based funding are usually employed on fixed-term contracts; they have to be mobile in order to ensure funding after the end of each contract. In addition, researchers are usually not included in any tenure track or career development measures that extend the length of the contract offered by the employer.
- The scope for research institutions to offer long-term career development options to excellent researchers is limited. This is also true for the Austrian Academy of Sciences, even though the Academy does not differentiate between core-funding or project-based funding. Hence, all researchers are offered the same career development measures while employed. According to the 'equality principle', the Academy supports excellent researchers independent of the source of financing.

Social security benefits (sickness, unemployment, old-age)

In Austria, grant beneficiaries' access to social benefits (sickness, unemployment and old-age benefits) is based on the following provisions:

- Grants offered by the main funding agencies provide social security coverage. Some programmes offer fixed-term contracts (grants) with full social coverage or with self-insurance;
- Anyone receiving a grant from the Austrian Science Fund (FWF) is financed via an employment contract. This applies to doctoral students and incoming scholars as well. The FWF had already begun to avoid funding researchers by means of stipends even before it signed the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers in 2006. The FWF supports researchers with employment contracts, which include social insurance (contributions to pension funds, health and

¹⁶ As outlined by the Austrian Academy of Sciences.

accident insurance, parental leave, etc.) Stipends for researchers going abroad are the only exception. In this case, there is no employment contract and only pension cover is provided;

- Fellowship programmes for doctoral candidates and post-docs administered by the Austrian Academy of Sciences (APART, DOC, DOC-team programmes) offer fixed-term contracts (fellowships) with full social coverage or with self-insurance.

7. Collaboration between academia and industry

The following table summarises key programmes designed to develop (more) partnerships between industry and academia, and to foster doctoral training in cooperation with industry.

Table 10: Collaboration between academia and industry

Measure	Description
AplusB business incubator Programme –(BMVIT¹⁷/FFG¹⁸) (ongoing)	See chapter 6 “Working conditions”.
ASAP – National Space Programme (2002-ongoing)	ASAP ¹⁹ supports research and technological development in the space domain through collective (academia/industry) projects. The annual budget is some EUR 7 million.
BRIDGE Programme (ongoing)	The BRIDGE Programme focuses specifically on the funding of industrial research-cooperation projects. Funded projects are those expected to build on the basic research of scientific institutes and take them closer to potential commercialisation through collaborative research with businesses. The projects carried out as part of concrete research collaborations are intended to enable an effective exchange of research results and expertise. Another aim is to foster communication between science and industry, opening up new prospects for both partners. The funding of collaborative projects is designed to facilitate mutual access to each other’s expertise and help companies overcome their apprehension about (basic) research.
Christian Doppler Laboratories Programme (ongoing)	The Christian Doppler Laboratories Programme promotes and strengthens application-based research carried out by academia in collaboration with industry partners. In individual Christian Doppler Laboratories (CD Labs), small groups of researchers collaborate with industry partners in the development of new, application-oriented basic research. The overriding objective is to improve young scientists’ education and career options both in academia and in the business sector. Academic papers, dissertations, and post-doctoral promotion undertaken within CD labs in cooperation with industry are expected to have a positive impact on university teaching practices. An additional goal is to establish international research partnerships, particularly in the European Research Area ²⁰ .
COIN – Cooperation and Innovation (ongoing)	COIN contributes to fostering Austria’s innovation performance by the better and broader transposition of knowledge into innovation. The “Cooperation and Network” line encourages technology transfer within entrepreneurial cooperation schemes, thus raising the level of innovation within businesses and strengthening their cooperation capacities. It focuses on output-oriented cooperation projects to develop and improve innovative products, processes and services. The 6 th Call of the COIN “Cooperation and Network” line had a budget of EUR 4.5 million. Projects started in mid-2013 and the duration is up to 3 years.
Collective Research Programme (ongoing)	Under the Collective Research Programme, businesses or special interest groups (representing the private sector) assign tasks to research organisations with the aim of developing products/services for the private sector.
COMET competence centre Programme – COMET K (ongoing)	The COMET competence centre Programme aims to develop international research excellence and expertise, and support the technological leadership of companies so as to strengthen Austria as a top destination for research. The

¹⁷ BMVIT - Federal Ministry of Transport, Innovation and Technology

¹⁸ FFG – Forschungsfoerderungsgesellschaft (research promotion agency)

¹⁹ Available at: <http://www.ffg.at/austrian-space-applications-programme>

²⁰ <https://www.cdg.ac.at/en/>

Measure	Description
	research carried out in competence centres ranges from medium- to long-term and meets high standards of quality. The programme's priorities are the applied orientation of top-level research and its actual implementation in the industry sector. COMET is sponsored by the Ministry of Transport, Innovation and Technology (BMVIT) and the Ministry of Science, Research and Economy (BMWFW). It follows on the success of their previous competence centre programmes. The provinces also support COMET with additional funding. The Austrian Research Promotion Agency is responsible for the management of COMET. As of end-year 2013, there were 21 COMET K-Centers (5 K2 Centers and 16 K1 Centers) as well as 24 K-Projects running with federal funding of approx. EUR 50 million per year.
Endowed Professorship	The endowed professorship supports the appointment of excellent researchers to Austrian universities in topics of strategic relevance for strengthening Austria's innovative capacity. Endowed professorships are designed to attract excellent researchers to Austria. A key element of this funding instrument is that these researchers will also be integrated into an existing work environment and will have their own research group. The 1 st call was launched on 30 January 2014 as part of the RTI Initiative <i>Production of the Future</i> with a total amount of EUR 5 million. The call is financed by the Federal Ministry of Transport, Innovation and Technology (BMVIT) and the Austrian Marshall Plan Foundation.
Forschungskompetenzen für die Wirtschaft - Research Competences for Industry (ongoing)	In the course of this programme, the Ministry of Science, Research and Economy, supports industry, primarily SMEs, in establishing and raising the qualifications of its innovation staff. The programme aims to establish industry-relevant research at universities and to promote inter-sectoral mobility. All projects are applied for and conducted by consortia comprised of enterprises and universities/universities of applied science. Together they design and implement the qualification measures that are customised to the needs of the enterprises and the selected participants. Since 2012, there have so far been two calls for qualifications seminars with a combined budget of EUR 3.75 million, and two calls for qualifications networks with a combined budget of EUR 9.3 million. There has been one call for innovation lectures with a budget of EUR 3.45 million.
ICT of the Future Programme (BMVIT) (ongoing)	The ICT of the Future Programme aims to foster cooperation between academia and the private sector with the objective of boosting development in the ICT sector.
Josef Ressel Centres – Research Laboratory for Universities of Applied Sciences (ongoing)	The strategic objectives of the Josef Ressel Centres are: <ul style="list-style-type: none"> - Utilise research capabilities at universities of applied sciences; - Support long-term cooperative relationships with industry and universities; - Support universities of applied sciences with a background in research in achieving high standards in R&D; - Improve the quality of education available through universities of applied sciences, in terms of sound vocational training with an emphasis on practical skills.
Knowledge Transfer Centres (BMWFW) (ongoing)	This initiative of the Federal Ministry of Science, Research and Economy started in 2013 to strengthen the transfer of academic knowhow to business. The programme foresees regional and thematic knowledge transfer centres, as well as funding for patents and prototypes for universities. The AWS (Austria Wirtschaftsservice) is in charge of organisation and management.
KIRAS - The Austrian Security Research Programme (ongoing)	KIRAS takes a comprehensive approach – because increasing public safety and security is definitely not (exclusively) a matter of reducing military threats or risks but also means minimising economic, environmental, cultural and social risks. All institutions that contribute to maintaining public safety and security may thus benefit from FFG funding. Innovative research and new technologies facilitate the work of emergency service and disaster management organisations, as well as gas, water and energy providers. KIRAS invites companies, research institutions, end users as well as partners active in the fields of humanities, social and cultural sciences to participate.
Laura Bassi Centres of Expertise (ongoing)	The Laura Bassi Centres promote excellence in application-oriented basic research where highly skilled researchers from academia and private industry work together. Teams are managed by a woman researcher of proven excellence (see chapter 3 “Women in the research profession”).

Measure	Description
Mobility of the Future (BMVIT) (ongoing)	The Programme supports cooperation between industry and academia to foster the development of intelligent and competitive transport systems. It covers the following research areas: mobility of persons and of goods, transportation infrastructure and vehicle technology.
Phoenix Award (BMWFW) (ongoing)	Since 2012, the “Phoenix Award” for successful academic business formation has rewarded young innovative entrepreneurs for successfully transforming their scientific outcomes into innovations. This award also enhances the visibility of the scientific performance of Austrian universities and the implementation of their achievements to a broad audience. This award amounts to EUR 10 000.
Production of the Future Programme (BMVIT) (ongoing)	This Programme supports cooperation between industry and academia to foster highly competitive (intelligent) production. It aims to enhance the innovation performance of national production, the targeted research competencies of research organisations and international cooperation in general. Since 2011, a total of EUR 47 million has targeted high-level research groups. In the fourth call there were 451 participants (50% RTD organisations and 50% companies).
Research Studios Austria (BMWFW) (ongoing)	The Research Studios Austria Programme promotes the application and implementation of research results from basic research in applied entrepreneurial research in Austria. The studios are small, flexible research units, which are usually embedded in existing research facilities. Via contract research or marketing projects they enable the transfer of application-oriented knowledge and know-how in the economy.
Take Off Programme (BMVIT) (ongoing)	The Take Off Programme supports collective research in the aviation sector ²¹ .
Young Experts Programme (ongoing)	The Young Experts Programme stimulates (junior) researchers’ cross-sector mobility as well as knowledge transfer between research and business by providing funding to junior researchers, post-docs, bachelor and master’s candidates. Funding provided to post-docs is expected to generate added-value for SME R&D efforts, resulting in greater cross-sector mobility and stronger links between academia and the business sector. Funding is provided only in the context of companies’ R&D projects.

Source: Deloitte

8. Mobility and international attractiveness

In 2011, the percentage of doctoral candidates (ISCED 6) who were citizens of another EU-27 Member State was 18.5% in Austria compared to 18.4% among the Innovation Union reference group and an EU average of 7.7%²². In the same year, non-EU doctoral candidates were 8.6% of all doctoral candidates in Austria compared with 16.9% among the Innovation Union reference group and an EU average of 24.2%.

Measures aimed at attracting and retaining ‘leading’ national, EU and third country researchers

The table below summarises key measures aimed at attracting and retaining leading national, EU and third-country researchers to Austria.

Table 11: Measures to attract and retain ‘leading’ national, EU and third country researchers

Measure	Description
ASCINA (Austrian Scientists in North America Initiative) (Austrian Office of Science and Technology) (ongoing)	The ASCINA Initiative aims at positioning Austria as an excellent country for research and innovation. It presents current national developments and innovations to Austrian researchers. Moreover, it offers participants an opportunity to learn about recent R&D policy developments, and new career and funding opportunities.
ASCINA Awards (BMWFW) (ongoing)	The Austrian Federal Ministry of Science, Research and Economy annually recognises excellent scientific publications and projects published by young Austrian scientists during a stay at a North American research institution. The award amounts to EUR 10 000. The award fosters scientific and academic cooperation, and promotes communication between young researchers in North America and the Austrian scientific community

²¹ Ten years Take off brochure: http://www.ffg.at/sites/default/files/downloads/takeoff_bro2012_final.pdf

²² See Figure 1 “Key indicators – Austria”

Measure	Description
Austrian Aliens Act (2011)	An amendment to the Austrian Aliens Act (July 2011) included the introduction of the “Blue Card” and the “Rot-Weiss-Rot Card” ²³ to attract third-country researchers to Austria.
Austrian RTI Strategy (2011)	The Austrian RTI Strategy supports the immigration of highly qualified scientists to Europe (Austria).
Researcher Career Grants (BMVIT/FFG) as part of the Talents programme (ongoing)	<p>Researchers Career Grants aim to attract researchers from abroad to conduct application-oriented research in Austria. The funding includes:</p> <ul style="list-style-type: none"> - The journey to Austria for job interviews in the field of research, development and innovation for researchers living abroad (Interview Grant); - Relocation costs when taking up a post in the field of research, development and innovation (Relocation Grant); - The professional integration of a qualified partner when a researcher living abroad relocates to Austria (Dual Career Grant).
Scientific Visa Directive (2005)	Austria has implemented the Scientific Visa Directive 2005/71/EC and recommendations 2005/762/EC and 2005/761/EC. Researchers can find information on the application for a Scientific Visa in the “Guide to Residence and Employment of Foreign Researchers in Austria” ²⁴ .
The Austrian Job Exchange for Research, Development and Innovation	See chapter 4 “Open, transparent and merit-based recruitment”.

Source: Deloitte

Inward mobility (funding)

The table below summarises key measures in support of researchers’ inward mobility.

Table 12: Measures supporting researchers’ inward mobility

Measure	Description
APART Programme (ongoing)	The APART Programme awards fellowships to national and international students in support of a post-doctoral thesis, or the continuation of a scientific project. Third-country applicants must carry out their research project at an Austrian research institution ²⁵ .
Career Grants as part of the Talents programme (ongoing)	See table 11 above.
Interview Grant part of the Talents programme (ongoing),	The Interview Grant covers travel expenses to attend a job interview (part of the Talents programme).
Joint Excellence in Science and Humanities (established 2013, first pilot in 2014)	The “Joint Excellence in Science and Humanities” Programme of the Austrian Academy of Sciences aims to support Austrian research in establishing and fostering international contacts. On the basis of research visits of 2-6 months for incoming and outgoing initiatives, the programme will contribute to establishing sustainable scientific relations.
L’Oreal Austria Programme (ongoing)	The L’Oreal Programme offers short-term fellowships to women researchers wishing to return to Austria following a research stay abroad.
Researcher Career Grants (BMVIT/FFG) as part of the Talents programme (ongoing)	See table 11 above.

Source: Deloitte

Outbound mobility

The table below summarises key measures encouraging researchers to spend some time in another country.

Table 13: Measures supporting researchers’ outbound mobility

Measure	Description
APART Programme (ongoing)	The APART Programme awards fellowships to national and international researchers in support of a post-doctoral thesis, or the continuation of a scientific project. In 2012, about 30% of the fellows conducted research at universities or research institutions abroad. The percentage of foreign researchers among APART

²³ Red-White-Red, i.e. colours of the Austrian flag.

²⁴ http://www.euraxess.at/fileadmin/oead_zentrale/willkommen_in_oe/Recht/Leitfaden_Forscher_engl.pdf

²⁵ <http://stipendien.oeaw.ac.at/en/stipendium/apart-austrian-programme-advanced-research-and-technology>

Measure	Description
	fellows in 2010-2012 was 18%.
DOC Programme (ongoing)	PhD studies can be conducted at universities or research institutions both in Austria and abroad. In 2011 and 2012, 15% of the fellows conducted research at universities or research institutions abroad.
DOC-team Programme (ongoing)	The DOC-team Programme supports teams working on transdisciplinary research projects in humanities, cultural studies and social sciences. Each team member must spend at least half a year at a research institution abroad.
Doktoratskolleg (FWF) (ongoing)	The Doktoratskolleg, a joint initiative led by internationally recognised scientists, facilitates opportunities for work experience abroad and offers training in support of transferable skills development.
Erwin Schrödinger Fellowships (ongoing)	As the largest post-doctoral programme for outbound mobility for basic research in Austria, the Schroedinger Programme aims to enable young scientists normally based in Austria to work abroad at leading research institutions and on leading research programmes in order to gain research experience abroad during their post-doc. With the possibility of also applying for a reintegration phase, the programme aims to facilitate the return phase for the researchers in order to reverse the brain drain from Austria.
Joint Excellence in Science and Humanities (established 2013, first pilot in 2014)	See table 12 above.
ROM Programme (ongoing)	The ROM Programme supports doctoral candidates and young post-docs in humanities and cultural studies to conduct research in Italy (Rome) (as part of their research project). Nine stipends were awarded in 2013.

Source: Deloitte

Promotion of 'dual careers'

Five Austrian universities provide a 'Dual Career Service' to support newly-recruited researchers and their partners in finding accommodation, securing a job for the partner and locating child care facilities. Furthermore, the universities and higher education organisations in Vienna, Lower Austria and Upper Austria are joining forces in a network: "Dual Career Service Wien - Niederösterreich – Oberösterreich". In close coordination with this Dual Career Service, the Vienna Science and Technology Fund (WWTF) offers Dual Career Service Support. The Dual Career Advice office of the Institute of Science and Technology Austria (IST Austria) offers individualised job search information and assistance to spouses and partners of newly appointed scientists and employees. It helps facilitate the job search process and identify suitable employment opportunities in Vienna and the surrounding areas.

A Dual Career Grant is available as part of the Talents programme to support the professional integration of the spouse in the event of relocation of a researcher (returning) to Austria. (For details of the Talents Programme, see Chapter 3 "Women in the Research Profession").

Portability of national grants

The following key instruments have been put in place allowing for the portability of grants.

Table 14: Grants portable to other EU countries

Measure	Description
APART and DOC Programmes (ongoing)	Research fellowships and programmes administered by the Austrian Academy of Sciences may be used either domestically or abroad. Each year, 10-12 APART and 40 DOC fellowships are granted. Since 2006, approximately 20% of fellows have used their grants to perform their research project or doctoral thesis at a research institution abroad.
DACH Agreement (ongoing)	The DACH Agreement (umbrella agreement) between the FWF, the German Research Foundation (DFG), and the Swiss National Science Foundation (SNSF) enables the portability of grants within the DACH countries.
Money follows researcher Initiative (ongoing)	The Austrian Science Fund (FWF) permits the portability of its grants in accordance with the EUROHORCS (European Heads of Research Councils) "Money follows Researcher" initiative.

Source: Deloitte

Access to cross-border grants

Applicants not affiliated to an Austrian research institution applying to the FWF for individual grants in order to finance their own salary from the grant money must have been living in Austria for at least three of the last ten years at the time the application is submitted (principle of territoriality). The research has to be conducted at an Austrian research institution.

Table 15: Cross-border grant

Measure	Description
Lise Meitner Programme (ongoing)	The Lise Meitner Programme is open to scientists from abroad who want to carry out their research project at an Austrian research institution.

Source: Deloitte

The following programmes administered by the Austrian Academy of Sciences are open to non-residents:

- APART, a programme for post-docs from any discipline, is open to Austrian citizens and anyone else planning to carry out their research project at a research institution in Austria; the percentage of foreign researchers receiving an APART fellowship in the years from 2010 to 2012 was 18%; and
- DOC or DOC-team programmes for doctoral candidates, are open to Austrian citizens or anyone enrolled in a PhD programme at an Austrian university; the percentage of foreign PhD candidates receiving a fellowship in the years from 2010 to 2012 was 20%.