# The Researchers Report 2012

Country Profile: Montenegro



Deloitte.

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## 1. National strategies

The table below presents key programmes and initiatives intended to implement the strategic objectives to train enough researchers to reach Montenegro's R&D targets, to promote attractive working conditions and to address gender and dual career issues.

**Table 1: National strategies** 

Measure	Description
Amended Higher Education Act (2010)	The Act made the following changes: it introduced the integrated university, the three-cycle system, the European Credit Transfer System (ECTS), the Diploma Supplement and the council of Higher Education and Quality Assurance (internal and external).
Amendment of the Law on Scientific Research Activities (2010)	The Law on Scientific Research Activities aims to promote integration into the ERA and framework programmes, introduce international quality standards as well as increase investments in scientific and research activities, connecting researchers.
National Programme for the Integration of Montenegro into the European Union for the period of 2008- 2012 (2008)	The National Programme for the Integration of Montenegro into the European Union is the national plan for the adoption of the "acquis communautaire", setting out short-term and medium-term priorities. For example, the government is committed to reforming the statistical system in the areas of science and research, expanding and developing the National Contact Point (NCP) network for the 7th Framework Programme of the European Union, promoting researcher mobility, strengthening the links between the research sector and the economy as well as adopting a number of byelaws.
Strategy for Scientific and Research Activity 2008-2016 (2008)	<ul> <li>The government Strategy for Scientific and Research Activity (SRA 2008-2016), including an action plan, identifies two key priorities to facilitate integration into the European Research Area (ERA):         <ol> <li>Increasing research cooperation with the EU;</li> <li>Reforming the national scientific community.</li> </ol> </li> <li>The Strategy put forward the following objectives for the development of the research system:         <ol> <li>Implementation of measures for strengthening human resources for scientific and research activity by increasing the number of researchers and providing better working conditions;</li> <li>Strengthening the research infrastructure through regular investments in the modernisation of the existing facilities;</li> <li>Application of measures for connecting the research sector with the economy by means of joint development projects;</li> <li>Increase of investments in research in the business sector.</li> <li>The action plan includes a roadmap for increasing investment in science and research, both by the public and private sector.</li> </ol> </li> </ul>

Source: Deloitte

## 2. Open, transparent and merit-based recruitment

#### **EURAXESS Services Network**

EURAXESS Montenegro promotes and facilitates mobility of researchers. The University of Montenegro acts as the national EURAXESS bridgehead organisation $^1$ .

# 3. Education and training

## Measures to attract and train people to become researchers

In 2008, Montenegro counted 766 full-time research equivalents who together with part-time colleagues and external research associates were employed in the country's two universities, nine private higher education institutions, government and the private sector. This number corresponds to about 0.3% of the total workforce in Montenegro.

In order to attract young people to science and a scientific career, the government has developed a number of activities and programmes, targeting pupils in elementary schools to university students, by engaging them in

<sup>&</sup>lt;sup>1</sup> Montenegro Country Page. Erawatch, Available at: <a href="http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country\_pages/me/country?section=Overview">http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country\_pages/me/country?section=Overview</a> Accessed 19.04.2012.

the regular teaching programmes as well as in national competitions on different topics, camps and visits to the great European and world research institutions.

The number of students enrolled in tertiary education increased from 13 245 in the 2006-07 academic year to 16 520 in 2008-09. The University of Montenegro had 82% undergraduates, 17.3% graduates and fewer than 1% doctoral students. In addition, 5 500 students were enrolled at private institutions of higher education<sup>2</sup>.

#### Measures to increase the quality of doctoral training

In Montenegro, universities are responsible for the development of high standards of teaching and learning as well as for the career development of students.

Higher Education Institutions (HEIs) continuously conduct self-evaluations, and evaluate and assess the quality of their courses and working conditions. Self-evaluation must involve stakeholders from the institution's management, academic staff and students (at faculty level all students are involved; at university level, participation is organised via student representatives)<sup>3</sup>.

## 4. Working conditions

#### Measures to improve researchers' funding opportunities

The Ministry of Science funds scientific and research projects (national, bilateral and participation in multilateral projects) as well as professional development of researchers in the country and abroad<sup>4</sup>.

#### **Autonomy of institutions**

The Law on Higher Education (2010) states that "a university is an autonomous institution that in performing its activities combines educational, scientific-research and artistic work, as the components of the unique process of higher education" (article 36).

#### Shift from core to project-based funding

Research activity in Montenegro is primarily conducted in the public sector, be it the University of Montenegro, institutes or other public institutions, such as the Montenegrin Academy of Science and Art, rather than in the private sector<sup>5</sup>.

## 5. Collaboration between academia and industry

Montenegro is not very advanced in transferring research outcomes to the market. The government has begun the establishment of links between the national SMEs and the scientific and research institutions<sup>6</sup>.

# 6. Mobility and international attractiveness

Since the 1990s, Montenegro has been suffering from a brain drain. The government has launched some measures to attract young researchers, in particular PhD students, to the University of Montenegro, such as the adoption of the Strategy on Scientific and Research Activity (2008).

Montenegro suffers from a lack of modern research infrastructure and state-of-the-art equipment. This hampers its involvement in research activities and research cooperation with the EU.

Researchers' mobility is the responsibility of the Ministry of Science and is implemented by the Ministry's Department for Science, Research and Technological Development and the Department for Higher Education.

Montenegro has signed and implements a number of bilateral agreements (e.g. with Slovenia, Greece, etc.) for short-term stays (up to 14 days) and long-term stays (from 1 to 3 months). One of the conditions of engaging doctoral candidates in projects is to support their mobility as a form of support to their training and career

<sup>&</sup>lt;sup>2</sup> Montenegro Country Page. Erawatch, Available at:

http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country\_pages/me/country?section=Overview Accessed 19.04.2012.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.

development. The Government of Montenegro has also concluded agreements on scientific and technological cooperation with the Governments of Slovenia and Croatia on the quality and originality of research approach as well as support of young researchers<sup>7</sup>.

The University of Montenegro, through the Office for International Cooperation, is in charge of providing administrative support for mobility opportunities. ZAMTES, the Office for International Scientific, Educational, Cultural and Technical Cooperation, also offers financial support to both individuals and institutions for participation in scientific conferences as well as seminars, workshops, meetings, courses and training programmes at national level and abroad. Finally, CANU, the Montenegrin Academy of Sciences and Arts, supports mobility by granting scholarships to talented students<sup>8</sup>.

### **Outbound mobility**

The government funds doctoral students to spend at least one semester during their studies at a foreign university. In addition, PhD graduates, especially those aged 27-34, have the opportunity to spend up to one semester working at a European university on 'unpaid leave'.

Moreover, a step towards increasing outbound mobility was the visa liberalisation for the Montenegrin citizens, i.e. abolition of visas for the Schengen area (Recommendation of the EC to the Council of Ministers EU, July 2009) <sup>9</sup>.

<sup>&</sup>lt;sup>7</sup> Montenegro Country Page. Erawatch, Available at:

http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country\_pages/me/country?section=Overview\_Accessed 19.04.2012.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.