

**NOTICE OF OPEN COMPETITIONS — COM/AD/15/10 AND COM/AD/16/10**

(2010/C 265 A/08)

***Are you interested in working for the European Institutions?******Does your profile meet our criteria?******Why not apply?******Give yourself a chance to succeed.***

The European Commission is organising open competitions, based on qualifications and tests, in order to constitute reserve lists from which to appoint AD6 and AD7 Research Administrators <sup>(1)</sup>.

**COM/AD/15/10 — RESEARCH ADMINISTRATORS (AD6)****COM/AD/16/10 — RESEARCH ADMINISTRATORS (AD7)****in the following domain:****COMMUNICATION/INFORMATION TECHNOLOGY**

***Before applying you should read carefully the instructions in the guide published in Official Journal C 184 A of 8 July 2010 and on the EPSO website [http://europa.eu/epso/apply/index\\_en.htm](http://europa.eu/epso/apply/index_en.htm)].***

***This guide, which forms an integral part of the notice of competition, will help you to understand the rules governing the procedure and how to make an application.***

**CONTENTS****I. GENERAL BACKGROUND****II. DUTIES****III. ELIGIBILITY****IV. ADMISSION TO THE COMPETITIONS AND INVITATION TO THE ASSESSMENT CENTRE****V. OPEN COMPETITIONS****VI. RESERVE LISTS****VII. HOW TO APPLY****ANNEXES****I. GENERAL BACKGROUND**

Two open competitions, an AD6 and an AD7, in the domain of Communication/Information Technology are being held to appoint Research Administrators respectively for the European Commission, mainly for the Joint Research Centre (JRC).

The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.

The purpose of these competitions is to draw up reserve lists to fill vacant posts mainly in different Institutes of the JRC, and more particularly, in the Institute for the Protection and Security of the Citizen (IPSC) in Ispira, Italy.

<sup>(1)</sup> Any reference in this notice to a person of the male sex must be deemed also to constitute a reference to a person of the female sex.

The number of successful candidates by competition and field as well as the indicative place of work are mentioned below:

Domain	Fields		Number of successful candidates by competition		Institutes/Locations
			AD6	AD7	
Communication/ Information Technology	1	Information and Communication Technology Security	5	2	IPSC, Ispra (IT)
	2	Information Mining, Analysis and Web Technologies	5	2	IPSC, Ispra (IT)
	3	Wireless Communications Technology	5	2	IPSC, Ispra (IT)
	4	Network Security	4	2	IPSC, Ispra (IT)
Remarks	<p>The Commission is publishing the following competitions in parallel:</p> <ul style="list-style-type: none"> <li>— COM/AD/01/10 — Research Administrators (AD6) in chemistry, biology and health sciences</li> <li>— COM/AD/02/10 — Research Administrators (AD7) in chemistry, biology and health sciences</li> <li>— COM/AD/03/10 — Research Administrators (AD6) in physics</li> <li>— COM/AD/04/10 — Research Administrators (AD7) in physics</li> <li>— COM/AD/05/10 — Research Administrators (AD6) in structural mechanics</li> <li>— COM/AD/06/10 — Research Administrators (AD7) in structural mechanics</li> <li>— COM/AD/07/10 — Research Administrators (AD6) in quantitative policy analysis</li> <li>— COM/AD/08/10 — Research Administrators (AD7) in quantitative policy analysis</li> <li>— COM/AD/09/10 — Research Administrators (AD6) in spatial sciences</li> <li>— COM/AD/10/10 — Research Administrators (AD7) in spatial sciences</li> <li>— COM/AD/11/10 — Research Administrators (AD6) in environmental sciences</li> <li>— COM/AD/12/10 — Research Administrators (AD7) in environmental sciences</li> <li>— COM/AD/13/10 — Research Administrators (AD6) in energy sciences</li> <li>— COM/AD/14/10 — Research Administrators (AD7) in energy sciences</li> </ul> <p>If you fulfil all the general and specific conditions (see title III), you may apply for both AD6 and AD7 competitions in several domains, but within a domain, you may apply for only one field, otherwise you will be disqualified. You must make your choice when you apply online and you will not be able to change it after you have confirmed and submitted your online application form.</p>				

## II. DUTIES

The detailed duties for each field are described in the Annexes.

Research Administrators (AD6) will, under the supervision of a senior scientist, carry out the relevant duties as members of a research team.

Research Administrators (AD7) will carry out the relevant duties at a high level, both individually and as scientific team leaders.

## III. ELIGIBILITY

**On the closing date for online applications**, you must fulfil all the following general and specific conditions:

### 1. General conditions

- a) You must be a citizen of one of the Member States of the European Union.
- b) You must enjoy your full rights as a citizen.
- c) You must have fulfilled any relevant military service obligation.
- d) You must meet the character requirements for the duties involved.

### 2. Conditions specific to the competitions

2.1	<b>Academic qualifications:</b> See point 2 of the Annexes
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<b>2.2</b>	<p><b>Professional experience:</b> See point 3 of the Annexes</p>																								
<b>2.3</b>	<p><b>Knowledge of languages:</b> You must have a main language (language 1) and a second language (language 2) as specified below. You must indicate your chosen languages on the online registration form. You will not be able to change your choices after the final validation of the application.</p>																								
<b>(a) Language 1</b>	<p>Main language: A thorough knowledge of one of the official languages of the European Union; <b>The official languages of the European Union are:</b></p> <table style="width: 100%; border: none;"> <tr> <td>BG (Bulgarian)</td> <td>FI (Finnish)</td> <td>NL (Dutch)</td> </tr> <tr> <td>CS (Czech)</td> <td>FR (French)</td> <td>PL (Polish)</td> </tr> <tr> <td>DA (Danish)</td> <td>GA (Irish)</td> <td>PT (Portuguese)</td> </tr> <tr> <td>DE (German)</td> <td>HU (Hungarian)</td> <td>RO (Romanian)</td> </tr> <tr> <td>EL (Greek)</td> <td>IT (Italian)</td> <td>SK (Slovak)</td> </tr> <tr> <td>EN (English)</td> <td>LT (Lithuanian)</td> <td>SL (Slovenian)</td> </tr> <tr> <td>ES (Spanish)</td> <td>LV (Latvian)</td> <td>SV (Swedish)</td> </tr> <tr> <td>ET (Estonian)</td> <td>MT (Maltese)</td> <td></td> </tr> </table>	BG (Bulgarian)	FI (Finnish)	NL (Dutch)	CS (Czech)	FR (French)	PL (Polish)	DA (Danish)	GA (Irish)	PT (Portuguese)	DE (German)	HU (Hungarian)	RO (Romanian)	EL (Greek)	IT (Italian)	SK (Slovak)	EN (English)	LT (Lithuanian)	SL (Slovenian)	ES (Spanish)	LV (Latvian)	SV (Swedish)	ET (Estonian)	MT (Maltese)	
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<b>and</b>																									
<b>(b) Language 2</b>	<p>Second language (must be different from language 1): A satisfactory knowledge of English, French or German.</p>																								

#### IV. ADMISSION TO THE COMPETITIONS AND INVITATION TO THE ASSESSMENT CENTRE

##### 1. Admission to the competitions

The information given in your online application will be checked against the general and specific conditions to identify those applicants who satisfy the eligibility requirements for the competitions.

##### 2. Invitation to the assessment centre: selection on the basis of qualifications

To identify candidates who will be admitted to the assessment centre, the selection board will select candidates on the basis of their qualifications after having established the criteria by which it will assess those qualifications. Candidates will be selected on the basis of the information given in their online application forms. The selection board will select those candidates who satisfy the eligibility conditions and who possess the qualifications (especially diplomas, publications in peer reviewed journals and academic and/or professional experience) that are most relevant in terms of quality and level to the nature of the duties described in the competition notice (see point 4 of the Annexes). Selection will be on the basis of the following marking scheme:

- a) each selection criterion is weighted between 1 and 3, according to how important the board considers it to be;
- b) the selection board will give a mark of between 1 and 4 for each criterion, depending on the candidate's qualifications.

It will then draw up a list <sup>(2)</sup> of candidates in the order of the marks awarded.

The number of candidates admitted to the assessment centre will be at maximum three times <sup>(3)</sup> the number of successful candidates indicated in section I of this competition notice and will be published on EPSO's website ([www.eu-careers.eu](http://www.eu-careers.eu)).

<sup>(2)</sup> Candidates not invited to the assessment centre can obtain a copy of the selection board's evaluation sheet concerning their qualifications by submitting a request within 10 days of being notified of the results.

<sup>(3)</sup> Notwithstanding a possible increase in the number of candidates invited to the assessment centre as part of the AD6 competition, up to the number of candidates invited as part of both the AD6 and AD7 competitions in the same field.

### 3. Verification of information given by candidates

Following the assessment centre session and in the light of the results from this session, the information given by candidates in their online applications will be verified against the general conditions by EPSO and against the specific conditions and selection criteria by the selection board. If verification shows that the information given is not borne out by the appropriate supporting documents, candidates will be eliminated from the competition.

Applications are verified for candidates with pass marks who obtained the best aggregate marks in tests (d), (e) and (f) for the AD6 competition and (d), (e), (f) and (g) for the AD7 competition in the assessment centre session, in descending order of merit (see section V). Candidates must also have obtained pass marks in the aptitude tests (a), (b), and (c) (see section V). Verification will continue until the threshold number of candidates is reached who can be placed on the reserve list and actually fulfil all the conditions for admission. The files of candidates below this threshold will not be examined.

## V. OPEN COMPETITIONS

<b>1. Invitation to the assessment centre</b>	<p>You will be invited (*) to attend an assessment centre session if:</p> <ul style="list-style-type: none"> <li>— the information given in your online application shows that you fulfil the general and specific conditions listed in section III;</li> <li>and</li> <li>— you obtained one of the highest marks in the selection based on qualifications (see point 2 of section IV).</li> </ul>
<b>2. Assessment centre</b>	<p>You will be invited to attend an assessment centre in Brussels for tests.</p> <p>Only one Assessment Centre will be established for both competitions (AD6 and AD7). Candidates that have applied for both competitions within one domain and who fulfil the conditions foreseen under point 1, section V, will receive only one convocation.</p> <p>The tests for the AD6 and AD7 competitions are the same except for an additional test in the field chosen for the AD7 competition. The marking of the reasoning tests and the tests on general and specific competencies will be adapted depending on the grade of the competition.</p> <p>You will be assessed on your Reasoning skills on the basis of the following elements (see point 4 of the guide to open competitions and examples on the EPSO website [<a href="http://europa.eu/epso/apply/index_en.htm">http://europa.eu/epso/apply/index_en.htm</a>]):</p> <ol style="list-style-type: none"> <li>a) Verbal reasoning</li> <li>b) Numerical reasoning</li> <li>c) Abstract reasoning</li> </ol> <p>You will be also assessed on your Specific competencies in the chosen field and on the following General competencies:</p> <ul style="list-style-type: none"> <li>Analysis and problem solving</li> <li>Communicating</li> <li>Delivering quality and results</li> <li>Learning and development</li> <li>Prioritising and organising</li> <li>Resilience</li> <li>Working with others</li> <li>Leadership</li> </ul> <p>Details on these competencies are set out in point 1.2 of the guide to open competitions.</p> <p>The specific and the general competencies are tested by means of:</p> <ol style="list-style-type: none"> <li>d) A written case study in the chosen field</li> <li>e) A group exercise</li> <li>f) A structured interview</li> <li>g) For AD7 only: an additional written test in the chosen field</li> </ol>

(\*) Where a number of candidates tie for the last available place, they will all be invited to the assessment centre.

<b>Language of tests</b>	<p>Tests a) to f) and, if applicable, test g): language 2 (German, English or French)</p> <p>Test d): During this test your knowledge of your language 1 (main language) will also be tested.</p>
<b>Marking</b>	<p><b>Reasoning skills</b></p> <p>a) Verbal reasoning: marked with 0-20 points</p> <p>b) Numerical reasoning: marked with 0-10 points</p> <p>c) Abstract reasoning: marked with 0-10 points</p> <p>AD6: The pass marks for tests a), b) and c) together is 20 points</p> <p>AD7: The pass mark for test a) is 10 points</p> <p style="padding-left: 20px;">The pass mark for test b) and c) together is 10 points</p> <p>You have to obtain the pass mark for tests a), b) and c) but these points will not be added to the results of tests d), e), f) and, if applicable, g).</p> <p><b>Specific competencies</b></p> <p>Both for AD6 and AD7 competitions, your specific competencies tested in d), e) and f) will be marked with 0-100 points.</p> <p>Pass mark: 50 points</p> <p>For AD7 only: your specific competencies tested in the additional test g) will be marked with 0-30 points.</p> <p>Pass mark: 15 points</p> <p><b>General competencies</b></p> <p>Your total general competencies will be marked with 0-80 points</p> <p>Pass mark:</p> <p>AD6: 40 points for the total of the 8 general competencies.</p> <p>AD7: 3 points for each general competency and 40 points for the total of the 8 general competencies.</p>

## VI. RESERVE LISTS

<b>1. Candidates placed on the reserve list</b>	<p>The selection board will draw up a reserve list for each competition (an AD6 list and an AD7 list) and will place your name on the AD6 and/or AD7 reserve list <sup>(?)</sup> if you are among the candidates who satisfy all the conditions set out in section V and if you have obtained pass marks in all of the tests and one of the highest marks in tests (d), (e) and (f) for the AD6 competition and (d), (e), (f) and (g) for the AD7 competition (see section V). The number of successful candidates per competition and per field is limited to that shown in section I, notwithstanding a possible increase in the number of successful candidates on the AD6 reserve list, up to the number of successful candidates placed both on the AD6 and AD7 reserve list in the same field.</p> <p>The reserve lists will be valid until 31 December 2012.</p>
<b>2. Classification</b>	<p>The reserve lists will be established by merit group for each field. The candidates names will be listed in alphabetical order within each merit group.</p>
<b>3. Place of appointment</b>	<p>Candidates placed on the reserve list(s) will be eligible for appointment as Research Administrators in the European Commission, mainly at the JRC sites, as indicated in section I.</p> <p>Considering the decentralised JRC site locations across Europe (Ispra, Seville, Karlsruhe, Petten, Geel, Brussels), the JRC is dedicated to aid newcomer officials to better integrate professionally and their spouses and families to better adapt to their new social environment.</p>

<sup>(?)</sup> Where a number of candidates tie for the last available place, they will all be placed on the reserve list.

## VII. HOW TO APPLY

<b>1. Online application</b>	You must apply online following the instructions on the EPSO website. <b>Deadline: 4 November 2010 at 12.00 (midday)</b> , Brussels time.
<b>2. Submission of application files</b>	If you are one of the candidates invited to the assessment centre, you will be asked to submit a full application file (signed online application form and supporting documents). Closing date: You will be informed of the closing date via your EPSO account. Procedure: See point 2.2 of the guide to open competitions.

## ANNEX I

## Field 1: Information and Communication Technology Security

**1. Duties**

The duties will mainly involve:

- software development
- risk assessment
- laboratory modelling and simulation
- preparation of publications
- presentation of results at conferences, seminars and meetings

**2. Academic qualifications**

Diploma in computer science, mathematics or another corresponding university degree at the following level:

*AD6 Research Administrators:*

- (i) a level of education which corresponds to completed university studies of at least three years attested by a diploma.

*AD7 Research Administrators:*

- (ii) a level of education which corresponds to completed university studies attested by a diploma, when the normal period of university education is four years or more,  
or  
(iii) a level of education which corresponds to completed university studies attested by a diploma when the normal period of university education is at least three years and an appropriate professional experience of at least one year in the chosen field.

**3. Professional experience**

AD6: a professional experience gained since obtaining the first qualification required under 2. (i) of at least three years is required in the chosen field. Doctoral studies can be counted as working experience up to a maximum of three years.

AD7: a professional experience gained since obtaining the first qualification required under 2. (ii) and 2. (iii) of at least six years is required in the chosen field. Those six years of professional experience must be additional to the one specific year requested under 2. (iii). Doctoral studies can be counted as working experience up to a maximum of three years.

**4. Selection based on qualifications**

One or more of these experience, knowledge and ability would be an asset:

- a. Additional diploma in the field
- b. Publications in peer reviewed journals
- c. Academic and/or professional experience in the following areas:
  - ICT security in the most recent technologies from the mobile, Internet, communications and embedded systems area
  - threat analysis and security concepts for emerging ICT technologies: peer-to-peer networks, embedded systems, intelligent sensors
  - threat analysis and security concepts for emerging ICT technologies: autonomous computing, ubiquitous computing, grid computing, quantum computing and cryptography
  - threat analysis and security concepts for emerging ICT technologies: real-time communications, nearfield communications, broadband communications
  - threat analysis and security concepts for emerging ICT technologies: open source software, copy, protection, web technologies, international data protection and privacy, anonymity, social computing
  - risk assessment for deployment of new information and communication technologies
  - assessment of global trends in ICT and their security and privacy implications on the basis of desktop vulnerability analysis and of laboratory modelling and simulation

## ANNEX II

Field 2: Information Mining, Analysis and Web Technologies

**1. Duties**

The duties will mainly involve:

- software development
- risk assessment
- preparation of publications
- presentation of results at conferences, seminars and meetings

**2. Academic qualifications**

Diploma in computer science, computational linguistics, statistics or another corresponding university degree at the following level:

*AD6 Research Administrators:*

- (i) a level of education which corresponds to completed university studies of at least three years attested by a diploma.

*AD7 Research Administrators:*

- (ii) a level of education which corresponds to completed university studies attested by a diploma, when the normal period of university education is four years or more,  
or
- (iii) a level of education which corresponds to completed university studies attested by a diploma when the normal period of university education is at least three years and an appropriate professional experience of at least one year in the chosen field.

**3. Professional experience**

AD6: a professional experience gained since obtaining the first qualification required under 2. (i) of at least three years is required in the chosen field. Doctoral studies can be counted as working experience up to a maximum of three years.

AD7: a professional experience gained since obtaining the first qualification required under 2. (ii) and 2. (iii) of at least six years is required in the chosen field. Those six years of professional experience must be additional to the one specific year requested under 2. (iii). Doctoral studies can be counted as working experience up to a maximum of three years.

**4. Selection based on qualifications**

One or more of these experience, knowledge and ability would be an asset:

- a. Additional diploma in the field
- b. Publications in peer reviewed journals
- c. Academic and/or professional experience in the following areas:
  - development of IT solutions for data processing and transfer
  - development of IT systems for data analysis and data mining
  - web technologies, natural language processing, information retrieval and visualisation
  - development of techniques applicable to massive structured and unstructured datasets, including multi-lingual ones, information text mining, pattern recognition and extraction
  - development and application of methods to handle typical text mining tasks; text categorisation, text clustering, named entity recognition, concept mining, production and exploitation of taxonomies, sentiment analysis, document summarisation, and entity relation modelling/analysis



- analysis of scenarios for integrated extraction of information from heterogeneous data, for derivation and discovery of new patterns and knowledge
  - exploration of large volumes of multidimensional data, possibly time-varying, and present visually results and information in order to understand the data, extract significant features and highlight relevant results
  - Java, Hibernate, Struts, JSP, Web technologies, natural language processing, user-interface methodologies, visualisation, machine learning, signal processing and statistical programming (SAS, MATLAB)
  - development of methodologies for real-time crisis situational awareness; collaborative crisis management; threat analysis, detection and early warning and media monitoring analysis
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## ANNEX III

## Field 3: Wireless Communications Technology

**1. Duties**

The duties will mainly involve:

- development of advanced technology solutions
- risk assessment
- preparation of publications
- presentation of results at conferences, seminars and meetings

**2. Academic qualifications**

Diploma in Electronic/Electrical/Telecommunications Engineering, Physics or Mathematics or another corresponding university degree at the following level:

*AD6 Research Administrators:*

- (i) a level of education which corresponds to completed university studies of at least three years attested by a diploma.

*AD7 Research Administrators:*

- (ii) a level of education which corresponds to completed university studies attested by a diploma, when the normal period of university education is four years or more,  
or  
(iii) a level of education which corresponds to completed university studies attested by a diploma when the normal period of university education is at least three years and an appropriate professional experience of at least one year in the chosen field.

**3. Professional experience**

*AD6:* a professional experience gained since obtaining the first qualification required under 2. (i) of at least three years is required in the chosen field. Doctoral studies can be counted as working experience up to a maximum of three years.

*AD7:* a professional experience gained since obtaining the first qualification required under 2. (ii) and 2. (iii) of at least six years is required in the chosen field. Those six years of professional experience must be additional to the one specific year requested under 2. (iii). Doctoral studies can be counted as working experience up to a maximum of three years.

**4. Selection based on qualifications**

One or more of these experience, knowledge and ability would be an asset:

- a. Additional diploma in the field
  - b. Publications in peer reviewed journals
  - c. Academic and/or professional experience in the following areas:
    - wireless communications and/or sensor technologies, in particular in digital signal processing and common wireless communications standards and protocols
    - assessment of vulnerabilities of communications and navigation systems
    - development of advanced technology solutions to mitigate and/or reduce the vulnerabilities to intentional interferences
    - ICT security research, in particular, next generation networks and convergence of information, communication and navigation technologies
    - development and integration of advanced technology solutions to meet emerging challenges in ICT security
    - security technologies for public safety and intelligent transport systems: digital beam forming in radar and communications systems, RF interference measurement and mitigation techniques, ultra wide band radar and communications systems, cognitive radio, secure radio communications, radar-communications convergence, intelligent sensors networks, vulnerability of GNSS based transport and ICT critical infrastructures, standardisation and interoperability of wireless technologies, distributed and pervasive computing
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## ANNEX IV

## Field 4: Network Security

**1. Duties**

The duties will mainly involve:

- development of advanced technology solutions
- risk assessment
- preparation of publications
- presentation of results at conferences, seminars and meetings

**2. Academic qualifications**

Diploma in computer science, electronics engineering, other engineering disciplines, mathematics, physics or another corresponding university degree at the following level:

*AD6 Research Administrators:*

- (i) a level of education which corresponds to completed university studies of at least three years attested by a diploma.

*AD7 Research Administrators:*

- (ii) a level of education which corresponds to completed university studies attested by a diploma, when the normal period of university education is four years or more,  
or
- (iii) a level of education which corresponds to completed university studies attested by a diploma when the normal period of university education is at least three years and an appropriate professional experience of at least one year in the chosen field.

**3. Professional experience**

AD6: a professional experience gained since obtaining the first qualification required under 2. (i) of at least three years is required in the chosen field. Doctoral studies can be counted as working experience up to a maximum of three years.

AD7: a professional experience gained since obtaining the first qualification required under 2. (ii) and 2. (iii) of at least six years is required in the chosen field. Those six years of professional experience must be additional to the one specific year requested under 2. (iii). Doctoral studies can be counted as working experience up to a maximum of three years.

**4. Selection based on qualifications**

One or more of these experience, knowledge and ability would be an asset:

- a. Additional diploma in the field
- b. Publications in peer reviewed journals
- c. Academic and/or professional experience in the following areas:
  - development of techniques for the modelling and assessment of critical systems
  - design, implementation and evaluation of networks security experiments
  - development of resilience and vulnerability assessment methods for large-scale information and communication systems-of-systems
  - modelling of interdependencies among the different components of the information infrastructure
  - development of systems for the observation and measurement of security experiments
  - development of simulation techniques and tools for the analysis of malware and related threats and attack mechanisms

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- security modelling, analysis and simulation of industrial information and communication systems, including SCADA (Supervisory Control And Data Acquisition) and other control systems
  - development and application of security metrics pertinent to measure, communicate and benchmark different security-related parameters, such as vulnerability, exposure to threats, susceptibility to attacks, resilience
  - development of techniques for the assessment of the consequences of malicious attacks on large-scale information and communication systems, including multi-actor and cross-border scenarios
  - viability of different risk management and risk governance approaches
-