



Hellenic Ministry  
of National Defense  
(HMoD)

# Sustainability in Defence

SUSTAINABILITY  
in DEFENCE 

2-Day International Conference organized by  
the Hellenic Ministry of National Defense (HMoD)

Directorate of Military and Technological Support (DTMS)  
Department of Infrastructure and Environment (DIE)  
in the framework  
of the Hellenic Presidency  
of the Council of the European Union 2014

June 2014

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Venue:  
Hellenic Armed Forces Officer's Club,  
Athens, Greece

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**Hellenic Ministry of National Defense (HMoD)**  
**Department of Infrastructure and Environment (DIE)**  
**More information at:**  
[www.mod.mil.gr/GreenArmedForces/SiD](http://www.mod.mil.gr/GreenArmedForces/SiD)

**Chairman of Conference Organizing Committee - Project Supervisor:** Col G. Drosos

**Project Officer:** Maj I. Manolis

**Dep Project Officer:** Maj N. Meggos

**Conference Organizing Committee:** HMoD/DIE

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Hellenic Presidency of the European Union



**Hellenic Ministry of National Defense**

2-Day International Conference organized by  
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of the **Council of the European Union 2014**



## AGENDA

1st Day: Tuesday, 10 June 2014

- [08:30] **End of Participants' Arrival**
- [08:50] **End of VIP's Arrival**
- [09:00] **Opening of Conference**
- [09:00-09:30] **Welcoming Addresses**
- [09:00-09:10] **Host**  
Mr. Dimitris L. Avramopoulos, Minister of National Defence  
(or Mrs. Foteini Gennimata, Alternate Minister of National Defence)  
(\* )
- VIP Guests**
- [09:10-09:15] **Hellenic Parliament/Special Permanent Committee on Environmental Protection**  
Dr. Dionysia-Theodora Avgerinopoulou, Chairperson of the Special Permanent Committee on Environmental Protection of the Hellenic Parliament.
- [09:15-09:20] **European Parliament Information Office in Athens (EPIO)**  
Mr. Leonidas Antonakopoulos, Head of EPIO (or representative).
- [09:20-09:25] **European Defence Agency (EDA)**  
Mr. Denis Roger, Director of European Synergies and Innovation of EDA (on behalf of Ms. Claude France-Arnould, EDA Chief-Executive)
- [09:25-09:30] **Academy of Athens**  
Professor Loukas Christoforou, President of the Energy Committee of the Academy of Athens.
- Welcoming addresses of Greek VIPs will be in Greek
- (\* ) **NOTE:** Addresses made by other invited Ministers attending the Conference
- [Chairman of the SiD Conference Organizing Committee:  
Colonel (Eng) Georgios Drosos (HAF), MSc, DIC]
- [09:30-09:35] • **Presentation of Hellenic MoD Crests to the VIP Guests**
- [09:35-09:40] • **Group Photo**
- [09:40-09:45] • **Opening of the Art Exhibition "Young Artists' View on Sustainability Spirit"**  
(Gallery of Art Works performed by graduate students of the Athens School of Fine Arts)  
Mr. Dimitris L. Avramopoulos, Minister of National Defence  
Professor George Harvalias, Rector of Athens School of Fine Arts
- Conference Structure – Administration Notes**  
[HMoD Rep (Event Moderator, Staff Officer of DTMS/DIE)]

[09:45-11:00]

1st Session: "General" (Part 1)

**Keynote Speakers**

[09:45-10:00]

• **"Principles of Sustainable Development"**

Professor Grigorios I. Tsaltas, Rector of Panteion University in Social and Political Sciences

[10:00-10:20]

• **"Climate Change and Armed Forces : a Brief SWOT Analysis in View of the Latest Climatic Research"**

Professor Dimitri Lalas.

[10:20-10:40]

• **"SE Europe and East Med: Security of Supply and the Role of Armed Forces in the Complex Geopolitical Landscape"**

Dr. Constantinos Filis, Research Director at the Institute of International Relations, Panteion University of Social and Political Sciences.

[10:40-11:00]

• **"Facing Geological Hazards, Susceptibility and Risk Assessment"**

Professor Paul G. Marinou, Emeritus Professor, National Technical University of Athens (NTUA), Past President of the International Association of Engineering Geology and the Environment.

[11:00-11:20]

**Questions and Answers (Q&A) Session**

[Panel: Keynote Speakers, Professor L. Christoforou, and Colonel (Eng) Georgios Drosos (Head of DMTS/DIE), who will coordinate the Q&A Session]

[11:20-11:25]

**Presentation of Hellenic MoD Crests to the Keynote Speakers**

[11:25-11:50]

**COFFEE BREAK**

[11:50-13:15]

1st Session: "General" (Part 2)

[11:50-12:10]

• **"Hellenic Ministry of National Defence: Integrating the Principles of Sustainable Development –SiD Initiative"**

Colonel (Eng) Georgios Drosos (HAF), MSc, DIC, Head of HMoD/DTMS/DIE.

[12:10-12:20]

• **"Hellenic Armed Forces Transformation-Energy Sustainability and Military Operations"**

Colonel (HAF) Dimitrios Pantelatos, Hellenic National Defence General Staff (HNDGS) Rep, Evolution Center Director.

[12:20-12:30]

• **"Energy Security in the CSDP: Deliverables of the Lithuanian Presidency"**

Dr. Karolis Aleksa, Republic of Lithuania, Ministry of National Defence Rep, Deputy Director of the Defence Policy and Planning Department.

[12:30-12:40]

• **"More Sustainable Armed Forces, as a Pillar to Energy Security/ National Vision"**

Commander Pietro Rossi, Italian Republic, Ministry of National Defence Rep, SMD-III-CID.

[12:40-12:50]

• **"European Union Military Concept on Environmental Protection during EU-LED Operations "**

Lt. Colonel David Goulding, EU MS Rep, European External Action Service (EEAS).

[12:50-13:00]

• **"EDA Energy and Environment Programme"**

Mr. Thomas Bennington, EDA Rep, Programme Manager for Environment and Energy.

[13:00-13:15]

- **“The EU Policy and Initiatives on Energy Efficiency in the Defence Sector”**  
Mr. Krzysztof Gierulski, EU COM / DG Energy Rep, Policy Officer.

[13:15-13:35]

**Questions and Answers (Q&A) Session**

[Panel: Speakers of the 1st Session- Part 2, and Major (Eng) N.Meggos (Staff Officer of DTMS/DIE), who will coordinate the Q&A Session]

[13:35-13:40]

**Presentation of Hellenic MoD crests to the Speakers**

**NOTES:** Event Moderator, Staff Officer of DTMS/DIE

[13:40-15:00]

**LUNCH BREAK**

[15:00-16:10]

**2nd Session: “Manpower”**

[15:00-15:15]

- **“Environmental Training and Awareness Schemes in the Hellenic MoD”**  
Major (Eng) Nektarios Alexandris (HAF), MSc, HMoD Rep, Staff Officer of DTMS/DIE.

[15:15-15:30]

- **“Environmental Protection within NATO / Working toward Integration of EP in Daily Military Activities”**

Mr Jeroen Rottink (NLD), Chair of NATO Environmental Protection Working Group (EPWG).

[15:30-15:45]

- **“Environmental Toolbox for Deploying Forces/SWE-FIN-USA Cooperation”**  
Lt. Colonel Hans-Bjorn Fishhaber, SWE Ministry of National Defence Rep.

[15:45-16:00]

- **“Hellenic Armed Forces Disaster Response Capacities and European Civil Protection Mechanism”**

Dr. K.N. Saini, National Rep in EU for Civil Protection, President of the Working Party for Civil Protection of the Council of the European Union.

[16:00-16:10]

- **“Social Contribution of the Hellenic Armed Forces”**

Lt. Commander Iordanis Sidiropoulos (HN), HMoD Rep, Staff Officer of DTMS/DIE.

[16:10-16:30]

**Questions and Answers (Q&A) Session**

[Panel: Speakers of the 2nd Session. Major (Eng) Alexandris will coordinate the Q&A Session]

[16:30-16:35]

**Presentation of Hellenic MoD crests to the Speakers**

**NOTES:** Event Moderator, Staff Officer of DTMS/DIE

[16:35]

**End of 1st DAY**

[20:00-22:00]

**Official Dinner (for Speakers), hosted by HMoD**

**2nd Day: Wednesday, 11 June 2014**

[09:00]

**End of Participants’ Arrival/Opening of Conference**

**NOTES:** Event Moderator, Staff Officer of DTMS/DIE

- [9:00-10:10] **3rd Session: "Financing"**
- [09:00-09:15] • "EDA Energy Technologies CapTech"  
Mr. Vassilis Tsiamis, EDA Rep, Project Officer for European Structural Funds and Energy Technologies.
- [09:15-09:30] • **"Financial Instruments for the Implementation of the Environmental Policy in Greece"**  
Mrs. Christina Prasinou, Hellenic Ministry of Environment (MoE) Rep, Chemical Engineer, Special Agency for the Coordination of Environmental Projects.  
Mr. Georgios Parnasas, Hellenic Ministry of Environment (MoE) Rep, Mechanical Engineer, Special Agency for the Coordination of Environmental Projects.
- [09:30-09:45] • **"The National Strategic Framework for Research and Innovation 2014-2020/Funding Opportunities under HORIZON 2020"**  
Mrs. Evaggelia Sofouli, General Secretariat for R&T Rep, Head of S&T Directorate, Hellenic Documentation Centre.  
Mrs. Georgia Tzenou, National Contact Point for Horizon 2020, Coordinator of "Enterprise Europe Network-Hellas".
- [09:45-10:00] • **"EU Funding Opportunities for Sustainable Development Projects of MoD"**  
Col (Eng) Georgios Delis (HAF), PhD, HMoD Rep, Director of European and Development Projects (DMEPM).
- [10:00-10:10] • **"Adopting Sustainability in Practice. Incorporation of Contemporary Technological Applications, Innovation and R&D Projects in Military Infrastructure"**  
Lt. Commander (Eng) Iordanis Sidiropoulos (HN), HMoD Rep, Staff Officer of DTMS/DIE.
- [10:10-10:30] **Questions and Answers (Q&A) Session**  
[Panel: Speakers of the 3rd Session. Lt Commander (Eng) Sidiropoulos will coordinate the Q&A Session]
- [10:30-10:35] **Presentation of Hellenic MoD crests to the Speakers**
- NOTES:** Event Moderator, Staff Officer of DTMS/DIE
- [10:35-11:00] **COFFEE BREAK**
- [11:00-12:15] **4th Session: "Infrastructure" (Part 1)**
- [11:05-11:15] • **"Sustainability in Military Transport: Should we Embrace?"**  
Professor Mathew G. Karlaftis, PhD, National Technical University of Athens (NTUA).
- [11:15-11:30] • **"Sustainability in Pipelines Infrastructure: Calculation of Buried Pipelines Strains due to Surface Blasts"**  
Professor of Geotechnical Engineering George D. Boukovalas, Head of the Foundation Engineering Laboratory, School of Civil Engineering NTUA.
- [11:30-11:45] • **"Underground Military Facilities: Reducing Vulnerability in an Environmentally Friendly and Cost- Effective Manner"**  
Associate Professor Michael Kavvadas, Head of Geotechnical Engineering Department, NTUA.

- [11:45-12:00] • **“Sustainable Development of Airfield Pavement Infrastructure”**  
Professor of Pavement Engineering Dr. Andreas Loizos, Head of Transportation Planning and Engineering, NTUA.
- [12:00-12:15] • **“Knowledge of Common Activities, Chemicals Used and Wastes Produced in Military Installations Guides Selection of Remedial Technologies in Case of Subsurface Contamination”**  
Associate Professor Marina Pantazidou, School of Civil Engineering, NTUA.
- [12:15-12:35] **Questions and Answers (Q&A) Session**  
[Panel: Speakers of the 4th Session- Part 1, and Colonel (Eng) Georgios Drosos (Head of DMTS/DIE), who will coordinate the Q&A Session]
- [12:35-12:40] **Presentation of Hellenic MoD crests to the Speakers**  
**NOTES:** Event Moderator, Staff Officer of DTMS/DIE
- [12:40-14:00] **LUNCH BREAK**
- [14:00-15:00] **4th Session: “Infrastructure” (Part 2)**
- [14:00-14:15] • **“Solar Hydrogen: Energy Carrier and Efficient Energy User”**  
Research Director Dr. Spyros Voutetakis, Center for Research and Technology Hellas (CERTH)/Chemical Processes and Energy Resources Institute (CPERI).
- [14:15-14:30] • **“Waste Gasification. Sustainable Waste Handling & the Production of Power- Heat and 2nd Generation Biofuels”**  
Senior Researcher Dr. Kyriakos Panopoulos, Center for Research and Technology Hellas (CERTH)/Chemical Processes and Energy Resources Institute (CPERI).
- [14:30-14:45] • **“Current Experience in Atmospheric Research on Airborne Platforms, Lessons Learned and Future Prospects for Unmanned Aerial Vehicles Deployment”**  
Director of Research Dr. Konstantinos Eleftheriadis, Environmental Radioactivity Laboratory, Institute of Nuclear and Radiological Science & Technology, Energy & Safety, National Centre for Scientific Research “DEMOKRITOS”.
- [14:45-15:00] • **“Life-Cycle Environmental Assessment of Defence Materiel”**  
Electronic Engineer, MSc, John Ziras-Christodouloupoulos, General Directorate for Defence Investment and Armaments (GDDIA)/Head of Quality Supervision & Certification Section.
- [15:10-15:20] **Questions and Answers (Q&A) Session**  
[Panel: Speakers of the 4th Session- Part 2, and Lt Commander (Eng) Sidiropoulos (Staff Officer of DMTS/DIE), who will coordinate the Q&A Session]
- [15:20-15:25] **Presentation of Hellenic MoD crests to the Speakers**  
**NOTES:** Event Moderator, Staff Officer of DTMS/DIE
- [15:25-15:50] **COFFEE BREAK**



[15:50-16:40]

### 4th Session: "Infrastructure" (Part 3)

[15:50-16:05]

• **"Implementation of REACH Regulation in Defence"**

Mr. Apostolos Nikolopoulos, Chemical Engineer, PhD, HMoD Rep, Staff Member of DTMS/DIE.

[16:05-16:15]

• **"-Green Camps- Project"**

Captain (Eng) Elena Papazoglou (HAF), HMoD Rep, Staff Officer of DTMS/DIE.

[16:15-16:25]

• **"-Smart Blue Camp-Project "**

Mr. Apostolos Nikolopoulos, Chemical Engineer, PhD, HMoD Rep, Staff Member of DTMS/DIE.

[16:25-16:40]

• **"-Military Energy and Carbon Management- Project"**

Major (Eng) Nektarios Alexandris (HAF), MSc, HMoD Rep, Staff Officer of DTMS/DIE.

[16:40-17:00]

**Questions and Answers (Q&A) Session**

[Panel: Speakers of the 4th Session- Part 3, and Major (Eng) Il. Manolis (Staff Officer of DTMS/DIE), who will coordinate the Q&A Session]

[17:00-17:05]

**Presentation of Hellenic MoD crests to the Speakers**

**NOTES:** Event Moderator, Staff Officer of DTMS/DIE

[17:05-17:15]

### CLOSING REMARKS

Conference Outcome – Way Ahead (Brief Synopsis, Proceedings, etc)  
[Colonel (Eng) Georgios Drosos (HAF), MSc, DIC, Chairman of SiD Conference Organizing Committee, Head of DTMS/DIE, HMoD]

[17:15]

### END OF CONFERENCE

[17:30-20:00]

**CULTURAL EVENT (Optional).**

Visit at the Acropolis (Site and Museum).  
Those, who are wishing to participate, should state it in the Registration Form.  
Transportation offered by HMoD.





Mr. **Dimitris L. Avramopoulos**,  
Minister of National Defence

## Curriculum Vitae

He was born in Athens, on June 6, 1953.

### I. Political Career

1993: Career diplomat since 1980, he resigns from the Greek Diplomatic Service and enters the political arena, as a member of the "New Democracy" Party.

1993-1994: Elected Deputy, member of the Greek Parliament.

1995-2002: Mayor of Athens.

1995-1999: Chairman of the Central Union of Local Authorities of Greece.

1995: Founder and first President of the "Permanent Conference of the Mayors of the Capitals of Southeastern Europe".

2000-2001: President of the "Free Citizens Movement".

2000-2002: President of the "Summit Conference of the Mayors of the World".

2001: Founder of the "Athens' International Prize for Democracy", under the auspices of UNESCO (Paris).

2002: Founder of the "World Union of Olympic Cities", under the auspices of the International Olympic Committee (Lausanne). Founder of the "World Institute of Glocal and Cities' Diplomacy" (Rome).

2004: Elected Member of the Parliament with "New Democracy" party.

2004-2006: Minister of Tourism Development.

2006-2009: Minister of Health and Social Solidarity.

2007: Reelected Member of the Parliament with "New Democracy".

2009: Head of International Relations for the opposition "New Democracy" Party.

President of the Organizing Committee of 2010 "New Democracy" Party Congress

2010: Vice President of the main opposition Party in the Parliament «New Democracy».

2011: Minister of National Defence.

2012: Minister of Foreign Affairs.

2013: Minister of National Defence.

### II. Academic Degrees

1978: Bachelor of Arts in Public Law and Political Science from the Law School of Athens' University.

1979-1980: Postgraduate Specialisation Diploma on International Organization (Boston University / Brussels).

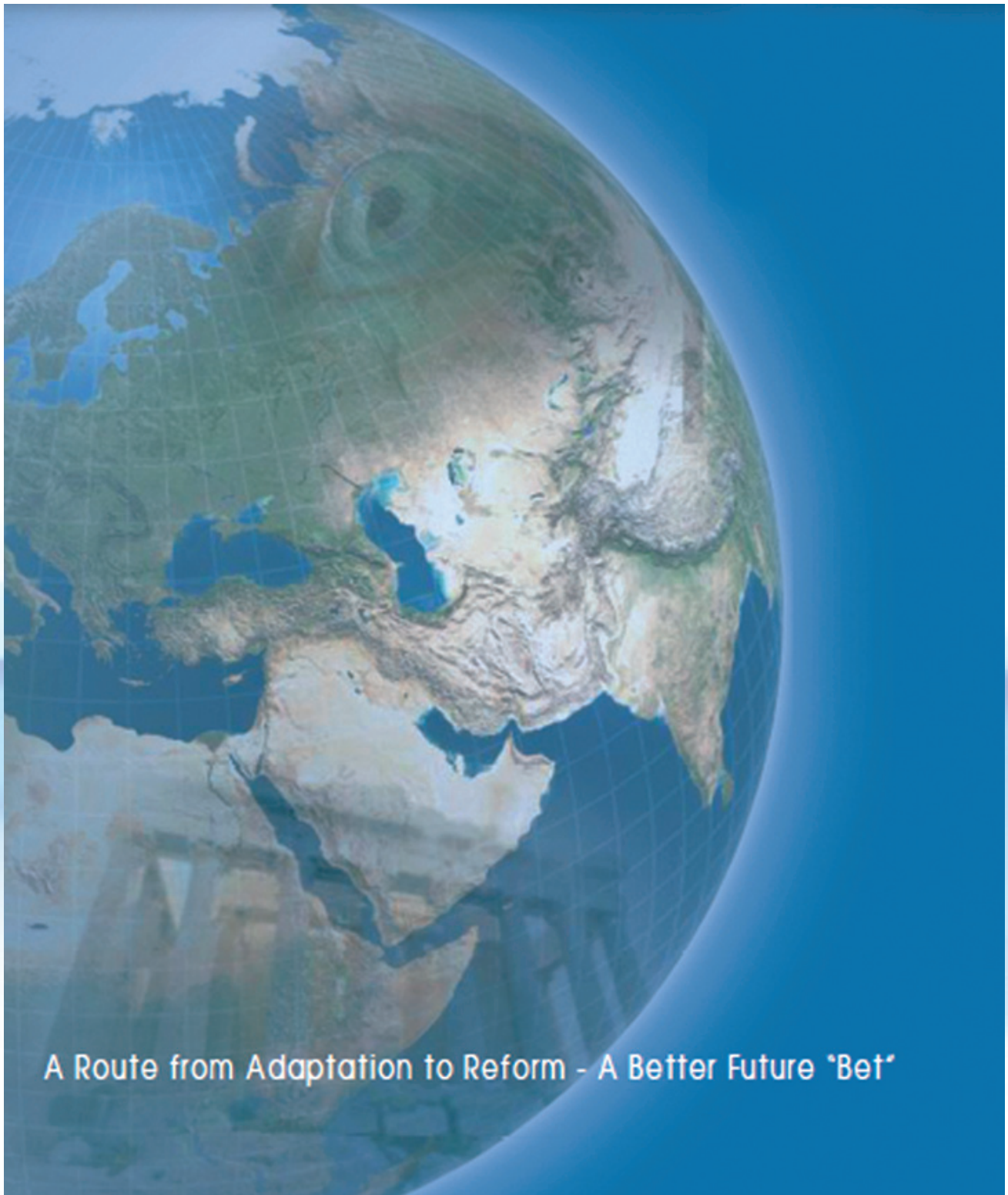
1986: Masters on European Studies (Institute of European Affairs of the "Université Libre de Bruxelles" (Brussels)).

### III. Personal Information

Married to Vivian, with two sons, Filippos and Iasonas.

Fluent in English, French and Italian.

# «Sustainability in Defence (“SiD”))» Initiative



A Route from Adaptation to Reform - A Better Future “Bet”



Mrs **Foteini Gennimata**  
Alternate Minister of National Defense

## Curriculum Vitae

- Personal Information

Born in Athens in 1964.

Graduate of the Department of Political Science and Public Administration of the National and Kapodestrian University of Athens (1987).

- Parliamentary and Governmental career

MP for Athens A' Electoral District with the 'Panhellenic Socialistic Movement' (PASOK) Political Party (2000 – 2002).

Super-prefect for the super-prefecture of Athens and Piraeus (2003 – 2007).

President of the Prefectural Authorities of Greece (2003-2007).

Deputy Minister of Health and Social Solidarity (2009-2010)

Alternate Minister of Education, Lifelong Learning and Religious Affairs (2010-2011)

Alternate Minister of Interior of the government of broad cooperation (2011-2012)

Alternate Minister of National Defence (June 2013)

- Political party activity

Member of the student organisation PASP (1982 -1987).

President of the «Georgios Gennimatas” Group since 1996.

Member of the PASOK Central Committee (2001-2004).

Secretary of PASOK Department of Education and Training (2001).

Member of PASOK Executive Office (2003-2004).

Member of PASOK National Council since 2003.

Member of PASOK Political Council (2004 -2009).

Spokesperson for PASOK (2012).

<b>VIP Guests .....</b>	<b>15 - 18</b>
<b>Keynote Speakers .....</b>	<b>19 - 23</b>
<b>First Session Speakers .....</b>	<b>24 - 30</b>
<b>Second Session Speakers .....</b>	<b>31 - 35</b>
<b>Third Session Speakers .....</b>	<b>36 - 42</b>
<b>Fourth Session Speakers .....</b>	<b>43 - 55</b>



Dr. **Dionysia-Theodora Avgerinopoulou**,  
Chairperson of the Special Permanent Committee on Environmental Protection of the  
Hellenic Parliament.

## Curriculum Vitae

Dr. Dionysia-Theodora Avgerinopoulou, Member of the Hellenic Parliament, is the Chairperson of the Special Permanent Committee on Environmental Protection of the Hellenic Parliament, the Chairperson of its Subcommittee of the Watercourses, and the Chairperson of the Circle of the Mediterranean Parliamentarians on Sustainable Development. She has also been recently elected as the Chairperson of the Standing Committee on United Nations Affairs of the Inter-Parliamentary Union. Dr. Avgerinopoulou is the recipient of the Green Star Award by the UNEP/OCHA/Green Cross International and a Young Global Leader of the World Economic Forum. She holds a J.S.D. (Ph.D.) in Environmental Law from Columbia University of Law and LL.M. in International Legal Studies from Georgetown Law Center. She is an international lawyer and the Director of the European Institute of Law, Science and Technology.



**Mr. Leonidas Antonakopoulos**  
Head of the European Parliament Information Office in Greece

## Curriculum Vitae

Mr. Leonidas Antonakopoulos is a Political Scientist, he studied Public Law and Political Science in Athens Law School and has Post-graduate Degrees in Political Science from Strasbourg's University Law School as well as from the European Studies Institute of Brussels University. He is an official of the European Union since 1990, and has a long working experience in Public Information and Political Communication.

Since November 2010:  
Head of the European Parliament Information Office in Greece

July 2006 - October 2010:  
Press Counsellor of the European Parliament Information Office in Greece.  
Directorate General for Communication of the European Parliament in Greece.

October 2005 - July 2006:  
Head of Communication and Media Services.  
General Communication Office of EP, Brussels.

July 2000 - September 2005:  
Head of Information and Communication Unit.  
European Commission, Directorate General of Development and Co-operation, Brussels

January 1995 - September 1999:  
Head of Commissioner Christos Papoutsis Private Office,  
European Commission, Brussels.

November 1990 - January 1995:  
Head of Greek Department of the Press Unit.  
Directorate General for Communication of the European Parliament, in Brussels.

November 1985 - October 1990:  
Director of the Greek Office of Press and Information in Belgium.  
Spokesman of the Greek Presidency in E.U, Council, Brussels. (1988).

August 1982 - March 1984:  
Political Counsellor in the Greek Permanent Representation to the European Union, in Brussels

- European Political Co-operation
- Institutional Affairs
- Relations with the European Parliament





**Mr. Denis Roger,**  
Director of European Synergies and Innovation of EDA (on behalf  
of Ms. Claude France-Arnould, EDA Chief-Executive)

## Curriculum Vitae

On May 1st, 2014 Denis Roger was appointed as Director, European Synergies and Innovation (ESI) of the European Defence Agency. The ESI directorate acts as an interface between ministries of Defence and wider EU policies. Denis ROGER's portfolio includes Innovative Research, Space, Horizon 2020, European Structural Funds and Market & Industry policies as well as Energy and Environment and Single European Sky-related issues. From 2009 to 2011 he was the Deputy Director in charge of Industry Strategy in DGA and in June 2011, he joined the French Prime Minister Department as the Deputy Head, International, Strategic and Technological Affairs, at the General Secretariat for Defence and National Security. In this position, he was in charge of issues relating to export control, counter-proliferation and international crisis. He also had a specific responsibility as the interministerial co-ordinator for Security Aspects of European Space Programmes.

After starting his career in test centres and in naval programmes, he held various international and R&T-oriented positions at the European Commission in Brussels, as the head of the USA-Canada office in DGA (Direction Générale de l'Armement, the French Defence Technology and Procurement Agency), as the Dean of Education and Research of Ecole Nationale Supérieure des Technologies Avancées - ParisTech and as the French Defence Equipment Attaché in Australia.

Denis ROGER graduated as an engineer from Ecole Polytechnique and Ecole Nationale Supérieure de l'Aéronautique et de l'Espace. He also holds a Master of Science in Aerospace Engineering from Stanford University and a diploma from the Institute for Higher European Studies in Brussels and was an auditor of the Institute for Higher National Defence Studies (IHEDN) in Paris.



Professor Doctor **Loukas Christoforou**,  
President of the Energy Committee of the Academy of Athens.

## Curriculum Vitae

Professor Loucas G. Christophorou is a Permanent Member of the Academy of Athens, Greece. At the Academy he holds the chair of Physical Science-Experimental Physics and is the Director of the Office of Research in Experimental Physics and Chairman of the Academy's Energy Committee. Formerly, he was Senior Corporate Fellow of Oak Ridge National Laboratory, Senior Research Scientist at the National Institute of Standards and Technology, and Ford Foundation Professor of Physics at The University of Tennessee. He lectured at over 130 universities and research centers in the USA, Europe and Japan.

His research programs cover five decades and deal with Atomic and Molecular Radiation Physics, and Chemical and Electron Physics. He is the author of many research papers and books on the fundamental interactions of radiation with matter and their application to advance modern technologies in many areas, including plasma technologies, energy and environment.

He is Fellow of the American Physical Society, Fellow of the American Association for the Advancement of Science, Senior Corporate Fellow Emeritus of Oak Ridge National Laboratory, recipient of an Honorary Doctor of Science degree from the University of Patras, corresponding Member of the Montenegrin Academy of Sciences and Arts, Member of the European Academy of Sciences and Arts, Vice-President of the Council of the European Union's Academies of Science (EASAC), recipient of the Alexander von Humboldt Senior Scientist Award of Germany, and recipient of the Phoenix Medal of Greece.



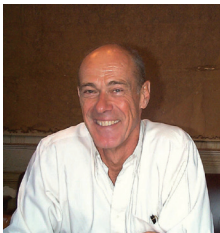
Professor **Grigorios I. Tsaltas**  
Rector of Panteion University in Social and Political  
Sciences

## Curriculum Vitae

Grigorios I. Tsaltas, born in Athens, is Professor of International Law, teaches International Law of the Sea, International Environmental Law of and International Law of Development. Founding Director of the European Centre for Environmental Research and Training (EKEPEK), Vice-president of the Association Internationale du droit de l'urbanisme (AIDRU), Vice-president of the Hellenic Society of International Law and International Relations, Member of the Board of the Institute of the Aegean of the Law of the Sea and Maritime Law, Jean Monnet Chair Holder (European Union and Developing Countries), President of the UNESCO Attica Club, Member of the Association Internationale du Droit de la Mer, visitor Professor of the University of Madrid (I.C.A.D.E.), Member of the Editorial Board of the Aegean Review of the Law of the Sea and Maritime Law and NMIOTC MIO Journal.

He holds a Doctorat D'Etat en Droit (unanimously excellent) in International Law from the University of Legal and Economic Sciences of Nice, a Masters' Degree from the Institut Européen des Hautes Etudes Internationales of the University of Nice, a Masters' Degree in Public International Law specializing in the Law of Development from Institut du Droit de la Paix et du Développement of the University of Nice and a Degree in Political Science from Panteion University of Social and Political Science.

His research interests contain: policies and international law of development, international law and international policy of environmental protection, international law of the sea, European policies of environmental protection, geography in international studies.



Professor **Dimitri Lalas**

## Curriculum Vitae

Prof. Dimitris Lalas is Senior Associate at FACE3TS, S.A. a consultancy on energy, environment and economy matters and particularly the interplay between them, areas that he has been involved with most of his professional career.. He has also worked on aspects of air pollution, renewable energy utilization, energy planning and climate change impacts.

Prof. Lalas has held faculty positions at universities in the United States (Wayne State University, University of Colorado) and in Greece (chaired professor of Atmospheric Physics and Meteorology, University of Athens

He has represented Greece in the international climate change negotiations from 1995 to 2005 and from 2009 till now.

Prof. Lalas has served as Director of the National Observatory of Athens, the oldest research center in Greece, and as the (first) president of the Greek National Centre for Renewable Energy Sources (CRES). He has also been Chairman of the Board of the Greek National Petroleum Company.

## Abstract

### **"Climate Change and Armed Forces: a brief SWOT analysis in view of the latest climatic research"**

In the last 18 months, the latest (5th) Assessment Report of the UN Intergovernmental Panel for Climate Change was released. The work of over 3000 scientists from all the nations of the world, this Report looks at the physical aspects of changes that already occurred and those to be expected in the future but also estimates its impacts and investigates mitigation means to both reduce its magnitude and adapt to the inevitable portion some of which is already taking place. All these aspects of climate change influence the operation of defense forces in times of conflict and in peace, but also threaten political stability directly and indirectly. It is the purpose of this presentation to highlight these aspects of the Report and the differences from the previous UN Assessments, and to discuss the ways they affect defense force missions, modes of field operation, logistics and budgets.



**Dr. Constantinos Filis,**  
Research Director at the Institute of International Relations,  
Panteion University of Social and Political Sciences.

## Curriculum Vitae

Has served as Director for issues pertaining to Russia and former Soviet republics at Panteion University's Institute of International Relations (IIR), where he currently heads the Center for Russia, Eurasia and Southeast Europe.

Elected in November 2007 as Senior Associate Member at St Antony's College, Oxford University, and, since September 2008 research fellow at South East European Studies at Oxford (SEESOX).

Starting in 2007, oversaw scientific teams at the Institute for Strategic and Development Studies, co-authoring a number of studies and analyses, and then holding the position of Scientific Director for about a year.

Member of the International Council of the Research Institute for European and American Studies.

Lectures in the Undergraduate and Post-graduate programmes of Panteion University. Also, a visitor at the Hellenic Naval Staff and Command College.

In July 2012, was appointed by the Board of Directors Director of Research at the Institute of International Relations of Panteion University.

In September 2013 he became member of the Greek-Turkish Forum.

## Abstract

### **"SE Europe and East Med: Security of Supply and the Role of Armed Forces in the Complex Geopolitical Landscape"**

Topics to be explored:

- EU security of supply
- Seeking alternative supply sources and limitation of risks for suppliers
- Relations with Russia as (a) main EU supplier
- The role of Southeast Europe and the Eastern Mediterranean
- Historic transitional phase – how regional processes are being impacted
- Stabilization and reorganization
- Reduced interventions with concurrent increase of political control
- De-escalation of tensions through resolution or maintenance of frozen conflicts
- Creation of security vacuum (how it is to be filled – e.g., regional configurations)
- Adapting armed forces to new needs
- Orienting armed forces towards local/linear security (maritime, land and air lines of security)
- Confronting security of supply (Oilfields, lines of communication, ports, infrastructure)
- Limiting need for Middle East energy sources – U.S. (energy) independence
- New cold-war climate cycle?



Professor **Paul G. Marinos**,  
Emeritus Professor, National Technical University of Athens (NTUA),  
Past President of the International Association of Engineering Geology  
and the Environment.

## Curriculum Vitae

Professor Paul G. Marinos is an Emeritus professor of Engineering Geology, National Technical University of Athens. Past President of the International Association of Engineering Geology and the Environment (IAEG) and of the Geological Society of Greece.

Mining Engineering degree, NTUA in 1966, Applied Geology degree and Doctorate, University of Grenoble, France, 1969. Has been visiting Professor University of Grenoble and Paris School of Mines.

Awards: Hans Cloos medal (Intern), André Dumont (Belgium), Glossop medal (UK), Jahns award (USA). Presentation of named lectures around the world. Dr Honoris Causa of the University of Thrace. Chevalier des Palmes Académiques of the French Republic.

Research on a variety of applications of geology. Author of over 300 papers in journals or major conference proceedings. Editor in chief of the journal "Geotechnical and Geological Engineering".

Consultant or expert on major civil engineering structures all around the world, mainly dams and underground works, and also landslides and water resources projects.

## Abstract

### "Facing Geologic Hazards, Susceptibility and Risk Assessment"

"In piece, soldiers must learn the nature of the land". This Machiavelli's message has proved truly prophetic with the subsequent history of war as military forces had to use geologic knowledge of the land surface to military advantage, trained beforehand for that. But it goes equally that they can contribute through this knowledge to the safety and welfare of the society. Geohazards are caused from particular combinations of geological conditions and often belong to a natural evolution of the earth's crust and its surface. Hazardous geological material, such as swelling soils or toxic minerals and hazardous geological processes such as earthquakes, volcanos, landslides, subsidence, coastal hazards and floods, are briefly presented and documented. In terms of loss of life geohazards can compare with the most severe catastrophes of contemporary society. Where urban and land development increases the potential severity of loss of life and property may also increase if geological knowledge is neglected. A number of tools we have in possession today in terrain analysis are also reported. The risk assessment of a hazard and consequently the actions to minimise the effects by engineering design and appropriate zoning are essential.



Professor **George Harvalias**,  
Rector of Athens School of Fine Arts

## Curriculum Vitae

Born in Athens in 1956.

He lives and works in Athens, Greece. He studied at the Athens School of Fine Arts (1976-1983).

He has done the following solo exhibitions:

- Batagianni Gallery - Michalis Cacogiannis Foundation, Athens (2009),
- AD Gallery, Athens (2005),
- ARTIO Gallery, Athens (2003, 1999, 1995, 1993),
- Eleni Koroneou Gallery, Athens (1991),
- POLYPLANO Art Gallery, Athens (1985).

He has participated in the following group exhibitions (selection):

- Athens Cultural Capital of Europe, Athens, 1985
- 2nd BIENNALE of Young Artists from the European Mediterranean, 1986
- Antipodes, Young Greek Artists, Museum of Modern Art, Melbourne, Australia, 1987
- 16th BIENNALE of Alexandria, 1987
- Kunst-Europa, Staatlichen Kunsthalle, Berlin, 1991
- Pro Patria, House of Cyprus, Athens, 1995
- Greek Realities, Stiftung Neue Kultur – Galerie im Marstall, Berlin, 1996
- Greek Realities, Kunsthalle Brandts Klaedefabrik – Odense, Denmark, 1997
- Montrouge – Athenes, 42e Salon d'Art Contemporain, France, 1997
- Focus of Gaze, Art Centre of Larissa, 1997
- BIENNALE of Alexandria, Egypt, 1997
- Macedonian Museum of Modern Art, Thessalonica, 1998
- An Outing, Leonidas Beltsios Collection, 2006
- In the Labyrinths of the Winds, Guernica, Spain, 2007
- Places, Collection of the Macedonian Museum of Modern Art, Benaki Museum, Athens, 2007
- M.M.S.T., Thessaloniki, 2008
- Politics of Art, National Museum of Modern Art, Athens, 2010



Colonel (Eng) **Georgios Drosos** (HAF), MSc, DIC  
Head, Department of Infrastructure & Environment (DIE)  
Hellenic Ministry of National Defence (HMoD)

## Curriculum Vitae

Col (Eng) Georgios Drosos is Head of HMoD / DIE since Feb 2010. His main activities comprise the co-ordination of the HMoD Environmental Policy implementation and the advancing of the Armed Forces Infrastructure, by launching new regulations for the incorporation of Sustainability Criteria in educating military personnel, constructing military installations & performing military operations. He represents HMoD in various National/ NATO/ EU Environmental & Infrastructure Committees and WGs.

Previously, he served from 2007 to 2010 in HAF GS, as Head of Infrastructure Dept. He has also served in NATO, HQ SACT (VA USA), from 2004 to 2007, as Capability Package Coordinator. Overall, in his military career up to now, he gained considerable experience in Infrastructure, Environment and Energy sectors having served at all levels of Command.

In the academic field, he followed a postgraduate course in the Imperial College, Department of Civil & Environmental Engineering, where he obtained DIC, MSc (with Distinction) in Engineering Geology in 2001. He also completed successfully postgraduate studies in The George Washington University, School of Business in Project Management in 2007, followed by postgraduate studies in Environmental Management in the Hellenic Management Association in 2010.

He has been honored with several military and academic medals, among which the "Gold Cross of the Order of Phoenix" by the President of Hellenic Republic, and "The Lapworth Medal", by the Imperial College. He was also awarded various Commendations, for distinguished service, by Hellenic Minister of Defense, Chief of HAF GS, NATO SACT COS, etc. Col DROSOS was born in 1965, in Ioannina, Hellas. He is married with two children. To relax, he enjoys reading & writing, and also likes music, art & sports.

## Abstract

### **"Hellenic Ministry of National Defense Integrating the Principles of Sustainable Development - "SiD" Initiative"**

HMoD is in the status of embedding sustainability principles into the everyday practice of the Armed Forces (AF) and the Defence Industry (DI). In this context, a major revision of the Environmental Policy has been conducted accompanied by an "Integrated Strategic Sustainability Plan". These establish the roadmap towards "Green Transformation" of the AF. Actions have been taken to promote personnel environmental sensitization, to introduce life-cycle assessment of defense materiel and to phase in innovative solutions to fixed infrastructure as well as to deployable equipment, which will eventually lead to sustainable military operations. Cutting-edge research achievements will be of the highest value for the optimal utilisation of sustainability principles within Defence. Towards this broader scope, full scale projects are under way, serving to mitigate the climate change impacts in AF and DI, which benefit the country and the society in general.

Furthermore, HMoD has launched the "Sustainability in Defence (SiD)" initiative to explore the aspects of the introduction of the Principles of Sustainability in Defence, structured in an holistic approach that will examine thoroughly three key factors for the incorporation of Sustainability in Defence, that is Manpower, Infrastructure and Financing. "SiD" will take into account all relevant existing initiatives (eg. Military Green, Green Defence) and will deliver a solid basis to develop a Defence Sustainability Concept within EU.





Colonel (HAF) **Dimitrios Pantelatos**,  
Hellenic National Defence General Staff (HNDGS) Rep,  
Evolution Center Director.

## Curriculum Vitae

Colonel pilot Hellenic Air Force (HAF/GRC) Dimitrios Pantelatos is the Director of the HNDGS Evolution Centre. He graduated from the Hellenic Air Force Academy in 1984 and he has served as a pilot at F-4E and F-16 combat aircrafts. He has also worked as an Instructor & Test Pilot, as an Instructor in Electronics Warfare and holds a MSc in Flight Dynamics from Cranfield University England/College of Aeronautics. He has served as Aide de Camp to HNDGS Chief of Defence (CHOD), as a Staff Officer at Hellenic Air Force General Staff (HAFGS)/C2 Defence Contracts Implementation Directorate and at HAFGS/A1 Directorate for operational requirements. He has been Commander of an Anti Aircraft Guided Missiles Squadron, Head of the Concepts Development & Experimentation Dept. (CD&E dept.)/ HNDGS Evolution Centre and Commander of Kabul International Airport for NATO International Security Assistance Force (ISAF). He has also had significant involvement in military Unmanned Air Vehicles (UAVs) subjects.

## Abstract

### **“Hellenic Armed Forces Transformation-Energy Sustainability and Military Operations”**

The Armed Forces must strive to achieve and maintain along with the operational capabilities, the strategic energy advantage in all domains. Understanding the energy impacts in the theater of operations is essential to better employing and sustaining an effective fighting force. On the other hand understanding existing operational capabilities is essential to producing a more energy aware and effective Armed Forces. Thus the process for weapon system development must incorporate the appropriate framework capable of integrating energy considerations. Optimization of energy for weapon systems ensures a sustainable and supportable warfighting capability.

Therefore all acquisition programs should address energy usage and energy consumption must be considered throughout a weapon system’s life cycle. This weapon system development cycle can be parsed into four phases, the Requirements Phase, the Capability Gap Identification Phase, the Acquisition Phase and the Utilization, Maintain and Dispose Phase.



**Dr. Karolis Aleksa,**  
Republic of Lithuania, Ministry of National Defence Rep, Deputy Director of the Defence Policy and Planning Department.

## Curriculum Vitae

Dr. Karolis Aleksa is Deputy Director of the Defence Policy and Planning Department, Ministry of National Defence of Lithuania. He is also a Lecturer at the Institute of International Relations and Political Science of Vilnius University (VU IIRPS). He holds PhD in political science from VU IIRPS. He has published articles on international security issues.

Dr. Karolis Aleksa has been working in the Ministry of National Defence of Lithuania since 2004. From 2007-2012 as a Deputy Head of the Strategic Analysis Division of the Defence Policy and Planning Department he has focused on emerging security challenges. During the Lithuanian EU Presidency in the second half of 2013 he has worked on energy security, organizing the Seminar on the "Energy Security Dimension in the EU CSDP: guidelines for the future" in Vilnius, Lithuania. As a Deputy Director of Defence Policy and Planning Department he specifically focus on emerging security challenges, including cyber, energy, maritime, and strategic forecast, analysis.

## Abstract

### **"Energy Security in the EU CSDP: Deliverables of the Lithuanian EU Presidency"**

Today the Armed Forces are among the largest public energy consumers in Europe, with a combined electricity demand as big as that of a medium-size EU country. Apart from putting already limited defence budgets on a pressure, the lack of energy efficiency in defence sector is also negatively affecting environmental sustainability targets and military effectiveness which, in turn, often translates into reduced security of our soldiers. Although EU institutions have recognized these issues for quite a long time this has never translated into a comprehensive energy security policy for the European defence sector. During its EU Presidency Lithuania put a lot of effort into promoting energy security dimension in the EU CSDP (with a specific emphasis on military energy efficiency). The goal of this presentation is to introduce the main deliverables that we have achieved and suggest some ideas on a way forward. It will also briefly touch on national efforts in the military energy security field.



Cdr **Pietro ROSSI**  
III Dept Plans & Policy, Italian Defence General Staff  
Centre for Defence Innovation (CID)

## Curriculum Vitae

Commander **Pietro Rossi** is a Staff Officer at the Centre for Defence Innovation in joint Doctrine development office. He also represents Italy in the Steering Committee of the NATO Energy Security Centre of Excellence in Vilnius (LTU).

He graduated from the Italian Naval Academy in 1983 and completed his studies in "Maritime and Naval Science" at the University of Pisa, attaining also a Master Degree on "Peacekeeping and Security Studies" at the University of Rome.

An experienced submarine officer he has been involved in an extensive range of joint/combined operations over the past 30 years. His time on the front line has included three warship Commanding periods: ITS DANDOLO (SSK), ITS SAURO (SSK), ITS ANTEO (Submarine support & Underwater operations Auxiliary Ship).

Whilst ashore, he had an equally varied range of appointments, including a three year tour at the NATO Component Command Land in Madrid (Logistics Staff Officer). He has previously worked in the Naval General Staff in the Submarine Division and at the Italian Navy Fleet Command as Submarine Operations Officer.

## Abstract

### **"More Sustainable Armed Forces as a Pillar to Energy Security: National Vision"**

Regular access, at a reasonable price, to energy resources is a strategic factor for Italy's – and Europe's – socio-economic development as it is testified by the constant growth in global primary energy demand.

This growth is associated with increasing challenges in terms of security of supplies, competition to acquire them and environmental impact in a complex and multifaceted geo-political scenario.

Energy is, also, a primary factor in conduct of military operations: the availability of energy and the way armed forces use it could be force multiplier or undermine effectiveness of assets.

Armed forces that will use less fuel in a more efficient way and with more options in energy supplies will be more apt to achieve desired end states and will actively contribute to global national energy security.

There isn't a single path towards more sustainable armed forces, it is vital to implement an energy oriented capability development. Italy is exploring different solutions that could lead to improve the energy resilience and sustainability of its armed forces.



Lt. Colonel **David Goulding**,  
EU MS Rep, European External Action Service (EEAS).

## Curriculum Vitae

Lt Col Goulding is an Infantry Officer who joined the Irish Defence Forces in 1980. He has a wide variety of military and academic qualifications. At home he has served in a broad range of Command and Staff appointments as well as on overseas deployments to the Middle East, the Balkans and Afghanistan. He took up his present appointment in Brussels in September 2011 in the Concepts and Capabilities Directorate of the European Union Military Staff. He currently lives in Brussels, is married to Christine and has two grown up sons.

## Abstract

### "European Union Military Concept on Environmental Protection and Energy Efficiency for EU-led military operations"

In December 2008, the European Union issued a report on the implementation of the European Security Strategy (2003), adding new challenges namely energy supply routes, climate change and environmental degradation.

This was the catalyst for the concept agreed by Member States in 2012. The concept's aim was to establish the principles and the responsibilities associated with Environmental Protection during EU-led military operations.

The Concept addresses relevant energy-related aspects, such as energy efficiency and the use of renewable energy during military operations; it provides an overview of associated activities which will enhance environmental protection, namely training, education and capability development. All helping to sustain readiness, facilitate international cooperation and interoperability, ensure legal compliance, strengthen civil relations and promote efficient use of and conservation of valuable natural resources.



**Mr. Thomas Bennington,**  
EDA Rep, Programme Manager for Environment and Energy.

## Curriculum Vitae

Tom Bennington is the Programme Manager for Energy and Environment at the European Defence Agency and is a retired senior officer and military pilot from the United Kingdom with significant experience in complex programme management, deployed military operations and the international Defence community. With previous experience as the assistant head of Nuclear Capabilities in the UK MOD, Chief of Staff of the Air Division of NATO's Maritime HQ and operational experience of running deployed camps in both Iraq and Afghanistan, he joined the EDA team in September 2013 and coordinates Energy and Environmental issues on the Agency's behalf.

## Abstract

### "EDA Energy and Environment Program"

Energy is a critical enabler to both military operations overseas and to peacetime activities at home but it is becoming prohibitive in terms of economic cost and, in some cases, in the loss of life protecting the logistic support routes. Similarly, environmental factors can constrain the use of military force and are of growing importance to preserving public support for military activities at home. Recognizing the increasing importance of Energy and the Environment to the Defence and Security sector, the European Defence Agency has brought together several related activities and is developing a comprehensive energy and environmental programme to support Member States efforts in these areas and to offer opportunities for energy efficiency, diversification of supply, collaboration, education and discussion. The presentation will examine the new programme approach giving tangible examples of how Europe's Armed Forces can make the own contribution to the low carbon-economy envisaged for 2050.



**Mr. Krzysztof Gierulski,**  
EU COM / DG Energy Rep, Policy Officer.

## Curriculum Vitae

Krzysztof Gierulski works in the European Commission on the development and the implementation of energy efficiency policies and legislation including the Energy Efficiency Directive, the follow-up of the National Energy Efficiency Action Plans and the coordination of the Concerted Action to promote good practices on energy efficiency in the EU-28 and Norway. In 2005-2008 worked at EACI supervising the implementation of international projects on renewable energy supported by IEE Programme. In 1996-2005 worked as an executive manager of EC Baltic Renewable Energy Centre in Poland. Mr Gierulski obtained a master degree in environmental management and policy-making from the University of Amsterdam and a master degree in geography and spatial planning from the University of Gdansk.



Major (Eng) **Nektarios Alexandris (HAF)**,  
MSc, HMoD Rep, Staff Officer of DTMS/DIE.

## Curriculum Vitae

Major (Aircraft Engineer) Nektarios Alexandris (GRC AF) is head of the Energy Efficiency Office of the HMoD. After graduating from the HAF Academy in 1995, he served for 8 years in production and quality control positions, supervising the organizational and intermediate maintenance of A-7 aircrafts and their powerplants. In 2004, he graduated from The University of Nottingham, UK, holding an M.Sc. with distinction in Environmental Engineering. For the next 7 years, Major Alexandris served as staff officer in the HAF General Staff, gaining expertise on environmental protection and occupational health and safety, while managing the environmental protection schemes of the AF and auditing all AF units and installations. Since 2011, he is stationed in the HMoD as senior environmental protection / energy efficiency expert and national delegate to relevant bodies.

## Abstract

### **“Environmental Training and Awareness Schemes in the Hellenic MoD”**

Compliance with the environmental EU and national legislation and the corresponding agreements in the context of NATO as well as implementation of the Environmental Policy of the HMoD requires the full commitment and active participation of all personnel, from the rank and post each person holds. The presentation focuses on the current and planned environmental protection awareness and targeted education / training schemes at various levels, depending on the specialty and exercised duties within the HMoD.



Mr **Jeroen Rottink** (NLD),  
Chair of NATO Environmental Protection Working Group (EPWG).

## Curriculum Vitae

Jeroen Rottink. After his university studies in chemical engineering, Jeroen Rottink served 1991-1992 in the Royal Dutch Army as a conscript officer, charged with Public Relations on Environmental Protection (EP). From 1993-2006 he continued in the Army as a civilian EP specialist working on advice, policy and Environmental Management Systems. In 2006, he became an EP advisor in the Joint Defence Staff and was elected Chairman of the NATO Environmental Protection Working Group of the Military Committee Joint Standardization Board. Since 2014, he is the senior safety management advisor in the Ministry of Defence, after two years in the Real Estate & Security Division.

## Abstract

### **“Environmental Protection within NATO / Working toward Integration of EP in Daily Military Activities”**

This briefing will provide an overview of NATO’s systematic approach to environmental protection during NATO-led military activities. The audience will be introduced to three kinds of infrastructures relating to environmental protection. The “human resources infrastructure” will zoom in on the EP chain of command and the EP Working Groups within NATO. In relation to the digital – paperwork infrastructure, NATO’s main EP documents will be highlighted as well as how these may be found on the internet. Last but not least, NATO’s approach to physical EP infrastructure and equipment will be introduced. This briefing will further cover implementation in training opportunities, awareness, planning, allocation of EP duties and integration of EP into exercises and operations. Mr. Rottink will finally address future challenges and areas of possible improvement, such as (informal) relations with UN and EU.





Lt. Colonel **Hans-Bjorn Fishhaber**,  
SWE Ministry of National Defence Rep.

## Curriculum Vitae

Hans-Björn Fischhaber is a Lieutenant Colonel in the Swedish cavalry and works at the Joint Environmental Department in the Swedish Armed Forces (SAF) HQ, focusing on international environmental cooperation issues. This is his second period at Environmental Department; the first period was 1999-2005. He graduated as a Fortification Officer at the general staff course at the National Defense College in Stockholm. Lt. Col Fischhaber has worked as Fortification Commander in the county of Stockholm and Gotland and also as Commander for the office of "Way and Waterbuilding Corps" and "Building and Rescue readiness bureau". He also worked as an environmental advisor for the commander of OHQ Nordic battle group in 2006-2008. In 2008-2009, he served as the Swedish Liaison officer at the German operations center (Einsatzführungskommando des Bundeswehr) in Potsdam, Germany. He is also one of the architects behind "The European Union Military Concept on Environmental Protection and Energy Efficiency for EU-led Military Operations" (The concept was approved in the EU Military Committee 12th of sept and in the EU Council 14th of sept. 2012). He received his environmental education at the Royal Institute of Technology and Mid Sweden University.

## Abstract

### "Environmental Toolbox For Deploying Forces -a Trilateral Cooperation"

The purpose of the Toolbox is to provide a deploying military unit—specifically the commander, the environmental officer, and soldier/sailor/airman—a toolbox of environmental awareness training resources to plan and implement sound environmental practices. Sound environmental practices are force multipliers that will help:

- ensure mission execution
- protect the safety and health of deploying troops, host nation troops, civilian personnel, and local nationals
- facilitate coalition and international cooperation and interoperability
- promote efficient use of resources
- ensure legal compliance
- contribute to environmental protection in the deployment area and more generally raise environmental awareness in military operations

The value and benefits of sound environmental practices notwithstanding, it is recognized that, in the event of a "conflict" between environmental considerations and the military mission, the latter takes precedence to ensure success of the operation. Equally important, when making choices on procedures and equipment to be used, it is vital to take a holistic approach, considering the full range of factors, to ensure the most feasible option is selected.

Dr. **K.N. Saini**,  
National Rep in EU for Civil Protection,  
President of the Working Party for Civil Protection of the Council of the European Union.

## Curriculum Vitae

Dr. K.N. Saini is a National Rep in EU for Civil Protection. She is also the President of the Working Party for Civil Protection of the Council of the European Union.

## Abstract

### **“Role of Military Capacities under Civil Protection Mechanism”**

The military assets have an important role to play on the new European Civil Protection Mechanism. The new legislation of Union Civil Protection Mechanism (UCPM), give clearly this possibility to army forces to contribute with their capacities, in order to have a better response to disasters. Especially the Member States may, subject to appropriate security safe-guards, provide information about relevant military capacities that could be used as a last resort as part of the assistance through the Union Mechanism, such as transport and logistical or medical support. The Member States have the competencies and the responsibility for their teams, modules and for other support, including military capacities. These military capacities will be used by the National Authorities of Civil Protection and will be offered to the UCPM. These modules together with other capacities will be used for response, inside or outside the E.U in case of a disaster.



Lt. Commander **Iordanis Sidiropoulos** (HN),  
HMoD Rep, Staff Officer of DTMS/DIE.

## Curriculum Vitae

Commander Iordanis Sidiropoulos is a Staff Officer at the Hellenic MoD/General Directorate of Financial Planning & Support/Directorate of Military & Technological Support (DMTS)/Department of Infrastructure & Environment (DIE). He has graduated from the Hellenic Naval Academy in 1998 as a Naval Engineering Officer and he has also received special technical training on S-70 Naval Helicopters Maintenance. He has served in staff positions aboard many different surface ships (mostly Fast Attack Missile Ships and Gunboats/Patrol Boats) and at Hellenic S-70 helicopters technical/operational land-based Squadron respectively. Additionally, he has been further qualified through specialized training courses on Seaborn and Airborn operational , technical and carrier path subjects. His current duties are mainly focused on Infrastructure, Energy & Environmental Research\_and\_ Development\_ (R&D)\_Projects with military interest/perspective.

## Abstract

### “Social Contribution of the Hellenic Armed Forces”

A complete integration of sustainable development principles in the Armed Forces should generally include, among others, actions of Social Responsibility.

In this context, the Armed Forces cooperate with international, national and local level bodies, contributing to the handling of social needs and emergencies (handling of environmental incidents or accidents and natural disasters like earthquakes, fires, floods etc), both inside and/or outside the areas of the Armed Forces responsibility or ownership, when and as long as it is required.

They also contribute with their personnel and equipment to the strengthening of existing bonds of mutual trust and cooperation with society by implementing and supporting actions of environmental reclamation (afforestation/reforestation, coastal cleanup etc) and furthermore with actions about the preservation and promotion of the historical and cultural and natural environment.



**Mr. Vassilis Tsiamis,**  
EDA Rep, Project Officer for European Structural Funds  
and Energy Technologies.

## Curriculum Vitae

Vassilis TSIAMIS is managing European Defence Agency's activities on European Structural Funds and Energy Technologies. Previously, he served as a Senior Officer for Defence Industry at EDA, between 2009-2013.

Since 1991, when he graduated from the Military Academy, Mr. Tsiamis served in various posts in the Hellenic Armed Forces and the Hellenic Ministry of Defence, on national and international assignments.

He is a graduate of the National Technical University of Athens in Electric and Computer Engineer and also holds Master degree on Satellite Communication Networks as well as in International Politics, Public and Defence Procurement.

Mr Tsiamis attended all military schools up to his rank in the Hellenic Armed Forces, and honored with medals and decorations of expertise and level. He is is married with two children.

## Abstract

### "EDA Energy Technologies CapTech"

While civil research provides the baseline for emerging energy technologies, EDA's work analyses the specific applicability to the defence sector of existing opportunities solutions (e.g low drag applications) and/or the development of new ones, focusing on renewable and alternative energy sources, novel fuel cells and energy storage systems. EDA's primary interest is given over to technologies offering potential in deployable defence applications, taking account of defence related aspects such as operational reliability, operational availability and the reduction of mission dependency on fossil fuels etc. At the same time, funding schemes to support research in these areas are challenged due to overall reductions in defence budgets although opportunities may exist within existing EU wider policies and tools from which the defence sector may benefit.



Mrs. **Christina Prasinou**,  
Hellenic Ministry of Environment (MoE) Rep, Chemical Engineer, Special Agency for the  
Coordination of Environmental Projects.

## Curriculum Vitae

Chemical Engineer, with experience in project management, technical and regulatory review within industry and government. A graduate of the University of Illinois at Chicago, with a Master's Degree in Chemical Engineering from the Illinois Institute of Technology, U.S.A.

Work experience includes: Chemical Director at Sanchem Chemical Company, Chicago, Illinois (11/1983 – 1/1986), Chemical/Environmental Engineer at the United States Environmental Protection Agency, Chicago, Illinois (11/1986-11/2000), Executive Officer at the Ministry of the Environment – Technical Support Unit (03/2002 - 3/2005), at the Ministry of Finance – Management Authority of Cohesion Fund (3/2005 – 10/2011) and the "Special Agency for the Co-ordination of Environmental Projects" within the "Ministry for the Environment, Energy and Climate Change" with responsibility in the monitoring of environmental programmes and projects co-financed by the EU (NSRF) and other financing mechanisms (11/2011 – present).

## Abstract

### "Financial Instruments for the Implementation of the Environmental Policy in Greece"

The Greek National Environmental Policy is derived from its National Law, European Directives and International commitments and agreements. Its main priorities are:

- The protection of Natural Environment and Biodiversity
- Solid Waste Management including recycling and reuse
- Protection and Management of Water Resources
- Environmental Risk management and Climate Change.
- Sustainable Urban Development including Air pollution, Noise, and Radiation control.

The financial instruments available for the implementation of the National Environmental Policy are mainly the European Structural Funds. From them, the "European Regional Development Fund" and the "Cohesion Fund" are the most relevant to environmental infrastructure projects, while the "European Agricultural Fund", the "European Fisheries Fund", and the "European Territorial Cooperation Fund" finance environmental projects to a lesser degree. Finally, the "European Social Fund" finances activities regarding environmental education and awareness.

Environmental projects can also be financed by Programs managed directly by the European Committee, such as the Environmental Program "Life".

In addition, the European Economic Area (EEA) has the environment as one of its priority and finances environmental projects.

Other sources of funding are provided by the initiatives of the European Commission: "Joint European Support for Sustainable Investment in City Areas" (JESSICA), and "joint European Resources for Micro to Medium Enterprises" (JEREMIE).



**Mr. Georgios Parnasas,**  
Hellenic Ministry of Environment (MoE) Rep, Mechanical Engineer, Special Agency for the Coordination of Environmental Projects.

## Curriculum Vitae

Mechanical Engineer, graduate of the National Technical University of Athens. Work experience includes: Consultant of Public Agencies and Private Enterprises on Finance, Planning, Monitoring, Management and Evaluation of co-financed projects and programmes (1997 – 2009). Executive officer at the “Management Authority of the Operational Programme of South Aegean Region”, with responsibility in the management and monitoring of environmental projects co-financed by EU Cohesion Fund (5/2007 - 11/2011). Executive officer at the “Special Agency for the Co-ordination of Environmental Projects” within the “Ministry for the Environment, Energy and Climate Change” with responsibility in the monitoring of environmental programmes and projects co-financed by the EU (NSRF) and other financing mechanisms (11/2011 – present).

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Mrs. **Evaggelia Sofouli**,  
General Secretariat for R&T Rep, Head of S&T Directorate, Hellenic Documentation Centre.

## Curriculum Vitae

Evangelia Sofouli has been working at the General Secretariat for Research and Technology since 1990, first as focal point and national representative for E.C Framework Programmes (Environment and Human Capital and Mobility Programmes) and responsible for science-technology and society programmes of the 2nd Community Support Framework Programme

In 2000, she was appointed Head of Technological Development Directorate, responsible for the planning of Transfer of Technology and Innovation Programmes (S&T Parks, Spin-offs etc), National Representative to the advisory Committee of the Research and Innovation Programme of the 6th FP, as well as High level representative to the EUREKA Initiative.

Since 2010, she is the Head of Planning and Programming Directorate, responsible for the coordination of activities funded by the Structural Funds 2007-2013 and the Planning and Programming of the next Programming Period 2014-2020 and RIS3 for Greece as well as Impact assessment of R&D Programmes, R&D Indicators and National Representative to ERAC.

## Abstract

### **“The National Strategic Framework for Research and Innovation 2014-2020”**

In the EU strategy “Europe 2020” the triptych smart, sustainable and inclusive growth, sets research and innovation at the heart of development. Even more it is estimated that if the goal of research spending to 3% of GDP is achieved by 2020, it will create 3.7 million new jobs.

It is therefore a major challenge for Greece to seek the reversal of the development model by directing businesses towards tradable activities of high added value that base their competitiveness on increasing productivity and on embodying knowledge rather than on low cost.

In the new programming period the emphasis of support, both at national and regional level, will focus on economic activities that either have or can develop competitive advantages with significant multiplier effects on the economy, welfare and employment.

The start of the new 2014-2020 programming period is the right time to put the funding of research and innovation in a new perspective creating a National Strategic Framework for Research and Innovation (NSFRI). This effort aims to leverage significant private investment through increased public funding and the targeting of research and innovation policy on major challenges facing the country towards 2020.



**Mrs. Georgia Tzenou,**  
National Contact Point for Horizon 2020,  
Coordinator of "Enterprise Europe Network-Hellas".

## Curriculum Vitae

Georgia Tzenou, is the National Contact Point for Horizon 2020/Coordinator of Enterprise Europe Network-Hellas, National Documentation Centre. She works at the RDI Services & Metrics Unit of the Greek National Documentation Centre (EKT), in the field of European research & innovation projects and knowledge transfer. She is the Coordinator of the Enterprise Europe Network-Hellas & National Contact Point for the Horizon 2020 programme of the European Commission (Research Infrastructures, Access to Risk Finance). She holds a MSc in European Studies, Universite Catholique de Louvain/Belgium and a Diploma in Management, Vrije Universiteit Brussel. She has coordinated several European projects and has operated as NCP for European programmes for more than 10 years. She has been actively involved in publications and other activities related to communication and dissemination of research results.

## Abstract

### "Funding Opportunities under Horizon 2020"

Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that this money will attract. It promises more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market. One of the "Societal Challenges" of Horizon 2020 is the "Secure, Clean and Efficient Energy", which is designed to support the transition to a reliable, sustainable and competitive energy system. It is structured around seven specific objectives and research areas: Reducing energy consumption and carbon footprint, Low-cost, low-carbon electricity supply, Alternative fuels and mobile energy sources, A single, smart European electricity grid, New knowledge and technologies, Robust decision making and public engagement and Market uptake of energy and ICT innovation. A budget of €5 931 million has been allocated to non-nuclear energy research for the period 2014-2020.





Col (Eng) **Georgios Delis** (HAF),  
PhD, HMoD Rep, Director of European and Development Projects (DMEPM).

## Curriculum Vitae

Colonel (Eng) Georgios Delis is a telecommunications & electronics engineer, holding a PhD in the area of Applied Geology & Geophysics. As a Researcher in the University of Patras he has participated to several international (EU) and national research projects within FP5 and FP6. He is co-author to several publications in International Journals, presentations in National and International Conferences and Technical and Research Studies in the fields of Applied Geology, Geophysics, Hydroelectric & Geothermal assessment, and Marine Geology and Physical Oceanography. He is currently assigned as Director of the "Department for the Management of European and Development Projects" of the Hellenic Ministry of Defence.

## Abstract

### "EU Funding Opportunities for Sustainable Development Projects of MoD"

Sustainable Development is an increasingly important priority for European policies, in both National and EU level.

EU allocates significant funds for both Development and R&D projects related with Sustainable Development. The most important financing tools are the European Structural Funds, which are mainly controlled nationally, while parts of them are controlled at EU level. Related R&D is funded for the period 2014-2020 through the HORIZON 2020 program. At National level, for the 2014-2020 period, the management of the funding for development is coordinated by the Ministry of Development, through 5 Sectoral and 13 Prefectural Operational Programs (OPs). Concerning R&D funding, the efforts are coordinated by GSRD of Ministry of Education, while important role plays the PRAXIS Network.

HMoD has long experience exploiting ESF funding and created the necessary structure for the competent management of co-funded projects since 2007, with the establishment of DMEDP and the Special Account for R&D.

Since then, HMoD has under implementation several projects funded by ESFs, while currently plans the Programming Period 2014-2020. Concerning R&D, HMoD implements the MECM project, funded by LIFE+.

The increasing involvement of HMoD with projects and practices related with Sustainable Development in Defence, proves that it is already one major priority of HMoD



Lt. Commander (Eng) **Iordanis Sidiropoulos** (HN),  
HMoD Rep, Staff Officer of DTMS/DIE.

## Curriculum Vitae

Commander Iordanis Sidiropoulos is a Staff Officer at the Hellenic MoD/General Directorate of Financial Planning & Support/Directorate of Military & Technological Support (DMTS)/Department of Infrastructure & Environment (DIE). He has graduated from the Hellenic Naval Academy in 1998 as a Naval Engineering Officer and he has also received special technical training on S-70 Naval Helicopters Maintenance. He has served in staff positions aboard many different surface ships (mostly Fast Attack Missile Ships and Gunboats/Patrol Boats) and at Hellenic S-70 helicopters technical/operational land-based Squadron respectively. Additionally, he has been further qualified through specialized training courses on Seaborn and Airborn operational , technical and carrier path subjects. His current duties are mainly focused on Infrastructure, Energy & Environmental Research\_and\_ Development\_ (R&D)\_Projects with military interest/perspective.

## Abstract

### **“Adopting Sustainability in Practice. Incorporation of Contemporary Technological Applications, Innovation and R&D Projects in Military Infrastructure”**

Adopting innovative and contemporary technologies and investing funds towards sustainable solutions can help the military forces have a leading role in sustainable development. To achieve a certain level of sustainability, innovation and optimization must begin with planning and as soon as the initial, conceptual phase of each project. This should include: setting specific goals on each project, promoting certain team collaborations and discussions, prioritizing civil and military projects/tasks, and making astute decisions on allocating funds, time and resources available. The current speech briefly presents some of the most representative initiatives on sustainability; military projects, case studies or researches all of which are of primary concern of the Hellenic Military Forces. Several of them have been selected to be discussed in the impending presentations of the conference. Since, without pushing the limits of technology there can be no advancement of the fix infrastructure and of the steady or mobile electro-mechanical equipment and subsequently of the military forces towards a new sustainable form which will promote environmental, economical and, above all, social well-being, it is of great importance, to note that in all of them, the element of technological innovation is introduced in various aspects of the projects, studies and researches.



Professor Mathew **G. Karlaftis**,  
PhD, National Technical University of Athens (NTUA).

## Courriculum Vitae

Matthew G. Karlaftis, Ph.D. is with the National Technical University of Athens. He specializes in transportation operations and quantitative methods. He has participated in many national and International research projects and is the co-author of an international best selling book on transportation statistics and econometrics, book chapters, peer reviewed journal papers and papers in conference proceedings. He is Editor-in-Chief for Transportation Research part C, European Editor of ASCE's Journal of Transportation Engineering, Associate Editor of ASCE's Journal of Infrastructure Systems, and an editorial board member for ten other journals. He has received the Fulbright Scholar Grant (2006-2007), the Walter L. Huber Civil Engineering Innovative Research Prize (2005, by the American Society of Civil Engineers), the ABJ80 Best Paper Award for 2009 by TRB, the 2011 ASCE State-of-the-art Award, and the 2013 ASCE Editor of the Year Award.

## Abstract

### **"Sustainability in Military Transport: Should we embrace?"**

In an effort to enhance security and address climate change, the military is considering measures to diminish its carbon footprint. Goals to be reached include producing cleaner power, reducing energy consumption, managing water and minimizing waste, as well as improving transport operations. This presentation emphasizes measures that allow the basic access needs of military personnel to be met safely and in a manner consistent with the human and the ecosystem's health. Sustainable transport solutions that are affordable, operate efficiently, and limit fuel consumption are discussed.



Professor of Geotechnical Engineering **George D. Boukovalas**,  
Head of the Foundation Engineering Laboratory, School of Civil Engineering NTUA.

## Courriculum Vitae

Diploma in Civil Engineering from the National Technical University of Athens, Greece (NTUA, 1978), M.Sc. (1980) and Ph.D. (1982) from the School of Civil Engineering of M.I.T.. Post-graduate researcher at the Norwegian Geotech. Institute (NGI, 1984). Presently, Professor of Geotechnical Engineering at NTUA, specialized in Soil Dynamics and Geotechnical Earthquake Engineering. Head of the Geotechnical Engineering Division and Director of the Foundation Engineering Laboratory. Author of more than 100 journal and conference papers on cyclic loading and liquefaction of soils, seismic performance of foundations and lifelines under adverse soil conditions (liquefiable soils, active fault crossings, landslides), as well as soil and topography effects on seismic ground motions.

## Abstract

### “Sustainability in Pipelines Infrastructure: Calculation of Buried Pipelines Strains due to Surface Blasts”

His current research focuses on the analytical as well as the numerical simulation of the dynamic performance of deep and shallow foundations, with the aid of fully coupled (effective stress, dynamic) numerical algorithms and elastoplastic constitutive models built upon Critical State theory.



Associate Professor **Michael Kavvas**,  
Head of Geotechnical Engineering Department, NTUA.

## Curriculum Vitae

M. Kavvas is the head of the Geotechnical Engineering Dept and an Associate Professor at National Technical University of Athens. He got his PhD and Master's degree from Massachusetts Institute of Technology (1982 and 1980) and his bachelor from National Technical University of Athens (1977). He teaches the undergraduate courses: "Soil Mechanics", "Foundation Engineering", "Dam Engineering" and the graduate courses "Design of Underground Structures" and "Computational methods in the Analysis of Underground Structures". He performs funded research in Constitutive Modelling of Structured and Partially Saturated Soils and in Numerical Analyses of Weak Rock Tunnelling. He has been an invited lecturer in several European and International Conferences such as: The XV European Conference on Soil Mechanics and Geotechnical Engineering, Athens, Sept 2011, the International Conference on Computer Methods and Advances in Geomechanics (IAC-MAG), Torino, June 2005, and the Int. Conf. on Underground Infrastructure Research, Kitchener, Ontario, Canada, June 2001. He has also worked as a geotechnical consultant for several soil investigation and engineering projects in Greece and overseas. Among others he has worked for the European Commission on tunnelling projects and for the construction and extension of the Athens Metro. He has served as a member of the Boards of Geotechnical experts of Egnatia Odos Highway and as core member of the international committee for drafting the Eurocode 7 (Geotechnics).

## Abstract

### **"Underground Military Facilities: Reducing Vulnerability in an Environmentally Friendly and Cost-effective Manner"**

Underground Military Facilities (UMF) include Deep Underground Military Bases (DUMB) including Land, Naval and Air Force Bases, Deep Underground Command Centers (DUCC) and Underground Ammunition Storage Magazines (UASM). They all offer significant advantages associated with reduced vulnerability from Conventional Projectiles and even from Deep Penetrating Bombs, reduced adverse consequences in case of accidental explosions (especially in ammunition magazines), reduced requirements of guarding and safekeeping against trespassing and espionage, and all these are combined with environmentally friendly and cost-effective construction, operation and maintenance requirements. The current presentation describes: 1). The methods used for calculating the conventional projectile penetration in the ground. The penetration of Deep Penetrating (Bunker-Busting) Bombs depends on the technology used and can reach up to 50 metres in some cases. These methods are used for estimating the minimum ground cover required for UMFs, 2). The types and typical magnitudes of safety hazards (ground shock, air-blast, debris, etc) produced by accidental explosions in earth-covered and underground ammunition magazines and typical ways to reduce these risks (e.g. by using expansion chambers and tunnel bends) & 3). The typical excavation and support measures of various size openings in soft ground and rock.



Professor of Pavement Engineering Dr. **Andreas Loizos**,  
Head of Transportation Planning and Engineering, NTUA.

## Curriculum Vitae

Dr. Andreas Loizos holds a Diploma in Civil Engineering from the National Technical University of Athens (NTUA), a Dr.-Ing. Degree in Pavement Engineering Mechanics from the University of Hannover/ Germany and a post doctoral scholar of the German Research Council (DFG). Since 2006 he is Full Professor of Pavement Engineering at the Department of Transportation Planning and Engineering at the School of Civil Engineering of NTUA. He is also the Director of the Laboratory of Pavement Engineering of NTUA. His main interests include road and airfields pavement engineering. He has been involved in a numerous research programs at national and international level like the FP7 European project and he has been a member of several international committees and working groups concerning pavement issues among others ASTM, RILEM, ISAP, TRB, PIARC, ISSMGE, COST actions and others. He is the RC (Research Coordinator) of Greece at the Forum of European National Highway Research Laboratories (FEHRL), in terms of the Greek FEHRL Group. He has given internationally a number of presentations as invited or keynote speaker and published numerous of papers and technical reports; his contributions have appeared in international journals of pavement and transportation engineering as well as in several International Conference Proceedings and citations. He is also the Associate Editor of the International Journal of Pavement Engineering (IJPE). He has chaired and co-chaired several International Conferences concerning road and airfield pavements, for example the CROW European Airport Pavement Workshop (The Netherlands, 2009). He is currently the Head of the Department of Transportation Planning and Engineering at the School of Civil Engineering of NTUA.

## Abstract

### **“Sustainable Development of Airfield Pavement Infrastructure”**

Airfield pavements are a key element of the military airport infrastructure. However, this infrastructure effects the natural environment. Products and services have impact throughout their life, beginning with raw material extraction and product manufacturing, continuing through construction, operation and maintenance, and finally ending with a waste management strategy. For this reason adopting sustainable practices and products, which preserve or enhance not only environmental but also economic and social well-being, is crucial for pavement design, construction and maintenance. Many strategies are already being implemented that enhance pavement sustainability, which makes a pavement more cost-effective, environmentally friendly and serviceable for social needs throughout its life. For example, one of the most common sustainable elements of pavement rehabilitation is the reuse of existing materials to the greatest extent. This and several other innovative techniques are displayed. Considering these principles an optimum management of airfield pavements can be achieved. This presentation highlights the importance of sustainable development in terms of airfield pavement infrastructure, through international experience and focusing on Greek experience and practice.



Associate Professor Dr. **Marina Pantazidou**,  
School of Civil Engineering, NTUA.

## Curriculum Vitae

Dr Marina Pantazidou is an associate professor at the School of Civil Engineering of the National Technical University of Athens (NTUA), Greece. She received a diploma in Civil Engineering from NTUA, an MSc degree in Soil Mechanics and Engineering Seismology from Imperial College, UK, and a PhD degree in Civil Engineering from the University of California at Berkeley, USA. Prior to serving as a member of the faculty at Carnegie Mellon University and NTUA, she worked with Montgomery Watson (now Montgomery Watson Harza), USA, in hazardous waste consulting on projects related to the characterization and remediation of contaminated sites.

## Abstract

**«Knowledge of common activities, chemicals used and wastes produced in military installations guides selection of remedial technologies in case of contamination»**

This presentation is about the non visible part of contamination in the soil or in ground water and a systematic way to consider remedial technologies when necessary. Any activity involving handling of chemicals, when repeated over the years, is bound to result in spills. The investigation of a potentially contaminated site starts by asking which chemicals are handled during the activities taking place at that site: transferring chemicals to storage tanks, draining overflowing chemicals through floor grates and collecting them in sumps, etc. Remediation success depends on the performance of the remedial mechanism, which is mostly contaminant-dependent, and the access to the contaminant, which is primarily site-dependent. Hence, knowledge of the chemicals involved in the activities that take place at a site can guide the selection of remedial technologies. This presentation focuses on suitable technologies for two categories of contaminants commonly found at military installations: petroleum hydrocarbons and chlorinated solvents.



**Dr. Spyros Voutetakis,**  
Center for Research and Technology Hellas (CERTH)/Chemical  
Processes and Energy Resources Institute (CPERI).

## Curriculum Vitae

Dr. Spyros Voutetakis is a research director and head of the Process Systems Design and Implementation Laboratory of CERTH/CPERI. His main work lies on the area of implementation of pilot plants, instrumentation, sensor testing and development. Within his laboratory he has developed automation systems for hybrid energy systems based on renewable energy sources. Additionally his work includes catalytic reactors, specifically hydrocarbon steam reforming for hydrogen production. On these areas he has participated in numerous research projects and scientific conferences. He is the author of more than 70 scientific publications, one research monograph and has more than 60 conference presentations.

## Abstract

### **“Solar Hydrogen: Energy Carrier and Efficient Energy User”**

Main obstacles for adopting hydrogen as a clean energy carrier are the production and distribution costs. Answer to the above challenges today can be the production through water electrolysis utilizing electricity produced by renewable sources. The infrastructure presented and analyzed is self-sustained and operates quietly with low thermal footprint. The station’s power demand is covered by a fuel cell system and the distribution of electricity forms a smart micro-grid. The proposed station can be placed to isolated places such as small islands or posts where it can serve also as refueling station for mobile hydrogen applications. The energy management ideas behind the efficient operation of this infrastructure are further deployed for the secure energy supply of camps with interconnected multiple energy “islands”. By borrowing ideas from the internet a micro-grid is supplying energy into a reconfigurable energy network with inherent security of supply for any mobile or permanent unit.





Dr. **Kyriakos Panopoulos**,  
Center for Research and Technology Hellas (CERTH)/Chemical Processes and Energy  
Resources Institute (CPERI).

## Curriculum Vitae

Dr. Kyriakos Panopoulos, is a senior researcher at CERTH/CPERI (Centre for Research & Technology Hellas /Chemical Process and Energy Resources Institute) specialised in advanced thermochemical processes for the utilisation of biomass and wastes as well as low carbon technologies. He has performed his PhD in the National Technical University of Athens on the topic of gasification technology. He has more than 100 publications and presentations in peer reviewed journals and conferences. His main research areas are the production power, heat and 2nd generation biofuels as well as solar fuels. He is directing an ISO17025 certified lab for fuels analyses and has worked on numerous pilot and technology demonstration projects related with energy and waste handling industry.

## Abstract

### **“Waste Gasification. Sustainable waste handling & co-production of power, heat and 2nd gen. biofuels”**

Topics covered:

- Brief introduction on the gasification technologies (Process parameters, differences between combustion, pyrolysis and gasification).
- Applications of Gasification. Fixed bed systems, Fluidised bed systems, Entrained Flow Gasifiers).
- Gas cleaning (Introduction, Tar compounds, Inorganics).
- Potential applications of integration of gasification into army operations (Waste elimination, Small Scale CHP, Second generation biofuel production).

Presentation of case studies.

- Environmental and economic benefits from gasification technology applications.

A brief introduction on the gasification technologies is presented (Process parameters, differences between combustion, pyrolysis and gasification). The Applications of Gasification are categorised in Fixed bed systems, Fluidised bed systems, Entrained Flow Gasifiers). An important aspect of the gasification technology is the gas cleaning (removal of Tar compounds, Inorganics). The presentation will continue giving the potential applications of integration of gasification into army operations (Waste elimination, Small Scale CHP, Second generation biofuel production). Some case studies will be presented. These will give a good basis for the illustrating the environmental and economic benefits from gasification technology applications.



Director of Research Dr. **Konstantinos Eleftheriadis**,  
Environmental Radioactivity Laboratory, Institute of Nuclear and Radiological Science &  
Technology, Energy & Safety, National Centre for Scientific Research "DEMOKRITOS".

## Curriculum Vitae

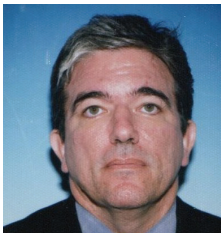
Dr. Konstantinos ELEFTHERIADIS (Environmental Radioactivity Laboratory, NCSRDI) is Director of Research at INRASTES. He has more than 20 years of experience in aerosol physicochemical characterization and development of novel sampling and measurement techniques for suspended particulate matter. He has established and is responsible for the Demokritos Regional Research Aerosol station, member of the Global Atmosphere Watch network (GAW-DEM), operating since 2007. He has been actively involved in European initiatives for the development of standardized methods, through EUSAAR (European Supersites for Atmospheric Aerosol Research) and ACTRIS (Aerosols, Clouds, and Trace gases Research InfraStructure network) activities. He has also served as an Expert in missions for the Regional IAEA/AFRA project RAF4019 - Developing Air Pollution Monitoring in Urban Zones, where the IAEA has been assisting participating Member States to develop capacity for urban air pollution control. Dr. Eleftheriadis is the Technical Manager of ERL according to accreditation certificate No. 447-2 for EN ISO/IEC 17025: 2005 Standard. He has been the PI for Demokritos in several EU FP and National programs, as well as the National Counterpart for Greece in Regional IAEA programs. He has more than 70 publications in peer reviewed journals regarding atmospheric aerosol science, measurement methodology and applications in air pollution and climate impact of atmospheric aerosol.

## Abstract

### **"Current Experience in Atmospheric Research on Airborne Platforms, Lessons Learned and Future Prospects for Unmanned Aerial Vehicle Deployment"**

Large Urban areas in the East Mediterranean require extensive and intensive study as they represent significant atmospheric pollution sources for the Region. Atmospheric parameters known to exhibit high variability such as the concentration levels and physicochemical properties of aerosol species are greatly affected by mixing processes of regional background and urban emissions impacted air. The structure of the atmosphere in the vertical is complex and non-uniform. It is therefore needed to be studied in situ and in a small scale.

Areas of interest are: Meteorological and atmospheric processes by modelling and measurements studies, specific pollutants levels such as aerosol particles and ozone as well as the origin of aerosol pollutants, the understanding of the processes leading to pollutants transformation and aging. The current trend of lower pollution levels in a rapidly changing atmosphere and the new parameters needed for addressing the parameterization of climate active species are some of the new challenges for atmospheric studies in the area. Atmospheric Research by airborne platforms has been conducted in this region in the previous decades, by using a research aircraft more than a decade ago. The effort to employ UAVs in atmospheric and climate research is encompassing expertise from a wider spectrum of scientists working on atmospheric science with significant previous experience in this area and is planned so that a large scale infrastructure, state of the art modelling and experimental tools can be used and target to cover the specific gaps of knowledge left from previous studies. More specifically with respect to the aircraft platform itself, an Unmanned Aerial Vehicle such as PEGASUS is suitable for extensive measurements and mapping of our region. There are certain aspects of UAVs which can lead to an enhanced output compared to all previous studies regarding their improved logistics and costs as well as their ability to fly closer to the ground. On the other hand the need to optimize the instrumentation with respect to size, weight and power consumption is a challenge.



Mr. **John Ziras- Christodoulopoulos**,  
Electronic Engineer, MSc, General Directorate for Defence Investment and Armaments  
(GDDIA)/ Head of Quality Supervision & Certification Section.

## Curriculum Vitae

Mr John ZIRAS CHRISTODOULOPOULOS, Electronic Engineer MSc, is an MOD designated specialist/representative for Quality and Certification Matters. He has been the Head of Quality\_Supervision & Certification\_Section" of the General\_Directorate\_for\_Defense\_Investment\_and\_Armaments (GDDIA) for several years and the National\_Representative\_on NATO\_WG2/AC 327 Group (Life\_Cycle\_Management\_Group). He has graduated "Electrical Engineering" from the University of Patras and he holds Masters & Diplomas on "Microwaves and Modern Optics", "Microwave Engineering" and "Environmental Design of Cities and Building". He has taken additional training at Plessey's Factory (Christchurch – England), Schlumberger (Wimborn – England) and European Negotiations (EIPA – Maastricht Holland) on subjects like "Environmental, hygienic and work safeness Efficiency", "evaluation of administrative process" and more.

## Abstract

### "Life-Cycle Environmental Assessment of Defence Materiel"

The aim of Hellenic Ministry of Defence is to optimise defense capabilities taking into account performance, cost, schedule, quality, operational environments, integrated logistics support and obsolescence over the life-cycle of the system.

Also Hellenic MoD shall take environmental consideration in all phases of the acquisition process, according to Hellenic law 3978/11 applying the Directive 2009/81/EU.

This presentation includes a description of the actors, the regulating documents and the Hellenic acquisition process of defence materiel. The process is today under development and is therefore briefly described. Life cycle assessment should be taking in an account in defence procurement, in order to reduce the environmental footprint and the relevant overall cost of defence material.

This presentation also includes suggestions of how to integrate life-cycle assessment or life cycle thinking in the acquisition process of defense materiel.



**Mr. Apostolos Nikolopoulos,**  
Chemical Engineer, PhD, HMoD Rep, Staff Member of DTMS/DIE.

## Curriculum Vitae

Apostolos Nikolopoulos serves as civil staff at the Hellenic Ministry of National Defence. He is a Chemical Engineer, PhD. His thesis concerned the use of ultrasound in chemistry, focusing in environmental applications.

As civil staff of HMoD, he initially served in military depot of industrial level in the quality control department, while supervising surface anti-corrosion treatment of army materiel and being responsible for the environmental issues of the Unit.

At present, he serves at the Dept of Infrastructure and Environment of the HMoD, charged with the issuing of implementation guidelines of environmental and chemical legislation within the Ministry. He is also an expert of REACH Regulation and its implementation in defence.

He was born in 1975. He is also married and has three children.

## Abstract

### **“Implementation of REACH Regulation in Defence”**

REACH Regulation, the EU leading chemical legislation, concerns the screening of all chemicals within the European market, with a view to establish a high level of protection of human health and the environment. It entered into force on June 1st, 2007.

There are four (4) main procedures foreseen by the Regulation:

**Registration:** The Regulation requires that manufacturers and importers of substances in quantity exceeding 1 tonne/ year, are obligated to provide information on the physico-chemical properties and the associated health and environmental risks of their substances.

**Evaluation:** The information submitted during the Registration procedure is evaluated by the European Chemicals Agency (ECHA) and the Member States Competent Authorities (MSCAs).

**Authorisation:** According to the Authorisation procedure, substances that meet certain criteria are understood as Substances of Very High Concern (SVHC) and they are gradually inserted in the Authorisation List of the Regulation.

**Restrictions:** Such measures are imposed for substances when there is an unacceptable risk to human health or the environment.

Concerns may arise for the defence from the implementation of the Regulation when the above procedures have an impact on chemicals with critical use in military materiel.

The possible adaptation of the defence sector will be discussed during the Conference, through either:

- Compliance with the Regulation, or,
- Substitution of hazardous substances, or,
- Application for a Defence Exemption, as foreseen by the Regulation.



Captain (Eng) **Elena Papazoglou** (HAF),  
HMoD Rep, Staff Officer of DTMS/DIE.

## Curriculum Vitae

Ms Elena Papazoglou is a Captain of the Hellenic Air Force Academy. After graduating the Engineering Department of the Airforce Academy as a civil engineer, worked for 9 years on public works, procurements and supervising. Due to transfer, the last couple of years her object of work has been environmental protection and energy efficiency. Moreover she is a diver specialized on the maintenance of underwater infrastructure.

## Abstract

### “Green Camps Project”

The Green Camps Project involves the pilot implementation of sustainable development standards and the minimization of the footprint that certain activities of three Greek Armed Forces camps, have on the environment.

In general the project refers to three pillars:

- Environmental protection and urban transport - Climate change confrontation - R.E.S.
- Water sources protection and management
- This briefing will provide an overview of NATO’s systematic approach to environmental protection during NATO-led military activities. The audience will be introduced to three kinds of infrastructures relating to environmental protection. The “human resources infrastructure” will zoom in on the EP chain of command and the EP Working Groups within NATO. In relation to the digital – paperwork infrastructure, NATO’s main EP documents will be highlighted as well as how these may be found on the internet. Last but not least, NATO’s approach to physical EP infrastructure and equipment will be introduced. This briefing will further cover implementation in training opportunities, awareness, planning, allocation of EP duties and integration of EP into exercises and operations. Mr. Rottink will finally address future challenges and areas of possible improvement, such as (informal) relations with UN and EU.

Soil systems protection and solid waste management

This presentation will further elaborate the specific actions to be taken in each camp, according to the pillars above mentioned.



**Mr. Apostolos Nikolopoulos,**  
Chemical Engineer, PhD, HMoD Rep, Staff Member of DTMS/DIE.

## Curriculum Vitae

Apostolos Nikolopoulos serves as civil staff at the Hellenic Ministry of National Defence. He is a Chemical Engineer, PhD. His thesis concerned the use of ultrasound in chemistry, focusing in environmental applications.

As civil staff of HMoD, he initially served in military depot of industrial level in the quality control department, while supervising surface anti-corrosion treatment of army materiel and being responsible for the environmental issues of the Unit.

At present, he serves at the Dept of Infrastructure and Environment of the HMoD, charged with the issuing of implementation guidelines of environmental and chemical legislation within the Ministry. He is also an expert of REACH Regulation and its implementation in defence.

He was born in 1975. He is also married and has three children.

## Abstract

### “Smart Blue Camp-Project”

Water Efficiency, in parallel with energy efficiency, is a point of interest for the defence, since it is directly connected to a vital resource.

Military Camps, deploying forces, but also defence industry, depend heavily on water. Therefore, innovative solutions in the water technology are constantly being sought after. To address this issue at a national level, the Hellenic MoD has submitted a detailed proposal for funding within the LIFE+ programme of the EU, entitled “SmartBlueCamp”. As can be understood from the combination of the name, the project includes the implementation of both Information and Communication Technologies (ICT), as “smart” aspect, and water-aware technologies, as “blue” aspect.

Two military sites were chosen as demonstration areas, the first being the Airbase of Larissa in Central Greece, planned to be transformed to a Model Sustainable Camp, and the second one, a Military Resort in Northern Greece.

The proposed interventions concerned rainwater harvesting and subsequent exploitation for irrigation of green walls and green roofs. This green infrastructure would act as insulating barrier of military buildings, thereby leading to less energy required for inside temperature conditioning. Harvested rainwater would be used also for maintenance purposes. A tertiary treatment unit would also be installed to produce water suitable for irrigation of green spaces.

The details of the proposal will be discussed in the context of the “SiD” Conference.



Major (Eng) **Nektarios Alexandris (HAF)**,  
MSc, HMoD Rep, Staff Officer of DTMS/DIE.

## Curriculum Vitae

Major (Aircraft Engineer) Nektarios Alexandris (GRC AF) is head of the Energy Efficiency Office of the HMoD. After graduating from the HAF Academy in 1995, he served for 8 years in production and quality control positions, supervising the organizational and intermediate maintenance of A-7 aircrafts and their powerplants. In 2004, he graduated from The University of Nottingham, UK, holding an M.Sc. with distinction in Environmental Engineering. For the next 7 years, Major Alexandris served as staff officer in the HAF General Staff, gaining expertise on environmental protection and occupational health and safety, while managing the environmental protection schemes of the AF and auditing all AF units and installations. Since 2011, he is stationed in the HMoD as senior environmental protection / energy efficiency expert and national delegate to relevant bodies.

## Abstract

### **“Military Energy and Carbon Management, LIFE11 ENV/GR/938/MECM”**

The Hellenic Ministry of National Defense (HMoND) is one of the largest public bodies in Greece. Its military installations are major energy consumers and, therefore, offer great potential for energy saving, which could lead to a significant reduction in greenhouse gas emissions. Although military installations perform their activities in accordance with the principles set out in the HMoND Environmental Policy, there is a need for a single, harmonized standard that will provide a consistent methodology for identifying energy saving opportunities and implementing energy efficiency improvements.

In line with national goals for reducing energy consumptions and GHG emissions, the MECM project implements an Energy Management System (EnMS) in accordance with EN ISO 50001:2011, along with pilot actions, in three main military installations: the naval station at Souda Bay, The Larissa airbase and the Triantafilidi army camp in Xanthi. The objectives of the proposed project are:

- To improve the environmental and energy performance of the Hellenic Military services and installations through the development and implementation of an EnMS.
- To promote energy management best practices and reinforce energy management awareness through the HMoND personnel.
- To offer guidance on measuring, benchmarking, documenting and reporting energy intensity improvements and their projected impact on GHG emissions reductions.
- To provide a framework for promoting energy efficiency throughout the HMoND supply chain.
- To demonstrate the potential contribution of Military Services to green business and sustainable development within Greece and abroad (other EU armed services, public bodies in general, citizens that live near the three facilities, NGOS).



Hellenic Ministry of National Defense  
(HMoD)