Permanent Secretary,
Ministry of Communication & Works of the Republic of Cyprus

Mr Alecos Michaelides

Curriculum Vitae (C.V.)

EDUCATION

1974 – 1975 French Language, "Comite de Patronage", University of Grenoble (France)

1975 – 1978 "Licence de Mecanique", University of Grenoble

Scholarships: French Government full scholarship

1978 – 1979 "Maitrise de Mecanique", University of Grenoble

Scholarships: French Government full scholarship

1979 – 1981 "Diplome d' Ingenieur", "Ecole Nationale des Travaux Public de l' Etat", (Lyon, France)

Scholarships: French Government full scholarship

1996 – 1998 "Master in Public Sector Management" (MPSM), Cyprus International Institute of Management (Nicosia, Cyprus)

Scholarships: Cyprus Government full scholarship

Honours: Director's prize for best final project

CONTINUING EDUCATION

1982 – 1999 Extensive participation at seminars and short courses locally and abroad, the highlight of which include:

∗ Basic Formation on European Union's matters (45 hours), Cyprus Academy of Administration (Cyprus, 1999)

∗ Testing and Use of Asphaltic Materials (3 months, 1989), South East London College, UK

∗ World Bank Seminar (4 days) on Procurement (including Project and Personnel Evaluation, Cyprus, 1988)

∗ World Bank Seminar (3 days) on Procurement (including Project and Personnel Evaluation, Cyprus, 1985)

1999 Acquired the title of EUR. ING. (Ingenieur European)

EXPERIENCE RECORD

2012 – Today Permanent Secretary, Ministry of Communications & Works (from 1st April 2012)

2007 – 2012 Director of Public Works Department (as from April 1st 2007)

2001 – 2007 General Coordinator of the Concession Agreement for the Development of Larnaka and Pafos Airports and the development of the Larnaka Port and Marina under a DBFO type of contract, at the Ministry of Communications and Works.

2004 – 2006 Member of the Government Negotiating Team, that has negotiated with Hermes Airport Ltd the Concession Agreement for the Development and Operation of Larnaka and Pafos Airports.

2003 – 2006 Chief Executive Engineer of the Design Sector of the Public Works Department, in parallel with the above duties at the Ministry of Communications and Works.

2000 – 2003 Chairman of the Board for the Registration and Control of Contractors, in addition to the above duties at the Ministry of Communications and Works.

1997 – 2003 Head of the Civil Engineering Section of the Directorate of Control, Ministry of Communications and Works.

1993 – 1997 First Grade Control Officer at the Directorate of Control, Ministry of Communications and Works.

1982 – 1993 Second Grade Control Officer at the Directorate of Control, Ministry of Communications and Works. Extensive experience in the design and construction of highways and building projects as well as airports and maritime works. Used to be chairman or member of many permanent or Ad-Hoc committees, which were evaluating contractor's claims or other contract variations, involving a great deal of negotiation skills. Also used to be member of the Central Committee for Variations and Claims, which is the Body that approves any variation and claim relating to public projects.

MEMBERSHIPS:
∗ Scientific and Technical Chamber of Cyprus
∗ Cyprus Association of Civil Engineers
∗ French Association of Civil Engineers (AITPE)
∗ French Association of Earthquake Engineering (AFPS)
∗ Member of the Cyprus Committee, which drafted the Cyprus Code for Design in Seismic Regions

COMPUTING: Microsoft Windows, Microsoft Office (Word, Excel, and Power Point) and use of Internet facility.

LANGUAGES: Excellent command of English (holder of GCE O level and Proficiency certificates), French and Greek (native language).

REFERENCES: Available upon request.

Address by Mr Alecos Michaelides,
Permanent Secretary,
Ministry of Communication & Works of the Republic of Cyprus

Dear friends,

It is a great pleasure to be here, in the first conference on offshore or onshore Oil & Natural Gas Cyber Security. Following the recent developments in the exploration of Cyprus energy resources, the oil and natural gas industry is of major importance. A secure development of the required infrastructures is critical, so that stakeholders and investors can gain the necessary confidence and safely embrace modern information and communication technologies in their systems, including oil and gas exploration, production, refining, distribution and transmission. The Cyprus government aims to enhance security levels and work with all stakeholders, including the energy sector, in achieving these goals.

In general the issues of network and information security are part of the wider information society framework, and security is considered an important pillar of the Digital Agenda for Europe. The European security policy covers issues related to the protection against harmful content, with emphasis on issues concerning children and to the protection of personal data and privacy. It also covers the important issues for the protection of Critical Information Infrastructure, combating cybercrime and attacks against information systems and the operation of Computer Emergency Response Teams – CERTs. The same security policy covers also the cooperation and coordination of actions with relevant stakeholders at European and international level, under the revised role, of the European Agency for Network and Information Security (ENISA).

Lately, cybersecurity issues are very high in the European Union's agenda. Some examples are cited below:

(a) The new regulation of ENISA entered into force in September 2013. The new regulation enhances the competences of the Agency in the field of security.

(b) The European Commission published in February 2013, the new cybersecurity strategy of the

European Union, which covers beyond the security of systems and infrastructures, the equally important areas of cybercrime, cyberdefence and international cooperation on network and information security issues.

(c) The group Friends of Presidency for Cyber Issues, which was established during the Cypriot Presidency, finalized Council conclusions on the European Commission proposals, adopted by the General Affairs Council on 25 June 2013.

(d) Last February , the European Commission has prepared a proposal for a new Directive on the Network and Information Security (NIS directive), currently seeking the approval of the Council and the European Parliament. Apart from the electronic communications sector, the Directive covers entities, companies and organisations, in the critical sectors of energy, transport, credit institutions and stock exchanges, healthcare and enablers of key Internet services, as well as public administrations.

The Republic of Cyprus recognizes the importance of cybersecurity in the promotion of new information and communications services, the use of new technologies and more generally the development of a healthy information society:

(a) The Ministry of Communications and Works, adopted in 2007, a policy document in the field of network and information security, promoting key actions for Cyprus, including the establishment of emergency response system for events related to network security and information (CERTs), the creation of an institutional framework for the security and integrity of infrastructure, and the development of an awareness program on security issues, for the stakeholders and the wider society of Cyprus.

(b) During 2010, the Ministry has adopted a detailed policy document for the operation of a government and an Academic Emergency Response Team for Events (CERTs). National CERT will meet and the business sector in the second stage.

(c) The Council of Ministers in February 2013 , approved the National Cybersecurity Strategy of the Republic. On 27 March 2013 the MCW requested the Office of the Commissioner of Electronic Communications and Postal Regulation to initiate and coordinate the implementation of the national cybersecurity strategy.

The Ministry of Communication and Works, as the competent Ministry for the Digital Strategy of Cyprus, supports the efforts of the competent authorities, in the field of Network and Information Security and cybersecurity. Under the same framework operators of critical infrastructures, such as energy, transport, and key providers of information society services, as well as public administrations, will be required to adopt appropriate steps to manage security risks and report serious incidents to the national competent authorities. This work will be relevant to the energy sector and forthcoming developments of oil and natural gas infrastructure in Cyprus.

The critical infrastructures and services in a country are defined as those services, whose large-scale loss would seriously impact the life of a large number of citizens. Critical infrastructures are found, among others, in the fields of energy, electronic communications, water supplies, sewerage systems, transportation, health and financial services. Several Information and Communication Technology (ICT) infrastructure found in these fields are designated as critical infrastructure and should be protected to the extent necessary.

The energy sector, and particularly the oil and natural gas industry, is expected to give a significant boost in the Cyprus economy in the coming years , so it is highly essential to invest in the proper protection of such infrastructure. The most dangerous cyber intrusions are tailored to leverage IT integration in oil and gas exploration, production, refining, distribution and transmission. Particularly vulnerable are companies with integrated process control and systems that are exposed to corporate networks and Internet-facing protocol. There are now several examples in other countries, where severe damage was noted by events in cyberspace which should be interpreted as a wake-up call to energy companies. Sophisticated, persistent cyber viruses like Stuxnet, Flame, Night Dragon and Shamoon, can infiltrate an organization's TCP/IP networks and provide a beachhead for access to sensitive data and control systems.

At national level, under the relevant action of the Cybersecurity Strategy, extensive study and analysis of the various risks involved will be carried out, including the risks coming from cyberspace. The Republic of

Cyprus has begun a process for the identification of risks in cyberspace, generally for all critical information infrastructures including data that apply in each sector separately. The energy sector is one of them. The representative of the Office of the Commission of Electronic Communications and Postal Regulation will present the relevant work done later in today's conference.

The implementation of the national Cybersecurity Strategy as well as the effective cooperation of all stakeholders for the development and implementation of the relevant actions are very important for enhancing network and information security, reducing crime, ensuring public confidence and enabling cooperation at European and international level. Considering that the success in this area requires the cooperation of the public and private sector, the competent authorities are seeking active participation of the business community, the operators and all stakeholders, particularly from the Communications and Information Technology, Energy, Health, Transport and the financial sectors. I believe that the conference will contribute positively towards implementing cybersecurity practices, proactively and effectively.

I wish you every success in today's conference and I hope that all stakeholders are willing to work with us to achieve the objectives of the cybersecurity strategy in all critical fields.