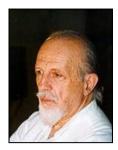
ENGINEERING EDUCATION POLICIES AND POLITICIANS...



Prof. T.P. TASSIOSProfessor Emeritus, National Technical University of Athens, Greece

- 1. Which are the optimum procedures for **political** decision-makings regarding Engineering Education?
- The fundamental importance of detailed "job"-descriptions of Techical Staff, in Design, Construction and Research (as well as their Regionspecificity).
 - An attempt to redefine the job-descriptions of a Certified Technician, an "Industry" Engineer, an Engineer, and an Engineering Researcher.
- **3.** Engineering Education befitting to a given "job"-description, leads to an appropriate "graduation". For another "job", another education programme is needed. (The misunderstandings produced by the term "post-graduate" course...).
- **4.** The underestimation of the economical and social importance of Professional Education.
- **5.** The apparent inadequacy of the BSc in Engineering in U.K. (where the Continental "Integrated and Uninterrupted" system is actually adopted, "MEng").
- **6.** The rather unfortunate attempt of Bologna-scheme to produce an "Industry" Engineer in 3 years:
 - Extreme difficulties in the 3-years curriculum itself.
 - The distortion of the programme imposed to the followers of the 5years scheme.

Keynote Lectures

- The unwillingness of the Industry to employ the "3-yearers".
- The unwillingness of the students to step-out after the 3-years...
- An apparent conceptual mistake (hidden populistic trends; is a half-MD or a half-Lawyer possible?)
- 7. The apparent inadequacy of the 4-years BSc in Engineering in USA and the trend towards an "Integrated Uninterrupted" 5-years scheme in USA Universities.
- The soundness of the "Integrated Uninterrupted" 5-years scheme of Engineering Education in Europe (which served already as a model in other Regions).
 - Practical evidence
 - Opinions of Bologna followers
 - Fundamental Prerequisites
- **9.** The need for rational-pragmatic job-descriptions to be served respectively (possibly accounting for Country-particularities)
 - a) by 3-years robust **non-university** studies (real "Industry" Engineers on narrow sub-fields),
 - b) by 4-years intensive University studies (if a national Market has a rich sector of medium-level Technology to serve),
 - by 5-years normal University studies aiming at medium and high Technology, on the one hand, and able to initiate possible doctoral studies, on the other;

overall cost-effectiveness being always considered.

- 10. The confusing (if not provocative) term "Master":
 - The confusion with the old-styled MSc: Engineering is a considerably broader intellectual process than Science
 - Who are really the "Masters" in our world of today?
 - Why a Region-specific term was used to express a successful European tradition of University Engineering Education?
 - The Bologna Master simply befits the needs of a really Professional Engineer; nothing more nor less. It has nothing to do with... "postgraduate" courses (after a manifestly inadequate BSc).
 - What is equivalent to what?