

# Leonardo da Vinci ILTOF Project

## Minutes of the Second Meeting – May 11, 2007

Thraki Palace Hotel, Alexandroupolis, Greece

List of participants: A. Carpinteri, M. Paggi (POLITO); E.E. Gdoutos (LAMDUT); A. Neimitz, I. Rokach (KUT); G. Borzi (TCN); M. Gorol (MESco); H. Oka (FIGES); G. Ferro (ESIS); G. Zavarise.

### 9:00 Opening

(1) **E.E. Gdoutos** – Welcome to the Participants; Presentation of the Democritus University of Thrace (DUTH) and the Laboratory of Applied Mechanics (LAMDUT) (see Annex A).

(2) **A. Carpinteri** – Brief overview on the progress of the ILTOF Project (see Annex B).

**M. Paggi** – Administrative aspects of the ILTOF Project: guideline for future expenses (see Annex B).

From the open discussion it emerges the need of charging more costs on WP2 and WP3.

(3) **Work Package 1: Coordination.**

**A. Carpinteri** – Brief discussion on the coordination activities, no special remarks.

(4) **Work Package 2: Needs analysis.**

**G. Borzi** – Overview on the progress of the WP2; Description of the ILTOF survey questionnaire (see Annex C).

A potential interest in Fracture Mechanics, Structural Integrity and Fatigue emerges from the analysis of the questionnaires (see Annex D).

#### ACTIONS:

To obtain a more reliable statistics, TCN will put the questionnaire on the ILTOF web-site. The activity is planned to be completed by the next meeting.

(5) **Work Package 3: Teaching specifications.**

**G. Borzi** – Overview on the progress of the WP3 (see Annex E).

One lesson of the pilot video-course “Fracture Mechanics and Complexity Sciences” by Prof. A. Carpinteri is shown to the Partners.

Discussion on the format of the video-courses. The use of LaTeX with the Beamer class file is suggested by I. Rokach to achieve a higher portability of the produced didactic material.

#### ACTIONS:

TCN will send detailed technical specifications to the partners regarding the format of the video-courses according to its experience.

Different formats can be experimented in the Project to fit the teaching methodologies required for each topic. Both low resolution (for internet purposes) and high resolution (for DVD purposes) videos will be produced. A comparison between the different formats will be performed during the next meeting, on the basis of pilot video-course presentations prepared by the Partners.

#### (6) **Work Package 4:** Products implementation.

Realization of a library featuring a collection of scientific works on Fracture, Fatigue and Structural Integrity issues.

The following video-courses and books are proposed by the University Partners (only tentative titles or arguments are specified, as well as their duration):

##### POLITO

- Video-course: Fracture Mechanics and Complexity Sciences (12 h, already implemented; Topics: Nonlinear crack models and Fractal crack models applied to Fracture Mechanics).
- Video-course: Fundamentals of Fracture Mechanics (10 h).
- Video-course: Advanced Applications of Nonlinear Crack Models (8 h).
- Video-course : Miscellanea (8 h).
- Video-course: Acoustic Emission Technique (4 h).
- Production of two primers (one on fundamental aspects and another on advanced applications).

##### KUT

- Video-course: Applications of Fracture Mechanics to Fatigue and Creep Engineering Problems (12 h).
- Video-course: Applications of the Finite Element Method in Fracture Mechanics (12 h).
- Production of one book in Polish.

LAMDUT

- Video-course: Basic Concepts of Fracture Mechanics and Lectures taken from the Fracture Mechanics Books by E.E. Gdoutos (10-20 h).

**ACTIONS:**

TCN provides a form for the description of the courses and will distribute it to the Partners (see Annex F).

The Partners will send to POLITO this resumé for each proposed video-course by the end of June, indicating the list of topics addressed and the tentative title per each lesson (one title per each hour).

TCN will send the passwords for the access to the ILTOF web-site to the Partners, in order to upload the bibTeX records for the realization of a wide library of scientific publications on Fracture Mechanics.

- (7) **Work Package 7:** Exploitation.

**ACTIONS:**

Improve all the actions related to dissemination and advertising of the Project. Put a link to the ILTOF web-site on the ESIS web-site. Distribute the leaflet.

- (8) **Technical discussion on the remaining ILTOF WPs and organization of new activities.**

To be discussed by e-mail in due course.

- (9) **Scheduling of next meetings.**

November 2007 – meeting in Poland (the venue will be decided).

May 2008 – meeting in Turkey (Istanbul).

**17:00 Closure of the meeting**

The minutes are approved by all the partners at the end of the meeting.



Prof. Alberto Carpinteri, Project Coordinator

Enclosures: Annexes A, B, C, D, E, F.