Datasheet of the IKTA4/138 project

I. *Human movement analysis using 3D methods*

Project start: January 1, 2002, duration: 35 months.

Amount of support: KHUF 42 000, total project cost: KHUF 127 060.

Project leader: ***Loványi István Dr.***
BME Irányítástechnika és Informatika Tanszék
H-1117 Budapest, Pázmány Péter sétány 1/d
<***http://lovanyi@iit.bme.hu***>, phone: +36 (1) 463-1380

Project URL: <***http://www.iit.bme.hu***>

II. Consortium members (number of members = **3**, the first member is the project co-ordinator)

no	*name*	*support*	*total cost*
1.	Budapest University of Technology and Economics, Dept. of Control Engineering and Information Technology	KHUF 26 900	KHUF 81 400
2.	Hungarian Foundation of the Bone and Joint Decade	KHUF 5 000	KHUF 15 100
3.	Semmelweis University, Faculty of Healthcare	KHUF 10 100	KHUF 30 560

III. Public presentations

No presentation is available.

IV. Goals of the project

Human movement analysis using 3D methods

The main objective of this project is consistent with the aims of the Bone and Joint Decade (the current decade is named like that by the World Health Organization): Improving the quality of care, the effectivity of diagnosis - using 2 and 3 dimensional imaging, real-time image processing, telemedicine tools and other novel Information and Communication Technology (ICT) methods.

The main tasks and milestones in the ICT R&D are as follows:

Adequat projection of clinical models into an informatics representation

. 3Ddigitalization. meta database,

Recording the basic standardized human movements by 2D and 3 D methods.

Realtime 2D and 3 D image processing

Implementation of realtime 3D movement visualisation

Development and implementation of application-specific intelligent retrieval algorithms

Development of teleconsulting, telediagnostic methods for therapy and prevention

Numerically stable, mathematically based image processing algorithms

Web based educational program for learning and assessment

Improved effectivity of diagnosis by means of statistics, reference databases, etc.

Main benefits of the project:

Creation of reference database (on pay per view basis)

National statistics

Realtime 3D movent tracking - not only for healthcare: e.g preserving 4D (3D+motion) Hungarian Cultural Heritage, folk dances, etc.

User friendly applications for Diagnosis Decision Support

Bone and Joint Decade Portal

- Teaching of stature correcting gymnastic by telecommunication
- Back school for healty individuals

Consultation, physiotherapeutical counselling via telecommunication

Preventive educational materials for the "Sulinet" project

V. Project results (in case of finished projects)

The project is not finished.

VI. Data on consortium members (number of members = **3**)

1. ***Budapest University of Technology and Economics, Dept. of Control Engineering and Information Technology*** (co-ordinator)

URL: <***http://www.iit.bme.hu***>

Support for the co-ordinator: KHUF 26 900, and its total cost: KHUF 81 400.
Contract number: .

Team leader: ***Loványi István Dr.***
BME Irányítástechnika és Informatika Tanszék
H-1117 Budapest, Pázmány Péter sétány 1/d
<***http://lovanyi@iit.bme.hu***>, phone: +36 (1) 463-1380

2. ***Hungarian Foundation of the Bone and Joint Decade***

URL: <>

Support for the consortium member: KHUF 5 000, and its total cost: KHUF 15 100.
Contract number: .

Team leader: ***Bálint Géza Dr.***
ORFI
H-1023 Budapest, Frankel Leó u. 38-40.
<***http://???balint.g@mail.datanet.hu***>, phone: +36 (1) 438-8331

3. ***Semmelweis University, Faculty of Healthcare***

URL: <>

Support for the consortium member: KHUF 10 100, and its total cost: KHUF 30 560.
Contract number: .

Team leader: ***Mészáros Judit Dr.***
Semmelweis Egyetem Főiskolai Kara
H-1046 Budpapest, Erkel Gyula utca 26.
<***http://meszarosj@pmed.hiete.hu***>, phone: +36 (1) 231-0166