# ‘IT Security for e-Health’ Workshop: 4th Sept 2009

Mobile phones

M. Nowik, W. Zabołotny, A. Grzanka, Institute of Electronic Systems, Warsaw University of Technology, Poland

## The Challenge or problem

Elaboration of the system for safe storing of biomedical information in a standard mobile phone in such a way that it should be available for rescue services

## Primary interests

Implementation for rescue services

## The Approach to address the Challenges

The access to biomedical documentation may be invaluable in a situation when a patient has to be treated by a doctor another as usual, or when a rescue team intervention is necessary. It allows to consider possible chronic diseases, interactions with other medicines administered by other physicians and avoid drugs not tolerated by the patient. Contemporary mobile equipment such as personal digital assistants or mobile phones give the possibility to store considerable amount of data, in particular biomedical documentation. However it is necessary to create a system controlling the access to this information.

In the simplest solution the patient himself could temporarily unlock access to this data and allow others to use them. However this approach is useless if the patient is unconscious.

The better solution is a system in which data are encrypted, and the decryption key is available to the authorized medical staff without patient’s intervention. In such a case however it is necessary to provide connectivity to the server storing the database of authorized staff and decryption keys. In the emergency situations (e.g. In the mountains or rural areas) this connectivity may be unavailable. In the proposed solution a special temporary emergency key is available to access the patient’s data without connection with the server.

## Goals in attending workshop

Finding partners for pilot implementation

**For further information please contact:**

a.grzanka@ise.pw.edu.pl