

Polish Personal Identity Card as a Tool for Identity Theft

Mirosław Owoc

Chair of Criminalistics, Adam Mickiewicz University (UAM), Poznań, Poland

Abstract—This article discusses the changes that are the result of entry the new personal ID card issued in Poland. The new document contains less information about the owner, i.e. height, eye color or signature, so that the risk of identity theft is significantly greater.

Keywords—*biometrics, identity theft, personal identity card.*

1. Introduction

Reducing the number of safety features that could be used for simple authentication of a person in new personal identity card (PIC) is another step that diminishes the protection of the public against crime. Today, being equipped with somebody else's personal identity card, a thief can cause substantial losses to the rightful owner. With the new personal identity card, a criminal will be able to ruin them utterly.

2. The New Personal Identity Card

The term “identity theft” refers to an instance of actively impersonating another person, while at the same time using their image or other personal details in order to cause them financial or personal damage [1].

Among the various tools that make impersonating another person possible or easier, the personal identity card (PIC) and the passport feature prominently. Most commonly, it is the PIC that is used fraudulently, the document being the easiest one to use in fraud, also because it lacks a fingerprint. Now, further weaknesses are to be introduced: there will not be a signature nor information on the owner's height or eye color. An additional drawback is the “new” idea for a front view photograph. The requirement for a front view photograph introduced under the new regulation is in fact a retrograde step that brings us back to the 19th century. This type of view came into common use in France back in 1888 when creating a register of recidivists. The front view has always been considered to be unappealing and not to do justice to the wealth of people's facial features, but this simplified and flat representation of the human face was introduced to facilitate a few simple measurements: the distance between the pupils and the width of the nose, the mouth and the entire neurocranium. Further measurements of the length of the nose, the height of the forehead and the length of the ear were taken from a profile-view photograph taken alongside the front view photograph.

3. Safety Features

When in the previous two decades all reasons were cited to discredit fingerprinting as an authentication measure, one major argument against it were protests by so-called “law-abiding citizens”. For them, being fingerprinted would be tantamount to being treated as common criminals and an insult. I am wondering whether these indignant defenders of civic dignity will speak out again when they see their expressionless photographs on their new PICs and how much outrage they will cause once they find out that as early as in the 19th century front view photographs became the standard way of portraying recidivists, and later all criminals. I need to add that a front view image of a face is the easiest one to be identified by a facial recognition system. In the absence of more effective facial recognition software, the mugshot-type photograph is today's choice. Note that there is also no effective human recognition software based on the shape of the auricle, visible in three quarter angle (half-profile) photographs, although experts can identify a person on that basis [2], [3].

Coming back to the peculiar idea of removing the owner's signature from the PIC, the argument to do away with it was not the lack of a method for the automated authentication of a signature, but the fact that a signature changes over time. Well, a signature is a reflection of a record in the brain. And the brain naturally changes: it learns, matures, stabilizes, fatigues, suffers from diseases, and grows old. However, a signature written by a literate adult is so rich in graphic features that, despite changes, it can be used for authentication for decades. Moreover, differences between an actual signature and its original sample can help determine the age and the physical and mental condition of the undersigned person.

Why such a sudden departure from the graphic signature? Has the percentage of illiterate people grown so significantly? Two years ago, a scandal erupted when it turned out that the newly-appointed U.S. Treasury Secretary, Jacob J. Lew, could not write a normal signature, producing instead a sequence of loops resembling a telephone handset cord. This, however, was more of a social scandal than a symptom of a global trend. The signature, an apparent sign of the official's functional illiteracy, was not accepted and had to be changed.

Until now, the identity thief has had to memorize the personal details shown on a PIC, take a while to practice the signature based on the miniature facsimile, and he could easily take out a loan to purchase expensive and easily mar-

ketable goods. Before a notice of the theft of a PIC reaches the lost PIC database, the thief may engage in several such transactions. The Japanese proverb “no naked man ever lost anything” still holds, but the latest version of the PIC will be a tool for crooks to drive their victims into debt they will not be able to repay in a lifetime.

A fingerprint depicted on a PIC would prevent such crimes. However, the proposal to include a fingerprint on the PIC faces opposition on many fronts. For example, several years ago, sensational news was publicized that somewhere in Asia cases had been reported of fingers being cut off to obtain access to the victims’ money using an ATM. Although a number of methods were promptly developed for the examination of the vital processes of the finger as well as a number of methods using other biometric features of living people, the circles interested in eliminating dactyloscopy from authentication methods managed to obviate the danger facing their interests [4], [5].

The latest version of the PIC precludes such bloody scenarios, but this is the only good news. The bad news is that the new PIC does not include a sample signature, allowing the identity thief to write any signature under any document, including signing the disadvantageous disposal of a PIC’s rightful owner’s property.

4. The Future

The irrational process of minimizing the number of features allowing to authenticate a PIC is snowballing. In the next version of the document, and it is going to be the penultimate one, further details will probably be scrapped:

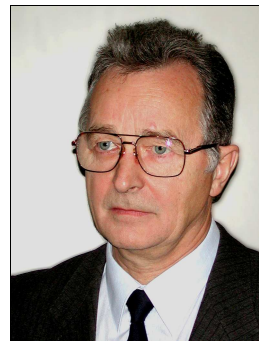
- date of birth – this piece of information is redundant as it is already included in the first six digits of the PESEL identification number used in Poland,
- sex – a feature that can be changed at will, sex is even less permanent than eye color, height and signature, which have already been removed from the PIC as being impermanent. In addition, the penultimate digit of the PESEL number indicates sex as disclosed in the entry of birth,
- place of birth – this information can be the basis of discrimination,
- parents’ given names – they can also be the basis of discrimination.

In the last version, the given names and the surname may also be removed as an appropriately extended PESEL num-

ber will contain all the information necessary to identify the owner (not the holder!) of a PIC, and in particular to identify his bank account. The photograph will probably stay. It may even be a color photograph of a slightly larger size, allowing the PIC to be used as a public transport pass or a gym membership card.

References

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Miroslaw Owoc became a Full Professor in 1992 (D.Sc. in 1975, Ph.D. in 1966). He is currently the professor emeritus at Adam Mickiewicz University (UAM) in Poznań. He was Chair of Criminalistics at UAM Faculty of Law and Administration (1990–2007), professor of Faculty of Administration and Social Sciences

at Kazimierz Wielki University (UKW) in Bydgoszcz (2010–2013), professor at Police Academy in Szczytno (1990–2003), Head of Identification Methods Institute at Police Academy in Szczytno (1990–1993). Mr. Owoc is an author and co-author of seven books and monographs (including co-editor of *Vocabulary of Forensic Handwriting Identification*, 19th ed. 2014), over 120 of research and conference papers, four patents, and around of four hundred of forensic examinations (evidence opinions). His research interests focus on chemical analysis of forged documents, information theory aspects of analysis of forensic photography, using computers in forensic handwriting identification, and biometrics.

E-mail: Owoc@amu.edu.pl
 Chair of Criminalistics
 Adam Mickiewicz University
 ul. Św. Marcin 90
 61-809 Poznań, Poland