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Biometric Applications in Iceland

Norsk biometri forum 18 april 2013

Overview



- Personal identification in Iceland
- Forensic use of fingerprints
- National ID documents
- Electronic biometrics in passports
- Other electronic biometric applications
- Use of face recognition and the future



Personal identification in Iceland

- Traditional: Name and padronym
- Nafnnúmer based on name (1959-1987)
 - Also used fæðingarnúmer

Göngu- og húsnæði eða bær og eignandi.	Hátt- og lítt. nr.	Fullt nafn. Ef meira gjafnar eru í því hafi skilgreint þær með ást.	Stett eða atvinnu.	Fæðingar- dagur			Nær stutt til Akureyrar.	Athugasemdir.	
				ár	stóðir (beirnarinn).	hreppur.			
	16	Þóttýggja Jónsson	Þóttýggja	25/1	1912	St. Anselmi	St. Anselmi	1900	
		Helli d. Euphrosine		30/1	1895	St. Anselmi	St. Anselmi	1900	
		Þóttýggja S. Euphrosine		27/1	1898	St. Anselmi	St. Anselmi	1900	
		Rosalinda Ólafsdóttir	Rósanna	17/6	1885	Órnustabí	Eyðalabætti	1918	
		Þóttýggja S. Euphrosine	Þóttýggja	3/6	1902	St. Anselmi	St. Anselmi	1921	
		Jon S. Euphrosine	Jon S.	13/6	1891	St. Anselmi	Eyðalabætti	1900	
		Caroline Euphrosine	Caroline	19/1	1894	St. Anselmi	St. Anselmi	1921	
		Þóttýggja S. Euphrosine	Þóttýggja	27/1	1895	St. Anselmi	St. Anselmi	1916	

SÖRLASKJÓL 40		8680 0400			
2	HALLDORA HELGADOTTIR	1	250530	-552	43 1 3623-4318 078
1	HELGI ARNASON	3	130489	-184	43 1 3951-1495 078
2	SIGRUN ÓSSURARDOTTIR	3	060598	-045	43 1 7739-8279 078
1	ÞOR ÞORSTEINSSON	3	180625	-429	00 1 9366-0307 080
2	ANNA H SVEINSDOTTIR	3	230831	-408	00 1 0378-8253 080
3	EINAR ÞOR ÞORSSON	1	020653	-442	00 1 080
4	GUÐRUN ÞORSÐOTTIR	1	280651	-338	00 1 3320-7042 080

SKUL I GUDMUNDSSON 236

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

- 1987-now: Kennitala is main identifier
- Check digit added to fæðingarnúmer
 - Contains birthday
 - Widely accepted and used
 - „Public semiotics“

Nafnúmer 8186-4403 Kennitala 170253-2649

Kennitala

í stað nafnnúmers

Kennitala er 10 stafir, 6 fyrstu tákna fæðingardag, mánuð og ár, 4 síðustu eru fæðingarnúmer og -öld.

Kennitala kemur fram á skattframtölum nafnskírteinum sjúkrasamslagsskírteinum bankakortum

Vinsamlegast athugið, að skattframtöl þessa árs og skattlagning fer fram á kennitölum. Hafið því kennitöluna á reidum höndum.

Hagstofan

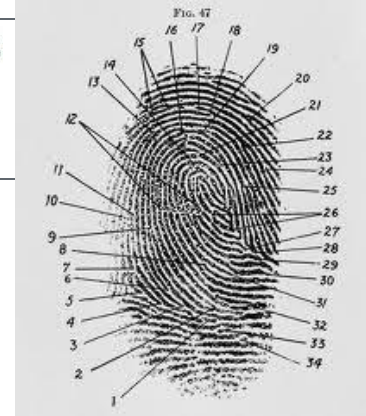
Menntamálanefnd Stúdentrábs HI 2007

Ég undirrituð / undirritaður krefst rými opnartíma þjóðabókhlóunnar um helgar yfir þróttímabili!

Ég skora á rektor að beita sér í málinu og tryggja að stúdentrá hafi aðgang að lesabókunum í Landbókasafni - Háskólabókasafni milli kl. 0:15 og 22:00 alla daga vikunnar í þróttabókunum á háustímsferlinum 2007.

Nafn:	kt.
Jónína Þóttýggja	kt. 13 02 82 - 5557
Jon Þóttýggja	kt. 07 12 87 - 7540
Þóttýggja S. Euphrosine	kt. 26 09 86 - 3259
Þóttýggja S. Euphrosine	kt. 11 08 89 - 3009
Þóttýggja S. Euphrosine	kt. 14 01 85 - 2139
Sigrún Þóttýggja	kt. 04 12 85 - 2259
Mína Þóttýggja	kt. 24 05 84 - 2479
Jónína Þóttýggja	kt. 21 02 84 - 2479
Hella María Þóttýggja	kt. 01 11 82 - 3009
Þóttýggja S. Euphrosine	kt. 14 03 86 - 3519
Þóttýggja S. Euphrosine	kt. 11 12 80 - 2909
Þóttýggja S. Euphrosine	kt. 06 08 87 - 2959
Þóttýggja S. Euphrosine	kt. 24 12 84 - 6279
Þóttýggja S. Euphrosine	kt. 25 06 83 - 3559

Forensic use of fingerprints



- First use 1935-1940 by Sveinn Sæmundsson
 - Classification according to Henry-system
- 1945 forensic department established Axel Helgason
- 1946 first case solved by fingerprints
 - Prison inmate on day-leave left fingerprints on crime scene
- 1950: 6 drowned people identified by fingerprints
- Around 1960: large groups fingerprinted to solve cases
 - 1955 a whole town of 200 persons
 - 1967 a whole company of 90 persons

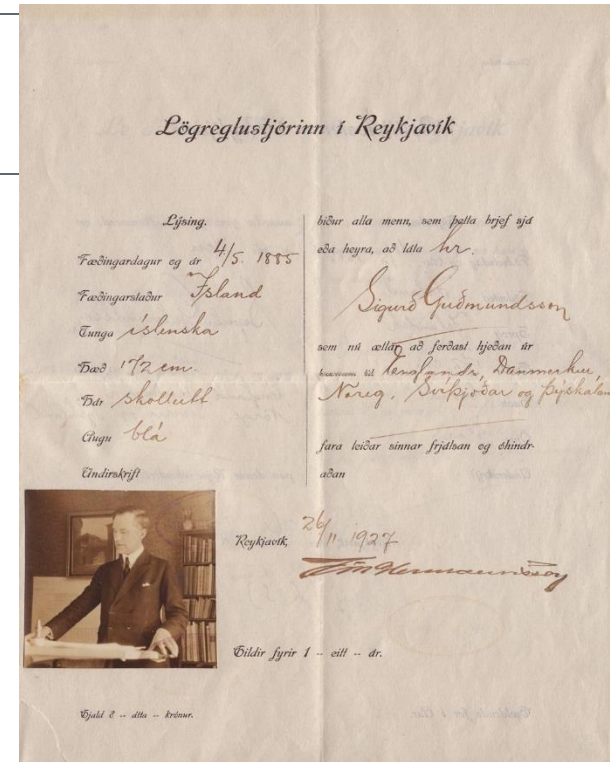


National ID documents

- National passports since 1919
 - Facial image + signature required
- Driving licences since 1920
 - Facial image required, later signature

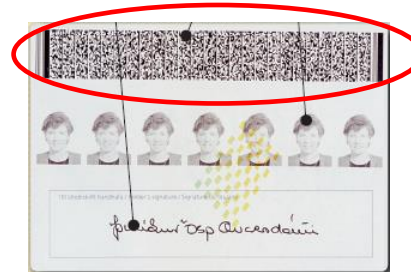


- Regulated ID cards since 1965
 - Facial image not required until 1981



E-biometrics in passports

- 1999: encoded facial image



- Chip required by the Schengen agreement
- 2006: electronic facial image and signature image
- 2009: two fingerprints locked up in chip



- Future:
- 2015: inspection systems allowed to read fingerprints
- No plans to read fingerprints at our outer borders



Other e-biometric applications

- First Iris applications in 2003
 - Common in health spas
 - Also used in high-school canteens
 - Some debate at first – now widely accepted
 - Alternative identification not necessarily offered
 - Data Protection officer ruling in 2010
 - OK to give personal data to third parties
- Fingerprint applications in 2007
 - In elementary schools
 - Data protection ruling in 2007
 - Allowed if alternatives are available
 - Personal data can not be used for other purposes



Use of face recognition and the future

- Facebook very popular
 - Huge biometric database
 - Built in face recognition
 - Data protection uncertain
 - Ongoing debate



- Future applications
 - Biometric ID cards and Driving licences?
 - Biometrics on social media
 - Pocket devices for personal use



Thank you

