



Bundeskriminalamt

AFIS quality requirements and implementations



NFIQ II workshop

Gaithersburg, MD



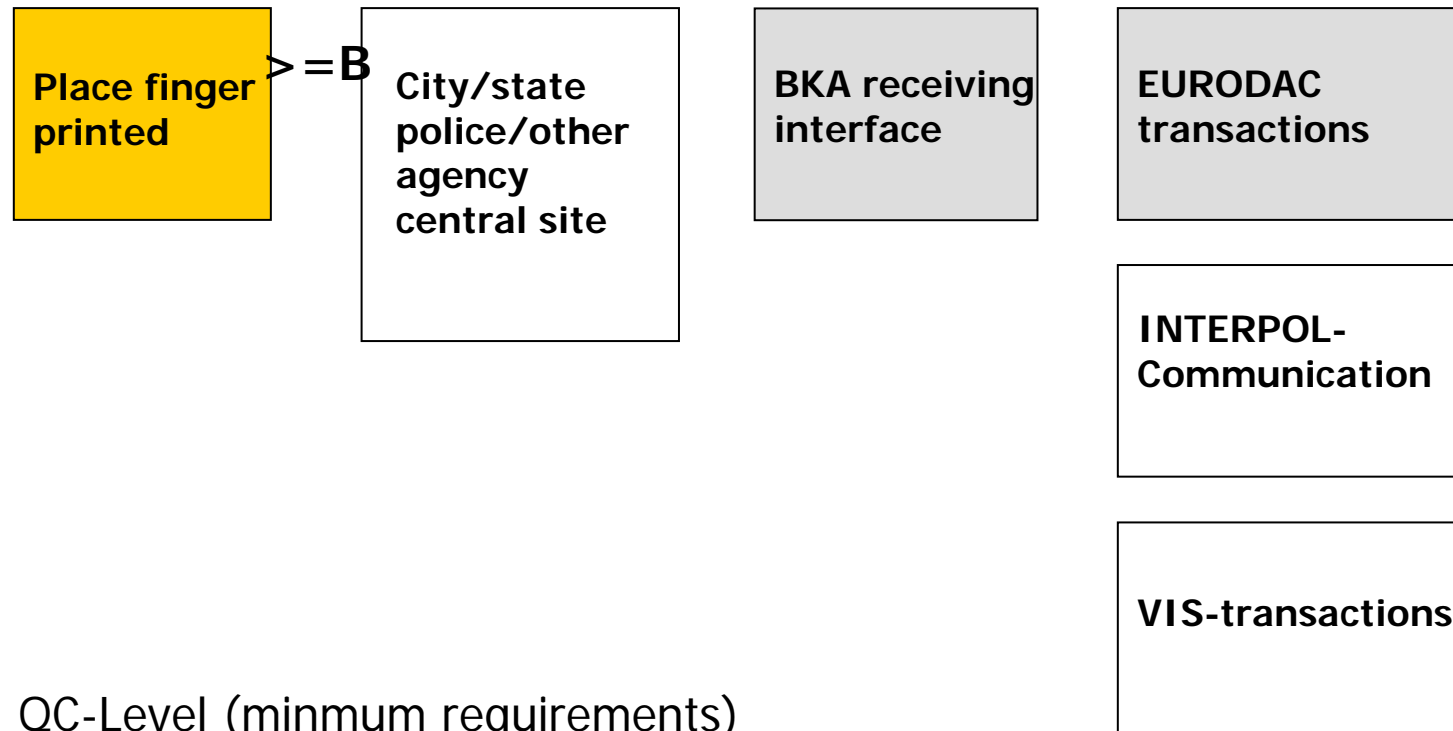
Examples we deal with



Link to QC
presentation



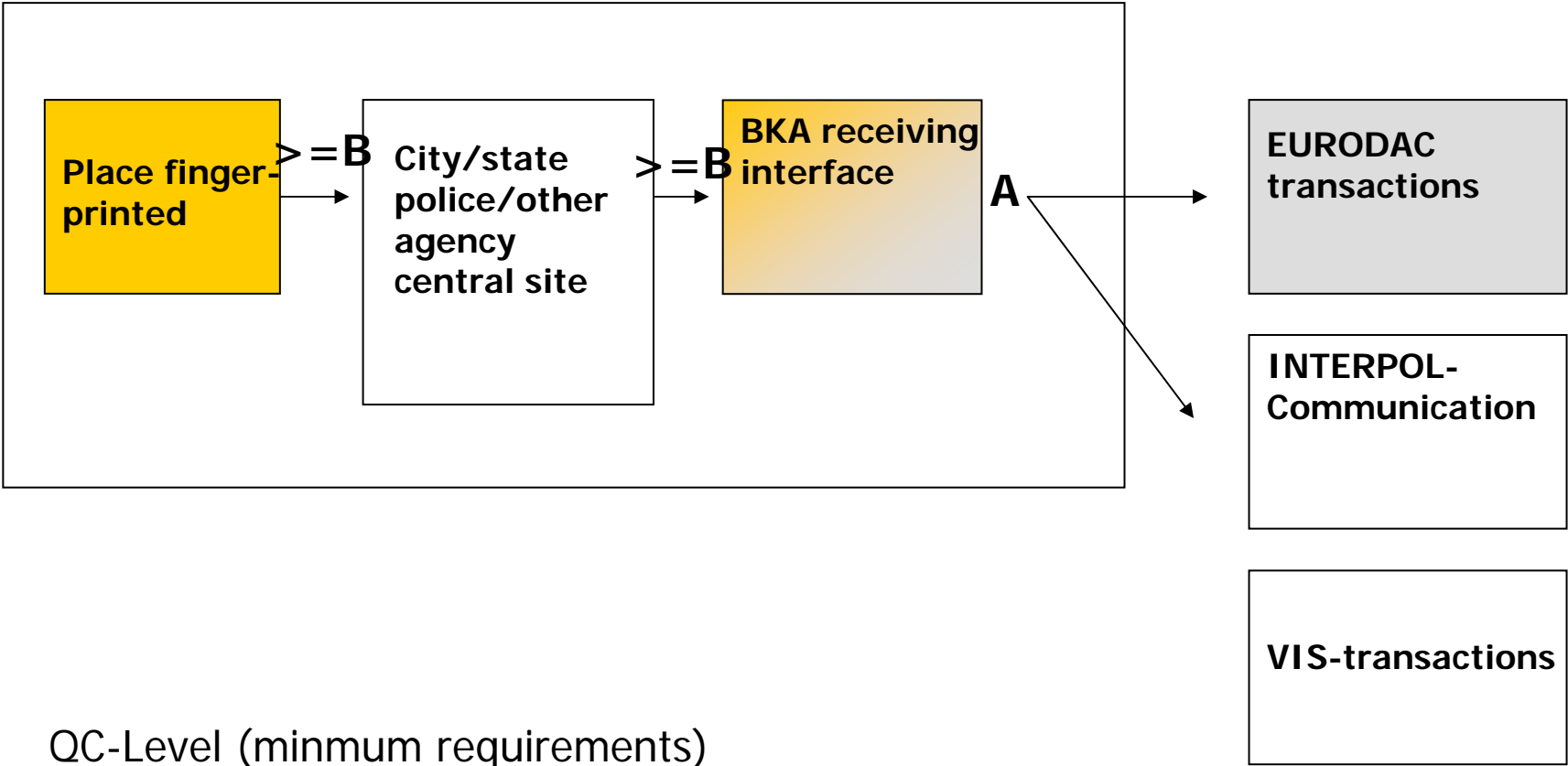
Current status of QC



QC-Level (minmum requirements)

A	E.g. NFIQ 1 and 2
B	NFIQ I (Various settings)
C	Other algorithm (proprietary)

QC at any step? Implementation Options



QC-Level (minmum requirements)

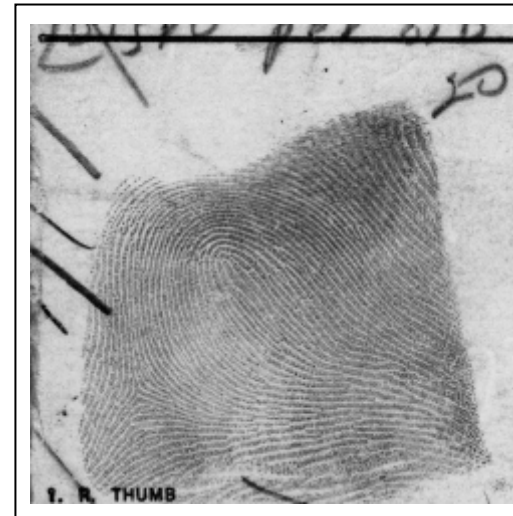
A	E.g. NFIQ II High level (analogue NFIQ I 1 and 2)
B	E.g. NFIQ II Lower level (analogue NFIQ I 1 to 3)
C	Other algorithm



Fingerprint expert perspective - Quality vs. matchability and completeness



SFin generated image



NIST SD27



Use cases for NFIQ II

- Automatic selection of the „best“ NIST-files for international correspondance

Speicherdatum	EPK-Nr.	EURODAC-Nr.	D-Nummer	HD-Nummer	PCN	Qualität	NIST-Dateinhalt
09.12.2006 06:35:23	E [REDACTED]	DE [REDACTED] 3507	[REDACTED]	[REDACTED]	[REDACTED] A	gut	
18.12.2006 09:27:55	E [REDACTED]	DE [REDACTED] 0060	[REDACTED]		???	gut	
07.09.2007 11:37:18	E [REDACTED]	DE [REDACTED] 0109	0 [REDACTED]		???	gut	
04.08.2011 11:38:53	E [REDACTED]		[REDACTED]		1 [REDACTED]	mittel	



Use cases for NFIQ II

- Automatic rejection of poor quality transactions
- Replacement of NFIQ I quality check on capture stations and other implementations



What is still missing with NFIQ II

- Algorithm for latents (finger and palm)
- Algorithm for palms
- Algorithm to detect what we deal with
- (Algorithm to detect altered fingerprints)