

IDENT 1: A Guide for Validation and Compliance with the FSR Code

EXECUTIVE SUMMARY

Police forces are at risk of spending excessive time and effort to develop validation plans, devise validation tests, generating similar data and results to accredit IDENT 1. This duplication of effort may be avoided if it is demonstrated that existing validation data, provided by accredited forces is representative of technical methods, currently undertaken by forces. 5 accredited forces have shared their validation documents to support forces.

This guidance document highlights the areas to focus on for a consistent approach to validation and accreditation. It must be noted that some of the plans were written over 8 years ago therefore it is important to highlight that UKAS's approach to accreditation and validation may be different due to recent bureau visits or updated information

Training & Competency

Marks used for training and competency should be representative of case work and from a variety of sources e.g., photographs, lifts, chemical treatments. They should also include a variety of different quality and finger and palm marks.

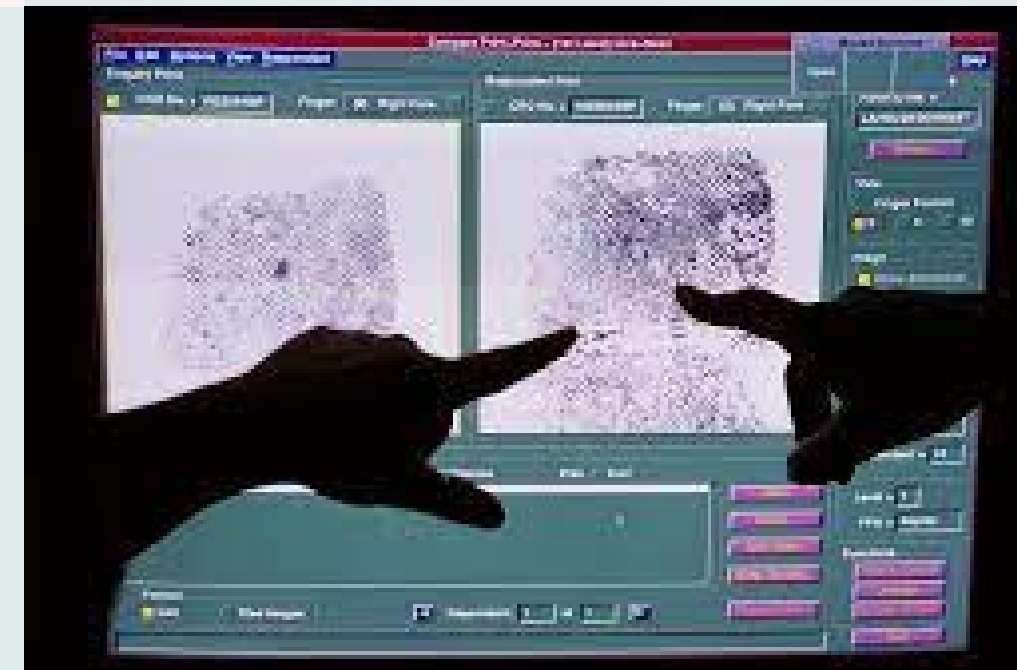
Procedures

Robust procedure should be documented for searching, peer review and dip sampling of cases as part of on-going Quality Assurance.

Business Continuity Plan (BCP): Vetting & Access

Additional vetting of staff may be required if the BCP is invoked as not all Police Forces have the same vetting requirements.

Permissions will be needed from the IDENT 1 provider to gain access to other Police Forces' IDENT 1 systems. New usernames and passwords may be required to work on other Forces' systems.



Ground Truth Data (GTD)

'Mock' cases should include a variety of different quality marks. They should also contain marks from a variety of sources e.g.chemical enhancement and photographs of powdered / lifted marks.

BCP: Working Patterns

Consider any differences in working patterns between organisations and reflect these in the BCP. It is often sensible to have Service Level Agreements or Memorandums of Understanding with more than one organisation to support your BCP. Remote log-in to IDENT 1 may not be possible depending on the issue that has resulted in invoking the BCP, so it may be worth sending marks to another organisation to be searched.

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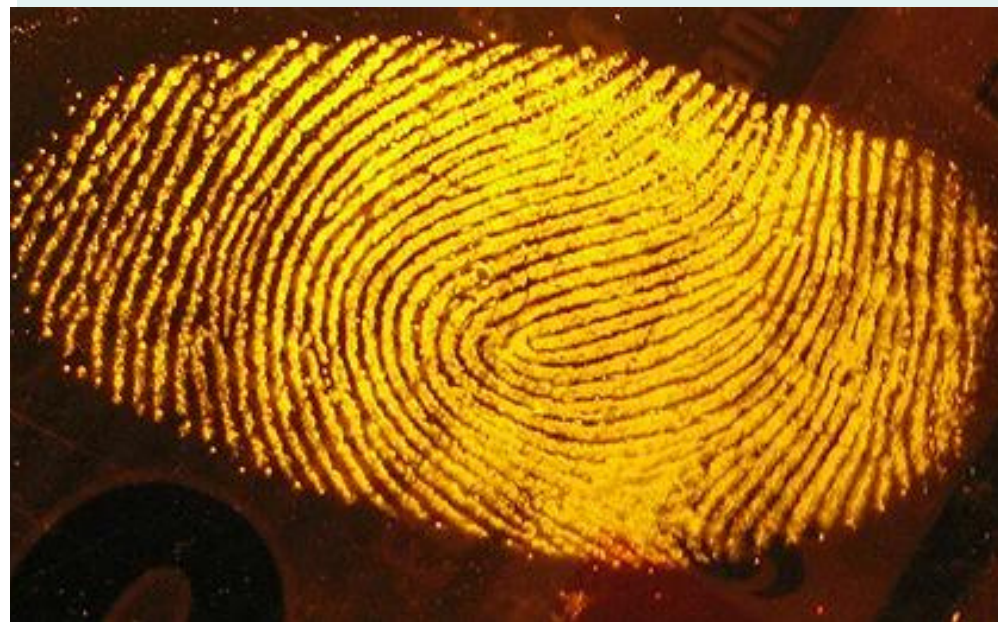
COMMON FACTORS FOR VALIDATION:

- Use of Ground Truth Data (GTD)
- Mock cases created with known outcomes.
- Range of marks including chemical enhancement, photographs and lifts, representative of case work received by Bureaus.
- Variety of friction ridge detail; fingers and palm.
- Varying quality of marks should be included; not just 'good' marks.
- Different size of marks, slightly larger /smaller than actual size, to take into consideration any additional technical processes used.
- Different orientations, to take into consideration variance in capture.
- Differences in encoding of marks to represent methods available on the IDENT 1 system. Include a variety of search options such as Left Hand(LH)/ Right Hand (RH) LH / RH plus fore finger of other hand or user choice.
- Validation should be carried out by a number of competent practitioners with a variety of experience to demonstrate repeatability and reproducibility.

Validation

The ADHOC container provided by HOB must be used to validate IDENT 1. The limitations of the container are that marks cannot be searched PEDB, Local, Regional, National, IABS.

It is accepted that validation of IDENT 1 only relates to the 'search' aspect, and the inputs and outputs. It does not need to include functionality of the algorithm.



Grading Marks

Establish a criteria for grading GTD marks. The MPS grading criteria (see below) was agreed at the NFFSB as a preferred grading method.

It is recommend that grading is completed by a minimum 3 independent, competent persons with a consensus applied.

Fingerprint Examiner Qualitative and Quantitative Assessment Scale for Latent Mark Quality

Grade	Designation	Description
Grade 5	Copperplate	A mark posing no problems for search or comparison and is easy to interpret.
Grade 4	Good Quality	The clarity and amount of detail may be compromised a little but would not be sufficient to impact on your interpretation.
Grade 3	Average	Reveals detail that could be searched or compared but requires interpretation as it is affected or compromised by external factors. (Grade 3 marks represent the majority of marks that are graded by bureau).
Grade 2	Borderline	Lies at the threshold of comparison or identification and requires considerable interpretation. It is unlikely to be suitable for search, although not impossible. It would include those marks that you would expect to result in an inconclusive outcome. It may contain enough detail to exclude only.
Grade 1	Insufficient	Some ridges present but is insufficient for search or comparison and is of poor quality or has few features.

Equipment

- Equipment should be uniquely identified with a corresponding equipment record available within your QMS.
- Retain any records of equipment maintenance and/or calibration within the relevant equipment record.
- Defective equipment should be labelled to prevent usage. Post-maintenance checks should be implemented where appropriate e.g. printers.
- Access to equipment should be restricted to authorised users.
- Work instructions and specialist training should be provided to personnel authorised to carry out disc or tape changes.

BCP: Memorandum of Understanding / Service Level Agreement

BCPs should be reviewed by all relevant parties and procedures should be shared. Consider any impacts on accreditation and include appropriate declarations in reports. An MOU will likely be required with your IDENT 1 service provider.

NOTE:

Consider if additional vetting of Fingerprint Bureau staff is required when setting up a BCP with other forces, this may delay the implementation of the BCP if additional vetting is required to gain access to other Forces' sites and /or systems (IDENT 1).

Future work

As part of future work, it has been agreed that a national validation package including a validation plan will be produced in conjunction with HOB, FINDS and the FCN for the new IDENT1 Strategic Matcher. A road map of delivery for the national package will be produced to support forces with verification planning.