

# MTP 101: Compliance requirements surrounding GTD

## WHAT ARE THE CHANGES FROM V1 TO V2 OF FSR CODE

Clarification that Friction Ridge Detail (FRD) means all areas of FRD on the human body. All sources and all inputs encountered (including lifts, photographs, lifts and digital images) shall be included in the validation exercise as described in the FSR code V2 below:

*96.1.1 The fingers, palms of the hand, toes and the soles of the feet comprise an intricate system of friction ridges and furrows, which are known as friction ridge skin. The arrangement and sequencing of characteristics within friction ridge skin are extremely variable between individuals, persist throughout life and are accepted as a reliable means of human identification.*

*96.1.2 Friction ridge detail is an area comprising the combination of friction ridge flow, friction ridge characteristics, and friction ridge structure to include other features such as creases. It is the examination of these characteristics and features that form the basis of the forensic science activity of friction ridge detail comparison defined in this Code. The undertaking of friction ridge detail comparison shall include all areas of friction ridge detail on the human body.*

*96.6.2 The examination process shall consist of the stages referred to as analysis, comparison and evaluation (ACE) and apply to all sources of friction ridge detail. All sources and inputs typically encountered shall be included in the validation exercises.*

*96.7.5 The validation exercise shall incorporate impressions of known source friction ridge detail including, but not limited to, lifts, photographs and digital images of friction ridge skin where appropriate. In addition to the process detailed in section 24 of the Code, it shall include: samples representative of the quality and variability of friction ridge detail typically encountered within each service.*

## WHAT DOES THIS MEAN FOR BUREAUX AND THEIR EXISTING GTD USED FOR VALIDATING THEIR ACTIVITIES?

Many bureaux' current validation material has not adequately included the variety of sources/inputs encountered in casework:

- All sources of FRD
- All types of inputs (for example, but not limited to, lifts, photographs and digital FRD)

To comply with FSR Code V2 bureaux **must** ensure their GTDs used to validate their methods have included the above, -where applicable to their organisation - e.g. do not include FEL processes that your FEL does not perform. Reference samples must also be representative of the quality and variability of FRD typically encountered within each service.

## WHAT CAN THE FCN DO TO SUPPORT THESE CHANGES AND ASSIST BUREAUX IN ACCESSING A GTD THAT MEETS THEIR REQUIREMENTS?

The FCN will produce reference samples that can support a national GTD upgrade to those bureaux that require it. Since all bureaux in England and Wales will have FRD specific to fingers within their GTD, the reference samples created will focus on filling the following gaps, where they are present, to enable compliance with the Code requirements:

- Palm, Phalange and plantar reference samples
  - Palm, Phalange and plantar samples will be processed through both CSI and FEL FRD development techniques (chemical enhancement types and a variety of powder types)
  - Lifts and photographs will be generated from powdered latent FRD
  - Photographs via DCS (or similar capture system) will be generated for FEL enhanced FRD.
  - Digital FRD- **The FCN will not be including digital FRD in this exercise.** Bureaux should validate/verify these inputs as a separate exercise, if required.
  - The product provided by FCN **will not include physical lifts**

Digital FRD is not to be included because it is felt that the considerations around it are such that to include it at this stage, where bureaux do not already consider such inputs, would be too great a burden on bureaux as it could require large scale changes in procedures.

The transition is intended to be on a like-for-like basis, i.e. following transition, bureaux should be providing the same service as they do now. Digital FRD can be included in bureaux's transitions where it is already undertaken or can be added at a later date.

A product package (e.g. USB or Egress (TBC) containing image files, and report detailing the method and traceability of the GTD creation) will be supplied to participating bureaux for use as part of a validation exercise. This will need to be supported by one/two force FELs and CSI units for the practical delivery of the product using FCN staff as donors.

### Proposed GTD Sample Size

Bureaux may wish to exclude specific reference samples if their CSIs/ Forensic Technicians do not use that powder/chemical treatment type or if they do not recover physical lifts and only photograph marks in situ. Bureaux' existing GTD may already include all areas of FRD, and this should be reviewed at a local level to establish whether these additional reference samples are required.

A range of substrate types will be selected based on what is commonly processed using that specific enhancement technique.

Donors will be recorded at the point of seeding of exhibits. The intention is to have a mix of age and Male/Female donors.

All sample marks and donor sets will be labelled with a unique identifier all of which will be traceable back to the donor or exhibit type.

CSI		
Ink/Tenprint		
	Living Person	Cadaver Simulation
Tenprint set- good- Scan/photo***	3	n/a
Tenprint set-poor- Scan/photo***	1	1
Plantar- good- Scan/photo***	3	n/a
Plantar- poor- Scan/photo***	1	1
		<b>Total: 10</b>

CSI		
Ali Powder /Tenprint		
	Living Person	Cadaver Simulation
Tenprint set- good- lift*	n/a	1
Tenprint set- poor- lift*	n/a	1
Plantar-good-lift*	n/a	1
Plantar- poor- lift*	n/a	1
		<b>Total: 4</b>

CSI				
Powder Types				
	Aluminium	Magnetic	Black Granular	White Granular
Palm- good- lift*	1	1	1	1
Palm- poor- lift*	1	1	1	1
Palm-good- image**	1	1	1	1
Palm-poor-image **	1	1	1	1
Phalange- good- lift*	1	1	1	1
Phalange- poor- lift*	1	1	1	1
Phalange- good- Image**	1	1	1	1
Phalange- good- Image**	1	1	1	1
Plantar-good-lift*	1	1	1	1
Plantar-poor-lift*	1	1	1	1
Plantar-good-image**	1	1	1	1
Plantar-poor-image**	1	1	1	1
				<b>Total: 48</b>

\*A 'lift' for the purpose of this exercise will be a digital reproduction of a lifted mark

\*\*An image will be a digital capture of FRD directly from an item, with inclusion of a scale

\*\*\*Tenprints scan/photo relate to a tenprint set which are recovered to a paper form and then scanned/photocopied to produce an electronic copy

Forensic Laboratory Officer/ Technician									
Chemical Treatments									
	Ninhydrin	Indandione	SG & BY40	Powder Suspension (white)	Powder Suspension (black)	Acid Yellow	Acid Violet	Physical Developer	Vacuum Metal Deposition?
Palm- good- DCS image	1	1	1	1	1	1	1	1	1
Palm- poor- DCS image	1	1	1	1	1	1	1	1	1
Phalange-good-DCS image	1	1	1	1	1	1	1	1	1
Phalange-poor-DCS image	1	1	1	1	1	1	1	1	1
Plantar- good- DCS image	1	1	1	1	1	1	1	1	1
Plantar- poor- DCS image	1	1	1	1	1	1	1	1	1
									<b>Total: 54</b>

Please note: 'poor' refers to FRD of limited detail and/or greater complexity due to compromised deposition. 'Good' FRD refers to any FRD that is graded as suitable for search or comparison, as defined by the individual Bureau.

'Good' marks will be produced in line with grading levels 4-5, 'poor' marks will be produced in line with grading levels 1-3 as described below:

Mark grading will be carried out prior to distribution by a competent member of a recognised Home Office Bureau, supported by the FCN, using the below table and any relevant Standard Operating Procedures for their organisation.

**TABLE 1: FRD QUALITY GRADINGS AND DEFINITIONS**

Quality Grading	Definition
1	Insufficient for search or comparison. The friction ridge detail is of very poor quality or has few or limited features.
2	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 ridge detail that you would expect to result in an inconclusive outcome. It may contain enough detail to exclude only.
3	Reveals detail that could be searched or compared but requires interpretation as it is affected or compromised by the action of deposition, physiological, biological or external factors.
4	Good quality area of ridge detail. The clarity and amount of detail may be compromised a little but would not be sufficient to impact on an expert's interpretation.
5	A 'clear-cut' area of ridge detail posing no problems for search or comparison. Easy to define and interpret.

## WHAT IS THE TIME SCALE IN WHICH TO DELIVER A NATIONAL FRD GTD

*57.2.2 From 2 October 2026 the sub-activities that the organisation undertakes of this FSA (MTP-101) listed in section 57.3.1 are required to be reflected on the schedule of accreditation.*

Between October 2025 and October 2026 bureaux will have to update their GTD to include all types of friction ridge detail, validate the process and have a UKAS Assessment. Reference samples will need to be created late 2025/early 2026 to ensure Bureaux have sufficient time to then process these samples in their own environment, using their own methods and equipment. It is recommended that updated GTDs and validation exercises should be completed by Bureaux no later than early July.