SCHEDULE F, PART 3

LIVESCAN

SERVICE LEVEL REQUIREMENTS

CONTENTS

1 INTRODUCTION

This Part of Schedule F (Part 3) details the Service Level Requirements for Livescan Services.

2 SERVICE LEVEL CRITERIA

This section defines the Service Level Criteria for Livescan Services as described in Schedule R (**Livescan and EIUs**). The Service Level Criteria are measures of the Services supplied by the Contractor. This section defines the criteria to be measured.

2.1 Operational Availability

Operational Availability for Livescan is measured against the critical components, as defined in Section 2.1.1 and 2.1.2.

The IDENT1 Livescan Service will be available 24 hours per day, every day of the year. The exceptions to this will be:

1. Planned system interruptions of up to 4 hours in any one calendar day, to take place contiguously between the hours of 24:00 and 06:00. Two additional hours between 22:00 and 24:00 are available on an exception basis to be utilised when necessary. These planned interruptions may affect only a part of the Service and will be planned at least four (4) weeks ahead of the scheduled time of the disruption with prior agreement between the Police Force and the Contractor, or as agreed between the Parties. The interruptions are described in terms of which of the described Services will be impaired and to what degree.
2. Planned local outages of no more than 2 hours per day on any one Livescan workstation or local server to enable the switch to new versions of software to be achieved in an orderly fashion. These short outages will take place between the hours of 24:00 and 06:00 unless other arrangements are made between the Police Force and the Contractor. Two additional hours between 22:00 and 24:00 are available on an exception basis to be utilised when necessary. When both system interruptions and local outages are required, they should be concurrently scheduled. The Contractor will notify the users at least two (2) weeks before these types of outages occur, or as agreed between the Contractor and the site point of contact.
3. Emergency outages at any time of the working day, by mutual agreement with the Contractor and the Authority or site point of contact, to solve severe operational problems. Examples of such emergency outages may include, but may not be limited to: fire in the facilities, unexpected power outage within the central computer facility, or severe system malfunction that could jeopardise the National collections.
4. Other exceptions as defined in Schedule B (**Conditions of Contract**) and Schedule R (**Livescan and EIUs**).

Note that system outages at the bureau and/or central site will not disrupt the continued capturing of ten prints and demographic data at the Custody Suite. Such data may still be captured, but in some instances will not be able to be transmitted to the bureau until the system is again available. In some instances it may be possible during a system outage to provide limited service (e.g., non-verified Live-IDs while FPO workstations at a bureau are unavailable). The Contractor will notify the affected Head of Bureau(x) and/or the Custody Station point of contact regarding the limitations on services prior to any planned system outage and as early as practical for unplanned system outages. Planned Livescan service interruptions will be coordinated with planned interruptions of baseline IDENT1 Services to the extent practical.

In the event that an emergency operational need arises before or during an interruption, the interruption may be postponed or service restored by the Contractor as soon as practical so as to allow IDENT1 Services to operate.

Downtime will commence when a critical equipment item is reported to the Help Desk as no longer available. Degraded performance as a result of a failure of a single item will not be considered downtime. However, such degraded performance may impact bureaux operations and will be reflected in the throughput and system performance service level criteria as defined in the *IDENT1 Operational SLR, Schedule F Part 2*.

Downtime will start and stop under the authorisation of the IDENT1 Help Desk and in consultation with the Site Point of Contact. Downtime will only include unplanned interruptions. Downtime is composed of administrative delays associated with coordinating personnel arrival time at a site (i.e., Bureau/Custody Station personnel available for site technician to enter a site), travel time to the site (if applicable), service restoration time, and time to test corrective actions. Downtime excludes any Bureau or Custody Station originated administrative delays that impede service delivery or restoration of service.

Planned interruptions will be defined as all interruptions of services that take place as scheduled, and with prior agreement between the affected Head of Bureau(x) and/or the Custody Station point of contact and the Contractor. Planned interruptions shall exclude any period of unavailability required to fix problems of functionality or throughput, which result from the Contractor's failure to meet IDENT1 Livescan requirements, irrespective of whether or not these interruptions are scheduled and undertaken with the prior agreement of the Authority or the bureau(x) involved.

In all instances, the Contractor will declare the duration of a Planned Downtime Period, as defined above, prior to starting Planned Downtime. Planned Downtime in excess of the Planned Downtime Period will become Unplanned Downtime commencing at the end of the period.

When a critical component or all of the system becomes unavailable, the Contractor will inform the Bureaux and/or Custody Station and will continue to manage the Service in such a way as to ensure that the daily workload is completed within the working day. If this becomes impractical, the problem will be escalated within the Contractor for decisions on priorities.

2.1.1 Bureau Segment Critical Components

The IDENT1 Livescan bureau components included in Livescan availability scoring are identified in Figure 2.1-1.

Critical Components	Non-Critical Components
Livescan Store and Forward or equivalent Livescan IDENT1 interface CPU	Livescan Store and Forward/Interface monitor, keyboard, mouse, and floppy disk drive
Network Router	Graphics Printer

Figure 2.1-1. Bureau System Critical and Non-Critical Components

2.1.2 Custody Station Critical Components

Livescan custody station equipment are intended to be available 24 hours per day, with exceptions as noted in Section 2.1 above. Custody station critical components are identified in Figure 2.1-2, and their availability will be used to calculate the Operational Service Score as described in Section 3.2 below. Non-critical components are also shown in Figure 2.1-2 for informational purposes.

Critical Components	Non-Critical Components
Livescan Workstation	Graphics Printer(s)
Network Router	
Communications Link between Livescan Workstation and Bureau Server	

Figure 2.1-2. Custody Station Critical and Non-Critical Components

2.1.3 Operational Availability Scoring

Operational Availability (A_o) will include the critical equipment as defined in Sections 2.1.1 and 2.1.2. The calculation is based upon total hours available monthly and downtime of unplanned interruptions. A_o will be calculated as follows:

$$A_o = \frac{(H_m - DT_m)}{H_m} \times 100$$

Where,

(a) H_m will be defined as the total hours in a given month. This number will be determined each month as 24 hours multiplied by the number of days in the month.

(b) DT_m will be defined as the unplanned downtime, i.e., the total number of hours in a given month that critical equipment is not available.

The A_o will then be used to obtain an Operational Availability (A_o) Score from Figure 2.1-3. This score will be included in the basis for adjustments to the monthly Operational Service Score as discussed in Section 3.2 below of this *SLR,* representing a weighted value of 90% of the Operational Service Score.

Charging Station A_o	SCORE	Charging Station A_o	SCORE	Charging Station A_o	SCORE
100%	100	82%	84	65%	41
99%	100	81%	83	64%	38
98%	100	80%	82	63%	35
97%	99	79%	81	62%	33
96%	98	78%	78	61%	32
95%	97	77%	77	60%	31
94%	96	76%	74	59%	30
93%	95	75%	71	58%	29
92%	94	74%	68	57%	28
91%	93	73%	65	56%	27
90%	92	72%	62	55%	26
89%	91	71%	59	54%	25
88%	90	70%	56	53%	24
87%	89	69%	53	52%	23
86%	88	68%	50	51%	22
85%	87	67%	47	50%	21
84%	86	66%	44	$\leq$ 49%	0
83%	85				

Figure 2.1-3. Scoring for Operational Availability (A_o)

2.1.4 Future Changes for Availability

Several changes to the availability service level criterion will be incorporated no later than FOC. These include the following:

(a) Reflecting DOR requirements for planned and unplanned downtime

(b) Updating the Critical and Non-Critical component list to reflect IDENT1 architecture and hardware

(c) Implementation of Planned Downtime metrics

Critical DOR requirements affecting Livescan are:

(a) Req-NF- 4466 The maximum permissible Planned Downtime for any element of the IDENT1 Service needed to enable EIUs to perform Identity Checks shall not exceed 2 hours.

(b) Req-NF- 1699 Planned Downtime for individual Livescan Units / EIUs for routine maintenance and the installation / modification / upgrade of hardware / software shall not exceed 4 hours in any rolling 4 week period

(c) Req-NF- 1731 In the event of a problem with an individual EIU, the Supplier shall repair or replace the equipment and restore the Service within 12 hours.

Based on the Authority's required MTTR figure of 12 hours Mean Time To Repair and current MTBF figures, the Charging Station A_o figure will be updated to reflect a target of 99% availability by FOC. Note that this includes provision for Bureau equipment dedicated to Livescan and that Central equipment availability is measured separately in the Operational SLR, Schedule F Part 2. The table at Figure 2.1-3 above will be replaced by that at Figure 2.1-4 below.

Charging Station A_o	SCORE	Charging Station A_o	SCORE	Charging Station A_o	SCORE
99.0%	100	88%	89	77%	74
98%	99	87%	88	76%	71
97%	98	86%	87	75%	68
96%	97	85%	86	74%	65
95%	96	84%	85	73%	62
94%	95	83%	84	72%	59
93%	94	82%	83	71%	56
92%	93	81%	82	70%	53
91%	92	80%	81	69%	50
90%	91	79%	78		
89%	90	78%	77		

Figure 2.1-4 Charging Station Ao Scoring Table at FOC

To support the goal of minimising planned downtime in addition to unplanned downtime, separate metrics will be defined, agreed with the Authority and evaluated as shadow metrics prior to the FOC. These metrics will have target values derived from the DOR requirements of total planned downtime of 4 hours in a rolling 4 week window, and maximum permissible planned downtime for elements of IDENT1 critical to the EIU Identity Check capability of 2 hours. If supported by the evaluation results, it is envisioned that these metrics will be implemented per the SLR change process defined in Schedule F Part 1. The recommended weighting structure incorporating the planned downtime metrics is shown in Figure 2.1-5.

Availability Service Metrics and Weights (Total weight assigned to these criteria = 90%, per Figure 3.2-1)	
Operational Availability Charging Station A_0	Planned Downtime
65%	25%

Figure 2.1-5 - Proposed Weights for Availability and Planned Downtime

In addition to the above changes, at intermediate milestones prior to the FOC, i.e., when the Scottish Livescan Units become operational, availability will be measured and scored for these in a similar manner to existing Livescan Units using the then applicable metrics and scoring tables.

2.2 Throughput

IDENT1 throughput is the number of transactions of a given type processed per month. IDENT1 manages Livescan submission transactions much as it manages inputs received by scanning with a ten print or mark scanner at a bureau. Once a Livescan submission reaches the local IDENT1 Bureau, it enters the bureau's workflow and its processing is distinguishable only by its unique Form Identification Number (FIN). Measurements gathered and reported under the umbrella of the *IDENT1 Operational SLR (Schedule F Part 2)* inherently include Livescan ten print submission data. As such, separate throughput measurements for Livescan transactions are not required in this Livescan SLR (Schedule F Part 3).

2.3 System Response Time Performance

At the bureau level, measures of system response time for Livescan submissions are the same as for other transactions. Livescan processing simply replaces scanning of paper fingerprint forms at the bureau with remote scanning at Livescan workstations, which does not affect existing throughput measurements. These measurements are based on the time from bureau search submission to the central site until responses are received at the bureau. Livescan transactions are automatically submitted to central for search shortly after receipt at the bureau. (The sole exception is that ten print transactions may first go to check prints if quality is poor.) They appear in the SLR report identically to other transactions. The SLR reports the percentage of searches that meet throughput requirements as delivered to each Police Force, measured at the Bureau Segment.

For Live ID, when the custody personnel are attempting to identify an unknown person, end-to-end response time is not completely addressed by the *IDENT1 Operational SLR* (Schedule F Part 2) alone. That SLR does not include communications times between the Livescan workstation and the bureau. Thus end-to-end response time for Live ID is greater than the *IDENT1 Operational SLR* time. The end-to-end response time for Live ID starts when a custody station first transmits a transaction, and ends when it receives the response. The following end-to-end response times exclude time spent waiting for Fingerprint Officer (FPO) actions.

(a) For verified Live ID transactions without a quoted CRO number, the end-to-end response time for ninety percent (90%) of all transactions will be 35 minutes or less, exclusive of time for queuing and processing by one or more FPOs.

(b) For non-verified Live ID transactions the end-to-end response time for ninety percent (90%) of all transactions will be 35 minutes or less.

(c) For transactions with a quoted CRO number, the end-to-end response time for ninety percent (90%) of all transactions will be 20 minutes or less, exclusive of time for queuing and processing by one or more FPOs. All Livescan transactions for which a CRO number is included require FPO verification.

The ability to comply with these response times is dependent on the Police Force transmitting transactions as the capture of demographic and fingerprint data for individuals being fingerprinted is completed. That is, due to network bandwidth considerations, the Contractor does not guarantee compliance with this requirement if the Police Force opts to capture demographic data and fingerprint data for four or more individuals being fingerprinted, and to then transmit these transactions at once. To meet this requirement, transactions must be separated sufficiently in time so that the communications link is not occupied with a previous transmission. Live ID transmissions of single transactions must be submitted at least 30 seconds apart. Livescan transmissions of groups must be separated by at least 5 minutes per transaction in the previous group.

System performance may be influenced by a number of factors as described in the *IDENT1 Operational SLR (Schedule F Part 2)*.

In the event that the Police Force believes that this requirement is not being met, the Police Force and the Contractor will jointly conduct an audit of end-to-end response times by measuring at least thirty new operational Live-ID transactions selected from the normal workload at a single Custody Station. Both the selection of the Custody Station and the schedule of the audit will be as mutually agreed upon by the Police Force and the Contractor.

In the event that the audit demonstrates that the requirement is not being met, the Police Force and Contractor will develop a mutually agreeable course of corrective action.

2.3.1 Future Changes for System Response Time Performance

There are two changes for the response time service level criteria after TOR. First, to provide incremental improvements, faster target response times for all search type are planned for FOC. These 90 percentile target values are derived from the DOR and summarised in Figure 2.3-1.

Search Type	Target Response Time (Minutes) at FOC, measured exclusive of operator or operator-queue times
Verified Live ID without Quoted CRO	10
Non-verified Live ID	2
Quoted CRO	10

Figure 2.3-1 Target Response Times at FOC

Secondly, to complement the 90 percentile response time metrics, target values for average and 99 percentile response times will be published. It is envisioned the average response time will be implemented prior to FOC while the 99 percentile response time is a candidate for post-FOC implementation.

2.4 Technical Support Service

Livescan users are provided the same levels of technical support as described in the *IDENT1 Operational SLR (Schedule F Part 2)*. Technical Support Service is measured in terms of response time for trouble calls made to the Help Desk. Response time is defined as the Contractor's level of responsiveness to any Bureau and Custody Site incident.

Technical Support Service will be measured in terms of response time for trouble calls made to the Help Desk. Response time is defined as the Contractor's level of responsiveness to any Bureau or Charging Station incident, see Figure 2.4-1 for the definition of each response level.

Response Level	Title	Description
1	Receive incident call	Answer the incoming call at the Help Desk and resolve or escalate.
2	Respond with Status Update	Resolve incident over the phone or escalate to next level.
3	Restore service to faulty item	Site support sent to correct incident and/or restore service to sufficient IDENT1 functional and performance capability to process their normal workload within the measures defined within this *SLR*. Note: For IDENT1 Livescan, *Restore Service to a Faulty Item* is not scored separately as it is included in the scoring for Availability.
4	Global Changes	Deploy hardware or software fixes to site to restore Livescan operational functionality. This response level is not applicable to all incidents, but only those incidents which cause a loss of Livescan Services as defined in Section 2 of this *SLR*. Note: For IDENT1 Livescan, *Global Changes* is not scored separately as it is included in the scoring for Availability.

Figure 2.4-1. Definition of Response Levels

Response Level	Target Response Time
1 - Receive incident call	1 Minute
2 - Respond with Status Update	30 Minutes
3 - Restore Service to Faulty Item	N/A
4 - Global Changes	N/A

Figure 2.4-2. Target Livescan Response Times

Restoration of Service is defined as restoration of sufficient Livescan functional capability to enable the Police Force to process its normal workload within the measures defined within this *SLR*. This will be agreed between the Help Desk and the Police Force. Technical Support Service will be measured with respect to response times for each applicable Response Level to trouble calls as defined in Figure 2.4-2.

Once the response time for each level is computed, a SCORE can be calculated for each response level. This score is calculated on a monthly basis and is illustrated in Section 2.4.1 through 2.4.2. The scores for each applicable Response Level will be used to calculate the Operational Service Score described in Section 3.2 below.

2.4.1 Receive Incident Call

The first level of maintenance response is provided by the Help Desk which is located at the IDENT1 Central Site. For any Bureau question or maintenance problem that is beyond user's level of expertise, an incident call, which can originate as a telephone call, electronic mail, or FAX, will be placed to the Help Desk. Each IDENT1 Site is provided a Problem Reporting Checklist developed for IDENT1 operations which is defined in the *IDENT1 Maintenance Plan*. This Problem Report Checklist includes the required information needed by the Help Desk to assess the Incident's severity.

To compute a measure for Incident Calls the following equation and steps will be used:

Equation. 1: $$\text{Receive Incident Call} = \left(\frac{\text{Number of Calls Responded to in 1 min}}{\text{Number of Incident calls received}} \right) \times 100$$

where

(a) The *Number of Incident Calls Responded to in 1 minute* is defined as the Help Desk's answering any incoming incident calls within 1 minute.

(b) The denominator of the equation is the total *Number of Incident Calls received* at the Help Desk.

The *Receive Incident Call* measure value will be computed using Equation 1.

Once the value has been computed, a SCORE will be selected from the Scoring Table presented as Figure 2.4-3

In the event that no applicable incident calls are made to the Help Desk in the reporting period, a fixed SCORE of 100 shall be applied.

Receive Incident Call	SCORE	Receive Incident Call	SCORE	Receive Incident Call	SCORE
=>90	100	=>75 and <80	85	=>60 and <65	70
=>85 and <90	95	=>70 and <75	80	=>55 and <60	65
=>80 and <85	90	=>65 and < 70	75	<55	60

Figure 2.4-3. Receive Incident Call Scoring Table

Once a SCORE has been selected, it will be applied to the Operational Service Score calculation as described in Section 3.2

2.4.2 Respond With Status Update

Once the Incident call details are entered into the Help Desk Management System, the Help Desk Operator, will then try to either resolve the incident call or escalate the incident as follow:

(a) Provide telephone support using a series of scripts residing within the Help Desk Management System. If telephone support provides a solution for the Incident, and the originator concurs with the corrective action, the status information will be logged within the Help Desk Management System, and the incident report closed.

(b) If telephone support does not provide a satisfactorily resolution, the Help Desk Operator will then prioritise and categorise the incident, and pass the incident on to the most appropriate third party provider in accordance with the Operations and Maintenance Support Plan as set out in Schedule O:58. The Help Desk Operator will then provide a status update to the originator as to what the next step is in correcting the incident.

(c) Non-fault calls (Fault Severity Level 0). If the Help Desk Operator is unable to resolve a Non-fault call over the telephone, the call will be escalated within the Contractor or Police Force service organisation, as appropriate, to be dealt with - and a status update provided to the originator. This will represent close-out of the call as far as the *SLR* is concerned. It will be for the person to whom the call is escalated to respond to the originator and/or agree a suitable response time - although the Help Desk will continue to track the call until resolved.

In computing a value for the respond with status update measure the following equation and steps will be used:

Equation2:

$$\text{Respond with Status Update} = \left(\frac{\{(\text{Number Resolved x } 1.1) + \text{Number statused}\}}{\text{Number of Incident calls}} \right) \times 100$$

where

(a) The *Number of Incident Calls resolved* and the *Number of Incident Calls escalated and statused* is defined as the Help Desk either resolving the incident or escalating the incident and providing the Bureau updated status within 30 minutes. Calls that are resolved within 30 minutes are awarded a premium by multiplying the *Number resolved* by 1.1

(b) The denominator of the equation is the total *Number of Incident Calls received* at the Help Desk.

The *Respond with status update* measure will be computed using Equation 2.

Once a value has been computed, a SCORE will be selected from the Scoring Table presented as Figure 2.4-4. In the event that no applicable status updates are required by the Help Desk in the reporting period, a fixed SCORE of 100 shall be applied.

Receive Incident Call	SCORE	Receive Incident Call	SCORE	Receive Incident Call	SCORE
=>90	100	=>75 and <80	85	=>60 and <65	70
=>85 and <90	95	=>70 and <75	80	=>55 and <60	65
=>80 and <85	90	=>65 and < 70	75	<55	60

Figure 2.4-4. Respond with Status Update Scoring Table

Once a SCORE has been selected, it will be applied to the Operational Service Score calculation as described in Section 3.2

2.4.3 Restore Service to Faulty Item

For IDENT1 Livescan, *Restore Service to a Faulty Item* is not scored separately as it is included in the score calculation for Availability.

2.4.4 Global Changes

For Livescan Services, *Global Changes* are not scored separately as they are included in the score calculation for Availability.

3 SCORING

3.1 Livescan Service Score

This section details the presentation of scores associated with the *Livescan SLR*.

3.2 Operational Service Score

The Operational Service Score for each Livescan is obtained by multiplying the *Receive Incident Call Score* (Section 2.4.1), the *Respond with Status Update Score* (Section 2.4.2), and *the Operational Availability Score* (Section 2.1) each by their respective Weights, then summing the results. This score is used to calculate adjustments to the Livescan monthly service charge.

Measure	SCORE	WEIGHT	OVERALL SCORE
Receive Incident Call Score		5%	
Respond with Status Update Score		5%	
Operational Availability **(A_o) Score**		90%	
Operational Service Score		TOTAL	

Figure 3.2-1. Operational Service Score

The Measures and Score for each Service Level Metric and the Operational Service Scores will be presented for all Livescan Units. The reporting for all Livescan Units in Scotland will be reported in a single report for the Authority and the Scottish Fingerprint Service. The reporting of Livescan Units for England and Wales will be presented individually to each Police Force as the contracting party and copied to the Authority.

Service Charge adjustments, if applicable, for Scottish Livescan that are included in the Monthly Baseline Charges are detailed in Schedule E (**Pricing**) and will be adjusted based on the Operational Service Score. Service Charge adjustments, if applicable, for Livescan Units provided under Optional Services will be adjusted based on the Operational Service Score and a monthly Service Credit will be applied on a quarterly basis to the monthly invoice. The monthly Service Credit amount is derived in accordance with Clause 8.4.2 of Schedule E (**Pricing**).