



Systems Delivery and Project Portfolio Management (SDPPM)

EFCD RFSO

ANNEX F TO APPENDIX A: LIVESCAN INTERFACE SPECIFICATION

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CONTENTS

1. INTRODUCTION1

1.1 PURPOSE1

1.2 SCOPE1

1.3 AUDIENCE1

1.4 RELEVANT AND REFERENCE DOCUMENTS1

2. BACKGROUND2

2.1 OVERVIEW2

3. LIVESCAN TO RCMP/GC/CPMG DEPARTMENT/AGENCY SYSTEM INTERFACE3

3.1 OVERVIEW3

3.2 LIVESCAN TO DEPARTMENT/AGENCY DETAILED INTERFACE SPECIFICATION4

3.2.1 RETRIEVE BIOGRAPHICAL DATA4

3.2.2 ERROR HANDLING7

FIGURES

FIGURE 3-1: LIVESCAN TO RCMP/GC/CPMG DEPARTMENT/AGENCY INTERFACE3

TABLES

TABLE 2-1: LIS AUTO POPULATE DATA FIELDS2

1. INTRODUCTION

1.1 PURPOSE

1. The purpose of this document is to detail the Livescan Interface Specification (LIS) to enable the automatic population of biographical data fields transferred from an RCMP/GC/CPMG department/agency system (e.g., CBSA's GCMS (Global Case Management System)) to a Livescan device. This will eliminate the time and effort to duplicate common data entry in two (2) systems and reduce errors resulting from the capture of inconsistent information in each system. (I)

1.2 SCOPE

1. This document describes the interface specifications that must be adhered to by the NMSO Vendor to enable the effective and efficient communication between the Livescan and the RCMP/GC/CPMG department/agency system. (M)
2. Any Vendor recommended improvements are expected to be discussed and resolved after contract award. RCMP has the sole responsibility to determine if any changes will be accepted. (I)

1.3 AUDIENCE

1. This document is intended for NMSO Vendor(s) and RCMP/GC/CPMG department/agency. (I)

1.4 RELEVANT AND REFERENCE DOCUMENTS

1. The requirements stated throughout the SOR and its accompanying documents describe the functional requirements associated with the LIS. (I)
2. This LIS document is focused on the technical requirements that need be satisfied to support the interface between the Livescan and the RCMP/GC/CPMG department/agency system. (I)

2. BACKGROUND

2.1 OVERVIEW

1. The LIS will allow the Livescan to support the timely retrieval of data fields required for Livescan Transactions (e.g. CARN, CARY, REF, IMM) from an RCMP/GC/CPMG department/agency system and then auto populate the data into the RCMP ICD compliant data fields in the transaction. (I)
2. The data that must be supported by the LIS includes the following in Table 2-1: LIS Auto Populate Data Fields. (M)
3. Refer to ICD 1.7.8 Rev 1.6 for data character type, field size, number of occurrences and any special character considerations that must be supported. (M)

Table 2-1: LIS Auto Populate Data Fields	
Data Element	Notes
Name	Includes Surname and zero (0) to four (4) Given Names in specific fields
Alias Name	Can include Surname and zero (0) to four (4) Given Names in an array list
DOB	
Country of Birth Code	
Sex	
Eye Color	
Height	
Weight	

3. LIVESCAN TO RCMP/GC/CPMG DEPARTMENT/AGENCY SYSTEM INTERFACE

3.1 OVERVIEW

1. The interface between the Livescan and the RCMP/GC/CPMG department/agency system will use RESTful web services over the HTTP or HTTPS protocol as GET requests. RESTful web services allow requesting systems to access textual representations of web resources using a uniform and predefined set of stateless operations. Requests made to a resource's URI will elicit a response in a JSON format. RCMP/GC/CPMG department/agency system responses will be compliant with the JSON response schema specified in this document. (I)
2. The following diagram depicts a high level conceptual view of the interface specification for the Livescan to RCMP/GC/CPMG department/agency system that the Livescan must support. The diagram depicts HTTP and the associated text below states HTTP; however, the interface must also support HTTPS to enable communication through either HTTP or HTTPS, as required. (M)



Figure 3-1: Livescan To RCMP/GC/CPMG Department/Agency Interface

3.2 LIVESCAN TO DEPARTMENT/AGENCY DETAILED INTERFACE SPECIFICATION

1. The following subsections provide the detailed specifications for the HTTP GET requests and corresponding response that must be supported by the Livescan application. (M)
2. These details are meant to provide sufficient information to ensure Livescan Vendors can complete their development. (I)
3. These details are not intended to describe the complete sequence of TCP/IP and HTTP interaction, instead only the key details that affect the interface specification are provided. There is an expectation that the Livescan Vendors are well versed in these protocols. (I)
4. The RCMP/GC/CPMG department/agency system will respond with an HTTP error for any submitted requests where the associated response cannot be returned. The HTTP errors that could be returned include only errors currently defined for the HTTP protocol (e.g. "HTTP/1.1 404 Not Found"). (I)
5. References to the ICD 1.7.8 Rev 1.6 fields have been included for both request parameters and response elements where applicable. (I)

3.2.1 RETRIEVE BIOGRAPHICAL DATA

Request Name: Retrieve Biographical Data by ID
Response Details: If there is no record found, an empty list must be returned.
Request Method: GET
Request URL: http://[SERVER]/Livescan/getBiodata?id=[parameter]
Parameter Name / Type / ICD Data Reference: id / ANS (mandatory) / examples (CBSA Tag 2.888, RCMP tag 2.801)
Response Data Mapping to ICD Data: Id - Tag 2.888 / Tag 2.801 surname + givennames – Tag 2.806 aliaslist (list of alias surnames + givennames) – Tag 2.824 dob – Tag 2.8022 cob – Tag 2.8935 sex – Tag 2.807 eyecolor (list of eyecolors) – Tag 2.809 height – Tag 2.810 weight – Tag 2.811
Content-Type: application/json; charset=UTF-8
JSON Response Schema: <pre>{ "\$schema": "http://json-schema.org/draft-04/schema#", "title": "Livescan Biodata", "type": "object", "properties": { "Id": { "description": "Individual Unique ID", "type": "string" } } }</pre>

```
"surname": {
  "description": "Surname",
  "type": "string"
},
"g1name": {
  "description": "Given Name 1",
  "type": "string"
},
"g2name": {
  "description": "Given Name 2",
  "type": "string"
},
"g3name": {
  "description": "Given Name 3",
  "type": "string"
},
"g4name": {
  "description": "Given Name 4",
  "type": "string"
},
"aliaslist": {
  "title": "aliasresponselist",
  "type": "array",
  "items": {
    "title": "alias",
    "type": "object",
    "properties": {
      "aliassurname": {
        "description": "Alias Surname",
        "type": "string"
      },
      "aliasg1name": {
        "description": "Alias Given Name 1",
        "type": "string"
      },
      "aliasg2name": {
        "description": "Alias Given Name 2",
        "type": "string"
      },
      "aliasg3name": {
        "description": "Alias Given Name 3",
        "type": "string"
      },
      "aliasg4name": {
        "description": "Alias Given Name 4",
        "type": "string"
      }
    }
  }
},
"dob": {
```

```

        "description": "Date of Birth",
        "type": "string"
    },
    "cob": {
        "description": "Country of Birth",
        "type": "string"
    },
    "sex": {
        "description": "Sex",
        "type": "string"
    },
    "eyecolor": {
        "title": "eyecolor",
        "type": "object",
        "properties": {
            "colorcode1": {
                "description": "code",
                "type": "string"
            },
            "colorcode2": {
                "description": "code",
                "type": "string"
            }
        }
    },
    "height": {
        "description": "Height",
        "type": "integer"
    },
    "weight": {
        "description": "Weight",
        "type": "integer"
    }
}

```

Response Example:

```

{
    "Id":1,
    "surname":"Public",
    "g1name":"Joe",
    "aliaslist":[
        {"aliassurname":"Public1","aliasg1name":"Joe","aliasg2name ":"Joey"},
        {"aliassurname":"Public2","aliasg1name":"Joseph"}
    ],
    "dob":"20001117",
    "cob":"Sweden",
    "sex":"M",
    "eyecolor":"A",
    "height":125,
    "weight":60
}

```

3.2.2 ERROR HANDLING

Description: The following schema is used to return error related information when error conditions are encountered (e.g. business level errors).

Content-Type: application/json; charset=UTF-8

Response JSON Schema:

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "title": "Error",
  "type": "object",
  "properties": {
    "errorCode": {
      "description": "code",
      "type": "integer"
    },
    "errorDescription": {
      "description": "description",
      "type": "string"
    }
  }
}
```

Response Example:

```
{
  "errorCode":1,
  "errorDescription":"The details of the error that has occurred."
}
```