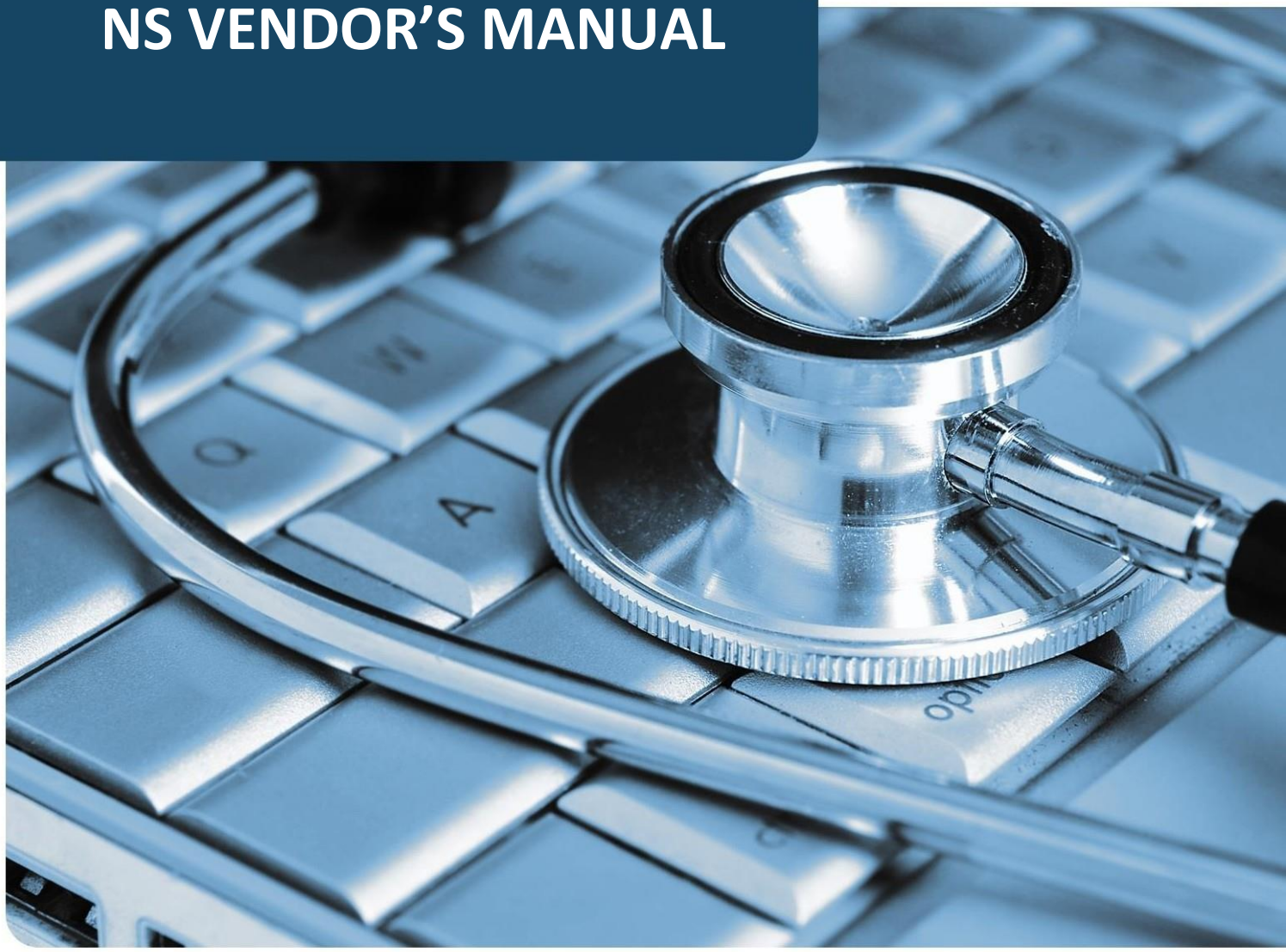
NS VENDOR'S MANUAL



Version 3.0

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REVISION HISTORY

Date	Version	Description
June 29, 2018	1.0	Initial version
October 22, 2018	2.0	1. Web link to current version of Vendor's Manual added to Section 1, p.1 2. Addition to MSIeLink Client Installation, Section 3.1, p.6 3. Updates to Quick Reference Guide, Section 3.2, p.7 4. Notes updated, Section 3.3.1, p.9 5. Change in number of claims per submission processed by host, Section 3.3.3, p.9 6. Update to Change Password steps, Section 3.3.7, p.11 7. Subsection 2.3.1 replaced with Submission Troubleshooting, Section 3.7, p.18 8. Format clarification to Provider Software Version field on the batch header record, Section 4.2.1, p.19 9. Format correction to Modified Date field on the Service Description vendor file (SERV_DSC.DAT), Section 6, p.47
June 27, 2019	2.0	External Claim Number (250-254) and Date of Injury (262-267) fields added to Record Sub-Type: CBE1, Section 4, p.29
October 31, 2024	3.0	Modify to support new transaction version

CONTENTS

SECTION 1: GENERAL CONSIDERATIONS

Orientation

The NS Vendor's Manual provides the NS MSI electronic claim submission accreditation requirements and associated technical specifications. The manual consists of the following sections:

- Section 1: General Considerations
- Section 2: Billing Software Accreditation Requirements
- Section 3: MSIeLink Submitter Requirements
- Section 4: Service Encounter Transaction Standard
- Section 5: FFS Electronic Statement Specifications
- Section 6: Vendor File Record Layouts

Manual Updates

The NS Vendor's Manual is accessible at https://msi.medavie.bluecross.ca/other-links/. Medavie Blue Cross (MBC) will notify accredited vendors of any updates to the NS Vendor's Manual via email. Accredited vendors are responsible for ensuring that MBC has current contact info in order to receive these notifications.

Questions

Please do not hesitate to contact MBC for assistance if you have any questions regarding this manual. Email:

BC_MSIBusinessAnalysts@medavie.ca

Regular Business Hours Support: 902-496-7011 or toll-free 866-553-0585; Monday - Friday, 8:00am to 5:00pm

After Hours Vendor Technical Support (urgent issues only, e.g., significant batch processing errors): Leave message at 1-888-818-3030. Include detailed problem description, name and contact information. Reference MSI Claims Adjudication system to ensure message is routed to appropriate team.

Mailing Address:

Medicare Programs
Medavie Blue Cross
PO Box 2200
Halifax NS B3J 3C6

Physical Address:

230 Brownlow Avenue
Park Place V
Dartmouth NS

SECTION 2: BILLING SOFTWARE ACCREDITATION REQUIREMENTS

The purpose of this section is to outline the requirements that parties must meet to have their software products accredited to communicate electronic transactions to MBC's Claims Adjudication system. This section also outlines ongoing requirements that parties must follow in order to maintain their respective accreditation privileges.

2.1 DEFINITIONS

Submitter

A submitter is any organization or individual that wishes to send electronic transactions to MBC for claims processing. Examples of submitters are:

- Individual service provider or a group of service providers who provide and maintain their own electronic communications for the purpose of submitting electronic transactions to MBC.
- Service bureau that provides electronic communications services to one or more service providers for the purpose of submitting electronic transactions to MBC.

Vendor

A vendor is an organization or individual with an accredited software product to be used by a submitter to send electronic transactions to and download files from MBC. MBC maintains and publishes a list of vendors having an accredited software product.

Provider

A provider is any physician, optometrist or other health professional providing medical services under contract with MSI, WCB and/or Community Services.

MBC

Medavie Blue Cross administers insured programs on behalf of their clients, e.g., Nova Scotia Department of Health and Wellness (DHW), Workers' Compensation Board of Nova Scotia (WCB). For the purpose of electronic submission, MBC administers the vendor accreditation process.

2.2 ACCREDITATION

2.2.1 ACCREDITATION REQUIREMENTS: VENDOR

A vendor must adhere to the following:

1. If a software product that is to be used to communicate with a MBC host runs in a Windows environment, the software product must incorporate MSIeLink client communications software. If this environment requirement cannot be met, a vendor can develop communications software at their own expense. Communications software must be developed to specifications provided by MBC (see Appendix A, MSIeLink Communication Protocol Standard).

2. A vendor must ensure any personal health information related to claims submission stays within Canada.
3. A vendor must have their software product accredited through an accreditation testing process administered by MBC.
4. A vendor must notify MBC three months in advance of any changes to their accredited software that might impact the claims submission process. Reaccreditation may be necessary depending upon the nature of the changes.
5. Software products must support all mandatory transaction types defined by MBC before accreditation will be granted.
6. A vendor must make the biweekly electronic fee for service statements available to submitters utilizing their software product, in the format specified in Section 5.
7. A vendor must implement any vendor file updates provided by MBC on a timely basis.

2.2.2 Accreditation Requirements: Provider

A provider must complete and adhere to the following:

1. A provider may choose from any of the accredited software products for claims submission. Alternatively, a provider may choose to have a service bureau submit claims on their behalf.
2. Any costs associated with claims submission is the responsibility of the provider.

2.2.3 Accreditation Requirements: MBC

In the administration of the accreditation process, MBC will provide the following:

1. Maintain an accreditation process to accredit new software products and reaccredit existing products, as necessary.
2. Monitor submitter transmissions to ensure accreditation requirements are maintained.
3. Inform submitters and vendors of any operational changes or upgrades, providing sufficient lead-time for the submitters and vendors to react. In general, three months' notice will be provided. It is recognized that legislative changes may not always allow as much advance notice.
4. Provide adjudication responses, statement of account, and other responses as defined in Section 4, Service Encounter Transaction Standard to the submitter in the output format specified.
5. Provide an electronic file of the health service codes that can be submitted for payment and other relevant vendor files as available.
6. Provide on request, the health card number check digit formula.
7. Maintain confidentiality of technology information captured on the "Vendor Application for Software Accreditation" form.
8. Notify providers if a vendor's accreditation privileges are to be withdrawn.
9. Maintain and make available to providers a list of vendors with an accredited software package and a list of service bureaus.

2.2.4 ACCREDITATION REQUIREMENTS: SUBMITTER

Any organization or individual that wants to submit claims to MBC must contact Medicare Programs, MBC to obtain a Submitter ID. MBC will forward a submitter form to the submitter. The form will contain the Submitter ID to be used when submitting claims to MBC. To obtain and maintain submission status the submitter must:

1. Agree not to divulge, share, compromise or permit any use of the Submitter ID except for the purpose of claims submission and retrieval.
2. Acknowledge that any breach or non-compliance of any term may result in immediate and unconditional withdrawal of submitting privileges.

2.2.5 ACCREDITATION PROCESS

The accreditation process involves the following steps:

1. Vendor contacts Medicare Programs, MBC for information regarding the accreditation process.
2. MBC provides the vendor with a "Vendor Application for Software Accreditation" form, and the NS Vendor's Manual which includes documents related to accreditation requirements, the service encounter transaction standard, the fee for service electronic statement, and MSI eLink.
3. The vendor completes the application form and returns it to Medicare Programs, MBC.
4. MBC sends out a second package of vendor accreditation materials including the eLink communications software and an accreditation test package. A Test Submitter ID and Test Provider Software ID are also provided to enable a new vendor to perform the testing required to meet the accreditation requirements.
5. The vendor installs the eLink communications software on their PC and contacts MBC if there are any problems with this process.
6. The vendor notifies Medicare Programs, MBC when they are ready to begin testing.
7. MBC advises the vendor as to when MBC's test environment will be available to the vendor for testing.
8. The vendor performs their own system testing and upon successful completion the vendor notifies MBC that they are ready to schedule their accreditation test.
9. The accreditation test is performed either on-site at the MBC office or remotely via screen-sharing software.
10. MBC reviews the accreditation results and determines if the accreditation requirements have been met.
11. If the accreditation requirements are met, written confirmation is sent to the vendor indicating that their software product has been accredited. Confirmation will include the Provider Software ID to be used for claims submission. Accreditation is effective on the date written confirmation is issued.
12. MBC will monitor submissions to ensure accreditation requirements continue to be met. Failure to comply with accreditation requirements may result in termination of accredited status.

2.3 OPERATING PRINCIPLES

2.3.1 General Information

General operating principles that must be followed by respective parties:

1. MBC will provide vendors with the accreditation materials required for the accreditation process.
2. Any modifications or problems associated with accredited software or operating systems are the responsibility of the vendor and not the responsibility of MBC.
3. Operational changes incurred by the submitter, vendor or provider as a result of legislative or policy changes will be at no cost to MBC.
4. MBC will inform all submitters and vendors of any operational changes by electronic bulletin three months in advance whenever possible.
5. Submitters are encouraged to submit daily to ensure that their service encounters are processed in a timely manner.
6. Payments by MBC will be made in accordance with the banking information provided on the "MSI Provider Business Arrangement (BA) Form".
7. Any problems identified during daily operations by MBC will be brought to the attention of the vendor. Accreditation may be terminated if identified operational problems are not corrected.

2.3.2 Change Control Process

1. Any upgrades or changes in operation at MBC, having an impact on submitters and vendors, will be communicated in writing three months in advance whenever possible. Depending upon the circumstances, it is possible that legislative or policy changes affecting MBC, submitters and vendors may not allow 3 months advance notice of required changes.
2. The communication will include MBC's target implementation date, relevant time frames for vendors and submitters to comply with the changes and vendor reaccreditation requirements.
3. Accredited software vendors must provide MBC with three months written notification whenever their operation changes in areas that might impact the claim submission process. Normally reaccreditation will be required to ensure no problems are encountered.
4. The required testing and associated time frame will be determined by MBC.

2.3.3 Termination of Accreditation

MBC will terminate accreditation for any of the following reasons:

1. Requirements continually violated and/or identified operational problems not corrected.
2. Evidence of a breach of confidentiality.
3. Evidence of fraudulent collusion between vendor, submitter, and/or provider(s).

Written notification will be issued when terminating accreditation. Providers will also be notified.

SECTION 3: MSIELINK SUBMITTER REQUIREMENTS

MSIeLink is the Internet gateway to MBC for a range of network services related to claims processing. This gateway uses the internet and is accessed using industry standard secure communications using the HTTPS protocol. The present version of MSIeLink supports the following network services:

- Service encounter claims submission
- Service encounter adjudication results
- Statement text request
- Statement detail request
- Eligibility request
- File download

These network services represent the existing features. New services may be added to fulfill further functional requirements.

MSIeLink remote is the communications software that resides on the accredited submitter's computer. MSIeLink remote consists of a communications program "jar" file and a communications "ini" file. This software is used to initiate each of the described network services. For those submitters wishing to communicate, but do not wish to use the MSIeLink remote software, a customized communication script can be developed, at the submitter's expense, adhering to the communication protocol document enclosed as Appendix A. Since MSIeLink uses an industry standard protocol HTTPS, implementation of the simple protocol is possible using many different communications packages or scripting languages.

MSIeLink host is the communications interface to Network Services that resides at MBC's location.

There are two methods to communicate with the MSIeLink server:

- Use the reference MSIeLink Client implementation by invoking Java appropriately on the platform of choice.
- Build your own implementation according to the specifications in Appendix A.

3.1 MSIELINK CLIENT INSTALLATION

The MSIeLink Client installation is very simple. Merely unzip the provided MSIeLink.zip file into a directory (examples below will be based on unzipping files to c:\msielink) and ensure the following files are present:

- msielink.jar – the program
- MSILink.ini – sample initialization file
  set the values in the initialization files as described later in this document
- cacerts – keystore containing certificates to connect with the eLink server

Run the command 'java -jar msielink.jar -help' and you should see the usage output along with the MSIeLink Client Version.

3.2 MSIeLink Network Services - Quick Reference Guide

All MSIeLink network services must be executed using an input filename, an output filename, and a network service switch.

The general form of the command line is:

java -jar msielink.jar inputFile outputFile serviceType [-p password] [-i initializationFile] [-s statusFile] If the password is not provided, the user will be prompted to enter it.

If the initialization file is not provided, the program will default to looking for a 'MSILINK.INI' file in the current working directory.

If the status file is not provided, one will not be generated. If the status file is provided, it will contain a one line summary of the status of the request when MSIeLink has finished executing. See Section 3.2.1 for details.

The format and content of the one line summary are described below.

Network Service	Command Extension	Command Line Example
Service Encounter	/se	java -jar msielink.jar 'input file' 'output file' /se -p [password]
Eligibility Request	/er	java -jar msielink.jar 'input file' 'output file' /er -p [password]
Adjudication Response	/ar	java -jar msielink.jar 'input file' 'output file' /ar -p [password]
Statement Detail Request	/sr	java -jar msielink.jar 'input file' 'output file' /sr -p [password]
Statement Text Request	/st	java -jar msielink.jar 'input file' 'output file' /st -p [password]
File Download	/fd	java -jar msielink.jar 'input file' 'output file' /fd -p [password]

The MSIeLink input and output files contain the following data (refer to Section 4, Service Encounter Transaction Standard, for additional information).

Network Service	Input File	Output File
Service Encounter	Service encounter filename	Adjudication response output filename
Eligibility Request	Eligibility request transaction filename	Eligibility response

Network Service	Input File	Output File
Adjudication Response	Input file contains the submitter's prefix	Adjudication result output filename
Statement Text Request	Input file contains the submitter's prefix	Statement text output filename
Statement Detail Request	Input file contains the submitter's prefix	Statement detail output filename
File Download	Input file contains filename of file to be downloaded (example 'FACILITY.DAT')	Output filename for downloaded file

3.2.1 STATUS FILE DESCRIPTION

The status file is only produced if the '-s statusFile' command line option is used. The file specified will be created (overwritten if it already exists) when MSIeLink finishes executing.

Note that if command line parameters are not parsed successfully the status file will not be produced. The contents of the status file are a two digit code and a text message in the following form:

00 Operation successful

The possible codes, along with sample text descriptions for each code, are:

00 – success	Operation successful
01 – unknown error	Caught an unhandled throwable running MSIeLink
02 – error that is repeatable (don't retry)	Unknown service type: Invalid inFile: Invalid outFile Invalid fileType: Invalid summaryFile: inFile and outFile are identical:
03 – error this is inconsistent (retry if desired)	Error reading properties file Error entering password inFile being used by another instance: outFile being used by another instance tempFilebeing used by another instance logFile being used by another instance: summaryFile being used by another instance: Setup failed Processing failed: Error renaming X to Y

3.3 MSIeLink Network Services

3.3.1 Service Encounter

Service Encounter refers to the specification pertaining to:

Base claim segments;
Person data segments;
Text segments; and
Text cross reference segments

These segment types, and all the associated action codes (add, reassess, delete), can be submitted to MBC, through MSIeLink, under the service type of Medical Claims Submission. These service encounters are used for all fee for service claims currently submitted to MBC.

The prerequisite to using MSIeLink is that all claims are prepared in the format and specification as defined by MBC in Section 4 (Service Encounter Transaction Standard), including the batch header and trailer.

The submission of claims through MSIeLink is a batch process that can be activated at any time by the submitter. When submitting claims via MSIeLink, the adjudication response process is automated and returns an immediate response/result to the submitted claim(s). This response file will indicate the claim acceptance or rejection status and the adjudication response.

> ***Note:*** MSIeLink will not reject the entire batch based on one or more individual claim errors. If the batch status is accepted (ACPT or HDPR), only those rejected claims within the batch need to be resubmitted. If the batch is not accepted, then the cause of the error must be fixed, and the entire batch must be resubmitted using a new batch number. The batch status indicates the type of error.

3.3.2 Eligibility Request

This transaction type is to be used when requesting the eligibility status of a Nova Scotia resident. The input file, as per the input claim format specification, will be assessed against the Individual Registry to determine the person's eligibility status.

3.3.3 Adjudication Response

The adjudication response is the on-line response to the service encounter transaction type. In most cases, the adjudication response will be packaged as the output file to a service encounter. However, this packaging of service types may be time consuming (waiting while host processes more than 1,000 claims per submission). Therefore, the adjudication response can be accessed as a separate service type, should the submitter choose to do so.

The adjudication response will display acceptance and rejection of service encounters and the adjudication results. The actual adjudication response format is contained in Section 4.1 (Service Encounter Transaction Standard, Record Formats)

3.3.4 Statement Text Request

The Statement Text Request (ST) service type is used to download statement information from the MSIeLink host. Statement requests will be appended to one another on the MSIeLink host if they are not retrieved. When requesting this service type, the user will be supplied with any and all statement files that are available. New statement data is appended to the bottom of the file, therefore, the most recent data will be at the end of the file.

3.3.5 Statement Detail Request

The Statement Detail Request (SR) service type is used to download statement information from the MSIeLink host. Statement requests will be appended to one another on the MSIeLink host if they are not retrieved. When requesting this service type, the user will be supplied with any and all statement files that are available. New statement data is appended to the bottom of the file. Therefore, the most recent data will be at the end of the file.

3.3.6 File Download

The File Download service type can be used to retrieve any of the available files from the MSIeLink host. These files include tables and lists, the MSIeLink executable and user documentation, and bulletins or notices. To keep up to date as to which files are available for download, an index of downloadable files can also be retrieved. Potential download files available may include:

Download Filename	File Description
INDEX.TXT	An ASCII text file containing a list of all files available for download.
INDEX.DAT	An ASCII text file containing a list of all files available for download.
FACILITY.DAT	List of valid facility codes.
MODVALS.DAT	List of fee modifier codes.
MOD_TYPE.DAT	List of modifier type codes.
PROGRAM.DAT	List of health programs.
PROVIDER.DAT	List of Service Providers.
SERVICES.DAT	Health procedures list.
UNQNUSER.DAT	Health procedures list with numeric identifier.
UPUQNUSE.DAT	Health procedures update list.
SPECLTY.DAT	List of health specialty codes
BULLETIN.TXT	Any current bulletin(s) available for download in ASCII text format.
SERV_DSC.DAT	Health procedure description list.
DIAG_INJ.DAT	Diagnostic Injury list
DIAG_CD.DAT	Diagnostic code list
EXPLAIN.DAT	Explanation code list

3.3.7 CHANGE PASSWORD

A submitter can logon to MSIeLink directly to change their password. The steps are as follows:

1. Use your preferred browser to navigate to https://www.MSIeLink.ca.
2. Login using your Submitter ID (3 letters) as the User ID and your current password.
3. Select "Change Password" from the Services Tab.
4. Using your current password, create a new password. The new password requirements are:
    - New password is not to match the current password.
    - Minimum password length is 14 and maximum length is 20.
    - Must contain at least 1 lowercase character, at least 1 uppercase character, at least 1 number, and at least 1 special character.
5. Save the new password by selecting the **Change Password** button.

Note: The new password will not have an expiry date and can be changed whenever you choose, but you need to know your current password to change it to a new complex password.

3.4 TRANSMIT FILE FORMATS

This section will describe the record formats of the service request files and include the record layout specifications that are required by the MSIeLink host.

This is the file format that the accredited submitter MUST comply with when submitting to MBC directly and requesting services from the MSIeLink system.

3.4.1 REQUEST FILE FORMAT OVERVIEW

A request file contains ASCII text specifically related to the service being requested. A request file must be supplied for every service request. For each service request, the request file contains:

Service encounter information;

- Service encounter batch data

Eligibility Request;

- Eligibility request batch data

Adjudication Responses;

- Submitter prefix

Statement text requests;

- Submitter prefix

Statement detail requests;

- Submitter prefix

File download request;

- File name to download

3.4.2 RESPONSE FILE FORMAT OVERVIEW

The response file usually contains ASCII text specifically related to the service being requested. The exception to the ASCII text is when downloading a binary file. A response file is returned for each service request. For each service, the response file contains:

Service encounter information;
- Adjudication response batch data

Eligibility Request;
- Eligibility response batch data

Adjudication Responses;
- Adjudication response batch data

Statement text requests;
- Statement texts

Statement detail requests;
- Statement details

File download request;
- File specified

3.4.3 SERVICE TYPES FILE FORMAT

The following is a description of the user data block associated with each of the service types identified when used in conjunction with the MSIeLink remote site software.

3.4.3.1 SERVICE ENCOUNTER

Service Type: '/se' Service Encounter Submission

Example: java -jar msielink.jar CLAIMS.IN CLAIMS.OUT /se

This request file example (CLAIMS.IN) contains one or many records for submission to MBC. CLAIMS.OUT is where the adjudication results are placed. /se is the MSIeLink command line option which identifies the service type.

The format of the data is as specified in Section 4.2.2.1 (Service Encounter Transaction Standard, Service Encounter Transaction):

CBE1	-	In province Service Provider Base Claim segment (1 only) for CCP/ICD-9
CPD1	-	Claim Person Data segments (1 only)
CST1	-	Claim Supporting Text segments (up to 100)
CTX1	-	Claim Supporting Text Cross-reference segment (only 1 if required)

In response to a service encounter, the MSIeLink host will return an Adjudication Response file.

3.4.3.2 ELIGIBILITY REQUEST

Service Type: '/er' Eligibility Request

Example: java -jar msielink.jar ER.IN ER.OUT /er

In response to an '/er' service type the MSIeLink host will respond with the eligibility status of the individual(s).

The layout of the input file (ER.IN) can be found in Section 4.2.2.2 (Service Encounter Transaction Standard, Eligibility Request).

3.4.3.3 ADJUDICATION RESPONSE

Service Type : '/ar' Adjudication Response

Example: java -jar msielink.jar AR.IN AR.OUT /ar

In response to a type '/se' (MSIeLink service encounter), the MSIeLink host will process, generate, and return a response file defined as the MSIeLink Adjudication Response. If the user wishes (large submitters) this automated process can be de-coupled through the MSIeLink Initialization file and retrieve the Adjudication Response as a separate process (user does not tie up the internet connection waiting when submitting service encounters, but connects again later to retrieve the adjudication responses).

The AR.IN file will contain the Submitter's Prefix code.

The Adjudication Response file can be programmatically read to see if there are any batch or claim errors. If there are any claim errors, the submitter need only correct and resubmit the bad claims with a new claim number (only claims with an A action code need a new claim number upon resubmission) and batch number.

The Adjudication Response will be appended to the Submitter's adjudication file if it has not been previously retrieved. The most recent file being appended to the end of the file.

3.4.3.4 STATEMENT TEXT REQUEST

Service Type: '/st' Statement Request

Example: java -jar msielink.jar STATEMENT.IN STATEMENT.OUT /st

The statement text request information is retrieved on a PER SUBMITTER basis. Note that **all** outstanding statement information will be downloaded upon request (the MSIeLink system will concatenate outstanding statement texts). Once downloaded, the information is flagged as such, and will not be downloaded again except by special request to MBC.

The STATEMENT.IN file will contain Submitter's Prefix

In response to a statement text request, the MSIeLink Host will return either a statement text file, or an error message file indicating no data to retrieve. The statement text request record layout is specified in the specification document.

3.4.3.5 STATEMENT DETAIL REQUEST

Service Type : '/sr' Statement Request

Example: java -jar msielink.jar STATEMENT.IN STATEMENT.OUT /sr

The statement detail request information is retrieved on a PER SUBMITTER basis. Note that **all** outstanding statement detail information will be downloaded upon request (the MSIeLink system will concatenate outstanding statement details). Once downloaded, the information is flagged as such, and will not be downloaded again except by special request to MBC.

The STATEMENT.IN file will contain Submitter's Prefix

In response to a statement detail request, the MSIeLink Host will return either a statement detail file, or an error message file indicating no data to retrieve. The statement detail request record layout is specified in the specification document.

3.4.3.6 FILE DOWNLOAD

Service Type: '/fd' File Download

Example: java -jar msielink.jar FILE.IN FILE.OUT /fd

The file download request file (FILE.IN) for this service type contains the name of the file to be downloaded in DOS 8.3 filename. The response file (FILE.OUT) contains the downloaded file. Only one file may be downloaded at a time.

See Section 3.6 for a list of files that are available for download.

Note that the filename specified does not contain any path information. The MSIeLink system is configured to download the correct file from a pre-defined path.

In response to a file download request, the MSIeLink Host will return either the requested file, or an error message if the file does not exist.

3.4.3.7 ERROR MESSAGES

Service Type : '999' - Error Message

If there is an error in the input file received from the site, the MSIeLink host will return a response file containing the error message. The error message contains a header and trailer record, with the error message being the contents of the file between the header and trailer.

Note that specific data in the header and trailer records will be filled with asterisks. The format of the error message is as follows:

Error Messages

Sample Error Messages are listed here. Note that these are not the same as the response codes for MSIeLink.

****Missing Batch Header [Check Claim File]

****No Adjudication Response Found

****Invalid Service Type

****No Statement Request Found

****Missing Batch Header

****Download File Not Found

3.5 MSIeLink Initialization File

The MSIeLink initialization file format and label/value pairs are designed to follow as closely as possible the existing MSILink initialization file format. Label/values used by MSILink are not required by MSIeLink and are ignored. Several additional label/value pairs have been introduced.

The general syntax and formatting rules for the MSIeLink initialization file are as follows:

Field Value = Field Data Pairs:

The basic syntax of a line is:

FieldLabel = Field Data

Field Labels:

Field labels start in the first column and ARE case sensitive.

Field Data:

Field data begins with the first non-white space character following the equals sign.

All field data items are mandatory (NO field data items can be blank, or contain a value of '0'). If no value is available, place an asterisk '*' for character fields, and a '1' for numeric fields.

Field data IS CASE SENSITIVE.

Comment Lines:

Any line that begins with a semicolon character in the first column is considered a comment line and is ignored.

White Space:

White space is considered to be tab characters and spaces. White space can NOT precede a label (labels must begin in the first column). White space can precede the equals sign. White space can follow the equals sign. White space can be included in the data field, but is restricted to spaces, no TAB characters. White space should NOT follow the data field because it may inadvertently increase its length and cause a syntax error (too long).

FIELD DESCRIPTIONS

MSIlink INI Fields	Field Description	Default Value
HOSTURL	The URL of the host to connect to. Accreditation is: https://accred.MSIeLink.ca/nsebill/submitter.html Production is: https://www.MSIeLink.ca/nsebill/member/uploadfile	None
SUMMARYFILE	The file to save the summary response as.	None
SSLPROVIDER	The SSL provider as registered with the Java security handler. Set to com.sun.net.ssl.internal.ssl.Provider for SUN JDK	None
SSLPROTOCOL	The SSL protocol implementation as registered with the Java security handler. Set to com.sun.net.ssl.internal.www.protocol for SUN JDK	None
TRUSTSTORE	The store of trusted root certificates. Set to the JDK provided 'cacerts' for production use. For test use add the accreditation MSIeLink server certificate to a trust store and set to point to this test trust store.	None
SUBMITTERPREFIX	The submitter prefix of the accredited submitter as defined by MBC.	None
LOGFILENAME	The filename to store the session log information. Each MSIeLink session creates a log file that stores information about the configuration and processing of the MSIeLink session.	MSIeLink.lo g

MSIlink INI Fields	Field Description	Default Value
DISPLAYDEBUG	This tells MSIeLink to log and display extra debug information. Values are YES or NO. Using YES will decrease the performance and is typically used by technical personnel for debugging and problem determination.	NO
HANGUPAFTERSEND	This tells MSIeLink to disconnect the session after successful submission of claim file. Values are YES or NO Note that this is only valid for service types '/se' This feature is typically used to decouple the service encounter submission process when large claim files are submitted and you do not want to wait around for a response.	NO
FORMATMODE	This tells MSIeLink to use compression or not. Values are 'CRUSHER' for using compression, anything else for not using compression.	CRUSHER

3.6 MSIELINK CLIENT TROUBLE SHOOTING

The MSIeLink client is designed and engineered to be a simple and reliable tool used to interact with the MSIeLink host system. However, computers are complicated pieces of equipment with a wide variety of interactions possible amongst different operating systems, system components, browsers, and Internet submission methods. To aid in resolving some common problems, the following trouble shooting steps have been provided.

Connection Test

1) Connect to the site using Internet Explorer and HTTPS
   - connect using the HostURL from the msilink.ini file you are using
   If you get a warning dialog about the site not being trusted, the server name not matching the certificate, or the certificate being expired on the production server, please contact your vendor.

2) Java Does Not Run
   If java will not run, then you have to add JAVA_HOME/bin to the PATH. How you do this depends on what machine you are running on.
   Please contact your vendor for instructions.

3) Certificate Errors
   If you encounter certificate errors, it may mean you are not pointing at the correct certificate file or the proper certificates have not been loaded. Please contact your vendor for instructions.

3.7 SUBMISSION TROUBLESHOOTING

A claim submission file contains one or more batches consisting of 1 or more claims in each batch. The file is submitted as per Section 3.2. If there is a communication and/or setup error, no response file will be generated. If your request cannot be processed, a message will be displayed on the submission screen and the msilink.log file will contain details of the problem. Examples include:

- System down for maintenance at time of submission
- Submitted with an invalid password
- Submitted with an expired password
- Submitted when your account was locked
- Submitted with invalid command line parameters (i.e. input file not found, .ini file not found)

In all of these cases, none of the batches will have been received by MBC so they will need to be resent.

If there are no communication errors and the arguments are valid, then all batches that are contained in your input file will be processed. For each batch, a batch status will be generated which will tell you whether the claims were submitted and adjudicated by MBC. Each batch submitted will create a response file with a status code. The status code will tell you whether the batch was processed or not.

Status codes that result in claims being processed by MBC are:

ACPT The claims were processed with no interruptions.

HDPR The batch was accepted but there were delays in getting all the claims processed.

Status codes that result in none of the claims being processed by MBC are:

BTOO Header/Trailer Batch Number Mismatch

DUPB Duplicate Batch

HNFD Header Not Found

IBNA Not Accredited to Submit Transaction Type

IBNO Invalid Batch Number

IBPS Invalid Provider Software ID or Provider Software Version

IBTL Invalid Batch Total

IBTT Invalid Transaction Type (CIP1)

IBTV Invalid Transaction Version (for transaction type)

IDTE Invalid Date in Batch Header

ITME Invalid Time in Batch Header

NOTX No Transactions/Empty File

SBRJ Submission Rejected

SEGM Invalid Segment found in Batch

SNVL Submitter Not Valid for Batch

TNFD Trailer Record Not Found

URTP Unidentified Record Type

SECTION 4: SERVICE ENCOUNTER TRANSACTION STANDARD

This section describes the transaction types and associated record formats required to communicate with the MBC Claims Adjudication System.

4.1 RECORD FORMATS

Each incoming record received by MBC, and each outgoing response will be terminated by a carriage return character, line feed. Different record types and record sub-types have different lengths. Within each record detailed below, the relative positions are identified and the field types and field lengths are included. For alphanumeric (A) fields, the standard is left justified with trailing blanks. For numeric (N) fields, the standard requires the data to be right justified with leading zeros, and blank if not present.

4.2 INCOMING TRANSACTIONS

4.2.1 BATCH HEADER /TRAILER

Batch Header and Trailer records are required for each batch of transactions and each batch must contain one or more transactions.

Batch Header Record Format

Field	Position	Format
Record Type	1	A(1) "2"
Submitter ID	2-4	A(3) Each submission site will be allocated a unique ID.
Batch Number	5-10	N(6) This must be unique across all batches in all files submitted by a submitter within the last 720 days. It should be assigned sequentially starting at 1 and can re-start at 1 once 999998 is reached.
Batch Date	11-18	N(8) YYYYMMDD format
Batch Time	19-24	N(6) HHMMSS 24 hour clock format
Provider Software ID	25-27	A(3) Each accredited software product will be allocated a unique ID upon accreditation approval
Provider Software Version	28-37	A(10) The version of the vendor software being utilized for claim submission. Decimal and special characters cannot be used.
Transaction Type	38-41	A(4) "CIP1"

Field	Position	Format
Transaction Type Version	42-43	N(2) '02' – Version 2 – Current Version '03' – Version 3 – New Version

Batch Trailer Record Format

Field	Position	Format
Record Type	1	A(1) "4"
Submitter ID	2-4	A(3)
Batch Number	5-10	N(6)
Total TXNs	11-15	N(5) Total number of transactions in the batch. A batch can have a maximum of 99999 transactions, although we recommend that batches have between 100 – 500 transactions.
Total Records	16-23	N(8) Total number of records in the batch excluding the batch header and trailer.

4.2.2 GENERIC TRANSACTION LAYOUTS

A transaction can consist of 1 or more records. Each record contains a header portion and a data portion. The header portion identifies the type of transaction and the record sub-type. The data portion is specific to each record sub-type.

The following describes the format of the header and data portions of the generic transaction record.

Header Portion

Field	Position	Format
Record Type	1	A(1) "3"
Service Encounter Number		
Submitter ID	2-4	A(3)
Submission Year	5-8	N(4) YYYY format
Sequence Number	9-15	N(7) A unique number, within the Service Encounter Number for each transaction. The Sequence Number should be assigned sequentially starting at 1. No two original transactions can have the same Service Encounter Number (Submitter ID, Year, Sequence Number and Check Digit).

Field	Position	Format
Check Digit	16	If a service encounter that was previously sent is to be reversed (deleted) or submitted for re- adjudication, the Service Encounter Number must be the same as on the original service encounter transaction. Calculated as per Modulus 10 1. Each alternate digit working from the rightmost digit are multiplied alternately by 2 or 1 as below: **1 3 6 4 1 9 7 original number** **2** 1 2 1 2 1 2 multipliers 2 3 12 4 2 9 14 products 2. The resultant string of digits is summed: 2+3+1+2+4+2+9+1+4 sum of digits = 28 3. The sum of digits is subtracted from the next higher number ending in zero, giving the check digit: 30-28 = **2 (check digit)**
TXN Type	17-20	A(4) The type of transaction that the record is within. Refer to the specific transactions for the valid TXN Types.
Record Sub-Type	21-24	A(4) The type of record within the transaction. Refer to the specific transactions for the valid Record Sub- Types. If the TXN Type contains a value of "CER1", this field must be blank.
Record Sequence	25-28	N(4) The sequence of the record within the transaction. This is primarily required for text records to ensure that the text lines are kept in the proper sequence. Each record within a transaction must have a unique sequence number.
Action Code	29	A(1) The action that a specific transaction is to accomplish. Specific allowable values are dependent on each type of transaction. Values are "A"(add), "D"(delete) and "R"(re-adjudicate). All records within the same transaction must have

Field	Position	Format
		the same Action Code. Action Code "**A"** must have a "CER1" transaction type or a "CIP1" transaction type with a "CBE1" record sub-type. Other record sub-types are optional. Action Code "**D"** requires no record sub-types. Action Code "**R"** requires 1 or more CST1 record sub-types.

Data Portion

The data portion is variable, dependent upon the type of transaction and the type of record. The following sections describe the detailed format for each type of transaction.

4.2.2.1 SERVICE ENCOUNTER TRANSACTION

Transaction Type: CIP1

This transaction is to be used for all medical and optometric service encounters submitted by service providers within Nova Scotia utilizing the CCP and ICD 9 coding standard. This includes reciprocal service encounters for services to Out of Province (OOP) service recipients who are registered with another provincial health plan (except Quebec).

Component Records

A service encounter transaction may be comprised of the following records:

Record Sub-Type	Information Presented	Number of occurrences per Service Encounter
CBE1	**Base Service Encounter** – includes identification of patient via HCN. It also includes the service performed, who performed the service, and the location of the service	Maximum 1
CPD1	**Person Data** – used to provide information on the individual for whom the service was performed.	Maximum 1 Only required when the patient does not possess a Nova Scotia HCN and is an eligible resident of Canada (Except Quebec)
CST1	**Supporting Text** – used when additional information is required to fully adjudicate the encounter.	0 to 100 records Only required when manual adjudication is necessary

Record Sub-Type	Information Presented	Number of occurrences per Service Encounter
CTX1	Supporting Text Cross Reference – used to refer to supporting text (CST1 records) submitted with a related service encounter (CBE1 record). The reference must be to a previously accepted service encounter.	0 to 1 Only required when manual adjudication is needed

If a specific service encounter transaction includes multiple records, they must be in the following sequence:

- CBE1 record
- CPD1 record
- CST1 record
- CTX1 record

Action Codes

The valid action codes that can be coded for the service encounter transaction are:

A Used when submitting a new service encounter. The Service Encounter Number cannot have been sent previously.

There must be a Base Service Encounter record (CBE1) provided. If additional person information is required, then a Person Data Record (CPD1) can be included. If supporting text is required, then supporting text records (CST1) can be included. If the supporting text has been used by other service encounters that have been accepted or held for manual assessment, a supporting text cross-reference record (CTX1) can be included.

R Used to cause a previously accepted service encounter to be re-adjudicated with text taken into consideration. Normally, except for specific situations (e.g., service encounter for unlisted procedure or service encounter for independent consideration), text is ignored when a service encounter is initially adjudicated.

Record Sub-types (CBE1, (CPD1), and CTX1) cannot be included.

Text records (CST1) must be included and will add an additional text block to any text blocks already existing for the service encounter.

D Used to delete (reverse) a service encounter that has previously been accepted by MBC. No record sub-types can be included and the record sub-type should be blank. The delete transaction only requires the header portion.

If a Re-Adjudicate or Delete transaction is refused, the service encounter that was to be re-adjudicated is left as is.

4.2.2.1.1 SERVICE ENCOUNTER DETAIL RECORD

Record Sub-Type: CBE1

This record contains the base data for service encounters submitted for in-province service providers. Most in-province service provider service encounters will only require this record.

The following describes the breakdown of this record.

Field	Position	Format
Service Encounter Type	30-33	A(4) (Mandatory) The service encounter type for all in-province service provider service encounters is "RGLR".
Provider Type	34-35	A(2) (Mandatory) Indicates the discipline of the service provider.
Service Provider Number	36-41	N(6) (Mandatory) All service providers will have a unique ID.
Specialty Code	42-45	A(4) (Mandatory) Designates the service provider's specialty that the service was performed under. The valid specialties for each service provider will be registered in the MSI Provider Database.
Service Recipient HCN	46-57	A(12) (Mandatory) All eligible individuals in Nova Scotia have a 10 digit HCN. If the service recipient is from out of province, the registration number is entered here. The province code of the patient's card must also be entered in the Payment Responsibility field and on the Person Data Record. HCNs may be validated before submitting a transaction by applying the equivalent province's check digit calculation. The algorithms for the check digits are available on request.
Service Recipient Birth Date	58-65	N(8) YYYYMMDD format (Mandatory for Nova Scotia HCNs and blank for service recipients from other provinces).
Health Service Code	66-71	A(6) (Mandatory) Indicates the health service (HS) performed. The HS Code must be allowable for: • the service provider based on the service provider's specialty and any service restrictions. • the service recipient based on the service recipient's

Field	Position	Format
		gender, age and other pertinent characteristics. • the Business Arrangement based on any service restrictions defined for the Business Arrangement. • the Facility/Functional Centre/Location based on any restrictions defined for the Facility/Functional Centre and any required facility capabilities. The HS Code and modifiers (implied and explicit) must be a valid service and will influence the amount that MBC will pay for the claimed service. Explicit modifiers are entered on the service encounter in one or more of the Explicit Modifier fields. Implied modifiers are derived from other data fields on the service encounter. If the HS Code is submitted as "EC" (Exceptional Circumstances), "IC" (Independent Consideration), or "IF" (Interim Fee) supporting text is required and the claimed unit value is mandatory. Must be a valid CCP health service code.
Service Start Date	72-79	N(8) YYYYMMDD format (Mandatory for Action Code "A".) Indicates the day the health service was performed.
Service Occurrence Number	80	N(1) (Mandatory for Action Code "A".) Indicates if the service was performed during the first, second, third or subsequent time that the service provider has seen the service recipient on the same day.
Diagnostic Code 1	81-85	A(5) ICD-9 format (Mandatory) Diagnostic Code 1 is used for the primary diagnosis. Diagnostic Codes 2 and 3 are used for any secondary diagnosis, if applicable.
Diagnostic Code 2	86-90	A(5) ICD-9 format
Diagnostic Code 3	91-95	A(5) ICD-9 format
Multiples	96-98	N(3) This field is used to indicate either the number of services performed, the number of units (e.g. 15 minute time blocks) required or the percentage of the body or surface area (e.g. sq. inches).
Explicit Modifier 1 Modifier Type	99-100	A(2) This field is used to enter a 2 character code in combination with available values, which helps identify and assign units payable to the service.

Field	Position	Format
Modifier Value	101-104	A(4) The Explicit HS Code Modifier fields are used to enter explicit modifiers required to further identify circumstances surrounding the service. Explicit HS Code Modifier values are those that cannot be derived from other data on the service encounter. Explicit HS Code Modifier values for the modifier type indicate the role that the service provider performed. (e.g. surgical assist or anesthetist). ("SRAS" for Surgical Assist and "ANAE" for Anesthetist)
Explicit Modifier 2 to 6 See Modifier 1	105-134	Format as per Modifier Type 1 and Modifier Value 1 Used if more than 1 Explicit HS Code Modifier Type and Value are required. An example of two modifiers could be role and unscheduled service time block for any service. Payment may be affected by the role of the service provider and by the time block (e.g., at night) that the service was performed.
Facility Number	135-140	N(6) The specific Facility Number where the service was performed (number as assigned by MBC). All institutions, hospitals, and offices will be numbered. Facility Number is required for locations other than "HOME", "OTHR" or "HMHC".
Functional Centre	141-144	A(4) The specific Functional Centre within the facility where the service was performed. An example is the Emergency Care Centre within the hospital. MBC will catalogue the valid Functional Centres for each registered Facility. This field is required on services performed at a registered hospital facility. Valid values for Functional Centre are the Modifier Values for Modifier Type "FN" contained in the MODVALS.dat file.
Location Code	145-148	A(4) (Mandatory) Valid values for Location Code are the Modifier Values for Modifier Type "LO" contained in the MODVALS.dat file.
Business Arrangement	149-155	N(7) (Mandatory for Action Code "A") The service provider's Business Arrangement that the service provider is claiming under. All providers in Nova

Field	Position	Format
		Scotia must have a Business Arrangement registered with MBC in order to claim for services. Providers may have multiple Business Arrangements to reflect among other things, different locations in which they practice or different arrangements to make payment to provider groups, as opposed to the specific provider claiming the service.
Pay To Code	156-159	A(4) (Mandatory) Indicates to what person or organization the payment is to be made. The Pay To Code will refer to the Business Arrangement under which the service was performed. "BAPY" (Business Arrangement)
Compensation Variable	160-161	N(2) 2 digit numeric codes representing a compensation variable for claim payment adjustment. Used if transaction type version is 03
Compensation Variable 2-5 See Compensation Variable 1	162-169	Format as per Compensation Variable 1 Used if more than 1 Compensation Variable are required.
Referral Provider Type	170-171	A(2) Indicates the discipline of the referring provider. Should be blank if OOP Referral Ind. contains "Y".
Referral Provider Number	172-177	N(6) If the service was a referred service, the referring service provider's number must be coded. If the service was referred from an OOP service provider, this field must be blank but the OOP Referral Ind. must be set to "Y".
OOP Referral Ind.	178	A(1) "Y" indicates that the service was referred from an OOP service provider.
Payment Responsibility	179-181	A(3) If the responsibility for the payment of the service is not MSI, then the responsible organization must be coded (e.g., "WCB", "COM"). If the service encounter is for services provided to a recipient registered in another provincial health plan as per the Medical Reciprocal Agreement, the other province code (e.g., "NB") is coded in this field. A medical reciprocal service encounter requires the OOP

Field	Position	Format
		registration number to be coded in the HCN field and also requires a Person Data Record for the recipient. The valid codes are: • "WCB" (Workers' Compensation Board), or "COM" (Community Services), or • ("NB", "PE", "NL", "ON", "MB", "AB", "BC", "NT", "YT", "SK", "NU"). "MSI"
Program	182-186	A(5) This indicates which MSI program the service recipient is claiming under. Values "MC" for Medicare, "HD" for Home Dialysis.
Chart Number	187-196	A(10) This is a clinical use field which can be used for any source reference number.
Claimed Unit Value	197-205	N(9) 7.2 format This field is used to contain the unit value claimed by the service provider. If this field is blank, the unit value indicator should also be blank.
Claimed Amount	206-214	N(9) 7.2 format This field is for submitter/provider reconciliation purposes. It will be ignored by the system. It may be left blank or could be used to carry provider software calculations of the amount anticipated to be paid by MSI.
Unit Value Indicator	215	A(1) "Y" indicates that the service provider is claiming a unit value less than the normal unit value for the service.
Not Used	216	A(1)
Paper Supp Doc Ind.	217	A(1) "Y" indicates that supporting documentation is being sent on paper (i.e. not as electronic text). Supporting documentation should only be sent on paper where it is not possible to include the information in text fields. The paper supporting documentation must reference the Service Encounter Number.

Field	Position	Format
Hospital Admit Date	218-225	N(8) YYYYMMDD format If the service recipient is a registered in-patient, the date the service recipient was admitted to hospital must be indicated on all hospital visit service encounters and hospital procedures where the modifier "RO" does not contain a value of "ANAE", or "SSAN".
Intensive Care Unit Admit Date	226-233	N(8) YYYYMMDD format Indicates the date the patient was admitted to the intensive care unit where the service encounter was performed. It is mandatory on all intensive care unit visits.
First Anesthetist Start Time	234-237	N(4) HHMM 24 hour clock format Indicates the start time of the first anesthetist involved in the procedure. This field is required on the service encounter submitted by the replacement anesthetist.
Consecutive Anesthetist Start Time	238-241	N(4) HHMM 24 hour clock format Indicates the start time of the replacement anesthetist. This field is required on the service encounter submitted by the replacement anesthetist.
Authorization Number	242-249	A(8) Is used when submitting a service encounter that has previously been authorized by the medical consultant.
Injury Diagnostic Code	250-254	A(5) ICD- 9 format Indicates the cause of injury that initiated the service encounter.
External Claim Number	255-261	N(7) Utilized for the WCB Claim Number.
Date of Injury	262-267	N(6) YYYYMM format

4.2.2.1.2 PERSON DATA RECORD

Record Sub-Type: CPD1

The Person Data Record is used to provide information on individuals who do not have a Health Card Number. The Person Data Record is mandatory if the service recipient is from out-of-province.

Service Encounter Person Data Record

The following describes the breakdown of this record:

Field	Position	Format
Surname	30-49	A(20) (Mandatory)
Given Name	50-69	A(20) (Mandatory)
Date of Birth	70-77	N(8) YYYYMMDD format (Mandatory for reciprocal billing)
Gender Code	78	A(1) (Mandatory for reciprocal billing) Values "M", "F"
Address Line 1	79-108	A(30) (Mandatory)
Address Line 2	109-138	A(30)
City Name	139-163	A(25) (Mandatory)
Postal Code	164-169	A(6)
Province/State Code	170-171	A(2) (Mandatory)
Country	172-191	A(20)
Guardian/Parent HCN	192-203	A(12)

4.2.2.1.3 SUPPORTING TEXT RECORD

Record Sub-Type: CST1

This record is used when supporting text is required to adjudicate a service encounter. In addition, a Text Record must be submitted when the "R" Action Code is used. Up to 999 records, each containing 3 lines of text, can be included for one service encounter.

Service Encounter Supporting Text Format

The following describes the breakdown of the data portion of this record.

Field	Position	Format
Text Line 1	30-102	A(73)
Text Line 2	103-175	A(73)
Text Line 3	176-248	A(73)

Record Sub-Type: CTX1

This record is used when the supporting text for the service encounter is used for another service encounter. Only 1 record can be included to indicate the other service encounter number, which shares the same text.

Field	Position	Format
Service Encounter Number		Reference to a previously accepted Service Encounter Number text to be cross referenced.
Submitter ID	30-32	A(3)
Year	33-36	N(4) YYYY format
Sequence Number	37-43	N(7)
Check Digit	44	N(1)

4.2.2.2 ELIGIBILITY REQUEST

Transaction Type: CER1

This transaction type is to be used when requesting the eligibility status of a Nova Scotia resident. The following data portion of the record is required:

The record sub-type should be blank in the header portion.

Action Codes

The valid action codes that can be coded for the eligibility request transaction are:

A

Used when submitting an eligibility request. The action code must be equal to 'A'.

Field	Position	Format
Provider Type	30-31	A(2) (Mandatory) Provider Type requesting information
Provider Number	32-37	N(6) (Mandatory) Provider Number requesting information
Recipient HCN	38-47	N(10) (Mandatory)
Program	48-52	A(5) (Mandatory) Value "MC" Medicare
Sub Program	53-57	A(5) (Mandatory) Values "MC" (note 3 trailing spaces) Medicare, "HD" (note 3 trailing spaces) Home Dialysis
Potential Date of Service	58-65	N(8) YYYYMMDD (Mandatory)

4.3 DRAFT RESPONSES

4.3.1. SERVICE ENCOUNTERS ADJUDICATION RESPONSE

The data file contains the results of processing for all service encounter transactions submitted. Only the service encounters applicable to a submitter are provided to that submitter.

These details can be used by the submitter for any processing needs (e.g., reconciliation of input files). Each result record will also include the service recipient's HCN.

If a service encounter transaction has been held by MBC for review, the adjudication response for the transaction will indicate held and a subsequent adjudication response detail record will be sent when the final outcome of the transaction has been determined.

If a previously processed service encounter is internally re-assessed with a resulting change in the approved unit value, an adjudication response detail record will be sent to the Submitter who initiated the transaction.

The following fields are contained on the Assessment Results Detail:

Field	Position	Format
Service Encounter Number	1 - 15	A(15)
Transaction Tag Number	16 - 19	N(4) Set to "0001" for the initial transaction that created a claim and then incremented by 1 for every transaction / re-assessment against the service encounter.
Transaction Action Code A D R	20	 Indicates the adjudication response is for the originating service encounter Add. Indicates the adjudication response is for a delete transaction. Indicates the adjudication response is for a re- adjudication transaction.
Re-assess Explanation Code	21-25	A(5) Indicates the service encounter has been re- assessed.
Assessment Outcome R	26	A(1) Indicates the outcome of the submitted transaction. The outcome can be one of: Indicates transaction refused. The Explanation Codes indicate the reason for refusal. A refused

Field	Position	Format
		add transaction must be re-submitted as a new claim once the correct information is determined. If a re-adjudicate or delete transaction is refused, the claim is left unchanged. H Indicates transaction is currently being held for review by MBC. A Indicates transaction was approved and an approved unit value has been determined. The unit value could be a reduced unit value or could be 0.00. In these cases the Explanation Codes indicate the reason for the reduction. An approved service encounter can later be re- assessed.
Assessment Result Action	27	A(1) "R" indicates the record is a reversal of an adjudication response result for the service encounter. "Space" indicates the current adjudication response. If the Assessment Outcome is "A"(approved) and the Transaction Action Code is a "R"(re- assessment), two adjudication response detail records will be created; the first is a reversal of the old approved unit value and the second is the new approved unit value. The records will have different Transaction Tag Numbers. If the Assessment Outcome is "A"(approved) and the Transaction Action Code is "A"(add) or the Assessment Outcome is "R"(refused) or "H"(held), only a current assessment result record will be created. If the Assessment Outcome is "A"(approved) and the Transaction Action Code is a "D"(delete), only a reversal record will be created.
Chart Number	28 – 37	A(10) As originally coded on the submitted claim.
Service Recipient HCN	38 – 49	A(12)
Estimated Payment Date	50 – 57	N(8) YYYYMMDD format The estimated date of the direct deposit that includes the payment / adjustment amount. The estimated date does not take holidays and late submissions (i.e., after the published cut-off date) into consideration.

Field	Position	Format
Adjudication Date	58-65	N(8) YYYYMMDD format The date the service encounter was adjudicated/re-adjudicated.
Approved Unit Value	66-74	N(9) 9999999v99 The value that has been assessed for the service encounter. These fields will not have commas or decimal points. The format will be 9999999v99, where the v designates an implied decimal point. If you were to look at the physical file, you would see "999999999".
Claimed Amount	75-83	N(9) 9999999v99 The claimed amount as coded on the submitted transaction.
Unit Value Indicator	84	A(1)
Explanation Codes	85-114	A(5) occurs 6 times If the approved unit value is not the normal value to be paid for the service, the Explanation codes provide the reduction reason(s). If the service encounter has been refused, the Explanation Codes provide the refuse reason(s).
Health Service Code	115-120	A(6)
HSC Modifiers Used	121-180	A(6) occurs 10 times. The list of implicit and explicit fee modifiers that were used to determine the approved unit value.
Business Arrangement Number	181 - 187	N(7)
Provider Type	188 - 189	A(2)
Service Provider Number	190 - 195	N(6)
Service Start Date	196 - 203	N(8)
Pay to Code	204 - 207	A(4)
Pre-Authorization Number	208 - 215	A(8)

4.3.2. ELIGIBILITY RESPONSE

Transaction Type - CER1

The following fields are in response to the service provider eligibility request.

Field	Position	Format
Service Encounter Number	1 - 15	A(15)
Recipient HCN	16 - 25	N(10)
Program	26 - 30	A(5)
Sub Program	31 - 35	A(5)
Potential Date of Service	36 - 43	N(8)
Eligibility Response	44	A(1) Values "Y", "N"

SECTION 5: FFS ELECTRONIC STATEMENT SPECIFICATIONS

5.1 GENERAL DESCRIPTION

This section describes the electronic statement format for fee-for-service providers.

- There will be one statement for each business arrangement, whether the business arrangement belongs to a group or to a provider. However, since the statement is returned to the submitter associated with a business arrangement, separate statements may occur physically in the same file. If a provider does not wish to have all their statements returned to the same submitter, the provider will need a different submitter ID associated with each business arrangement.
- It is possible that a statement could be for a negative amount if the provider's reversals for the pay period sum to more than the provider's service encounters (positive payments). Payment adjustments will never cause negative statements.
- The file is in comma-delimited format.
  - Fields are not fixed length;
  - All fields are separated by commas;
  - Character fields are surrounded by double quotes;
  - All records end in a carriage return/line feed.
- Numeric fields that specify the decimal will include the decimal point, but no dollars or commas. They are not zero filled. Negative numbers will be preceded by the negative sign (-). The negative sign counts as one of the digits defined in the maximum length. For instance, a number defined as having 8 digits before the decimal and 2 after (numeric (8.2)), can fall in the range:

  -9999999.99 to 99999999.99.

- There are 4 types of records that may be in each statement. Their formats are given in the next section:

  1. **Detail records.** These contain the service encounter details and amounts paid and occur first in the statement. There is one detail record for every service encounter (payment greater than or equal to zero) and reversal in the pay period. These records are sorted in order of business arrangement number, provider type, provider number, service date, service encounter number, sequence number, and tag number.

  2. **Payment adjustment records.** These contain adjustment amounts applied to a provider or provider group in the pay period. If a business arrangement was not adjusted during the pay period, there will be no records of this type. If a business arrangement was adjusted by one or more payment adjustments, there will be one record for each payment adjustment applied. These records occur after the detail records for the business arrangement to which they apply. If it is a group business arrangement, the payment adjustment record(s) occur after the detail records for the specific provider being adjusted.

3. **Physician total records**. These contain totals per physician and business arrangement, including a payment adjustment total. There is one physician total record after each physician's detail records. These occur after the payment adjustment records in a statement. There could be multiple records if the statement is for a group or if the statement includes multiple business arrangements.

4. **Group total records.** These contain the totals per group and business arrangement before and after payment adjustments. There is one group total record for each business arrangement for a provider group. The records occur after the last provider total and last payment adjustment for the business arrangement. There are no group total records if the statement is not for a group.

5.2 Record Formats

5.2.1 Detail records

Field	Format (Max. Length)	Value
Record Type	A(1)	"D" (detail)
Group Number	N(6)	Unique identifier for a provider group
Provider Type	A(2)	PH for physician, OP for optometrist, NP for Nurse Practitioner
Provider Number	N(6)	Unique identifier for the provider
Business Arrangement Number	N(7)	Unique identifier for a business arrangement
Payment Run Number	N(7)	Internal MSI identifier for the payment run. The same number appears for all service encounters in one payment period. It's not consecutive from one pay period to the next.
Payment Responsibility	A(3)	One of "MSI", "WCB", "COM" (Community Services), or a valid 2 letter province code for reciprocal claims ("NB", "PE", "NL", "ON", "MB", "AB", "BC", "NT", "YT", "SK", "NU")
Health Card Number	A(12)	Service recipient's health card number
Service Start Date	N(8)	YYYYMMDD format
Health Service Code	A(6)	Service code as defined by the claim standard
Service Encounter Number	A(15)	Service encounter number - corresponds to what was supplied on adjudication response

Field	Format (Max. Length)	Value
Service Encounter Sequence Number	A(4)	Service encounter sequence number - corresponds to what was supplied on adjudication response
Transaction Tag Number	A(4)	Transaction tag number - corresponds to what was supplied on adjudication response. (Not necessarily consecutive)
Assessment Result	A(1)	"R" (Reverse), blank for a regular claim.
Approved Units	N(8.2) 99999999.99	Units approved through adjudication - negative for reversals/deletions.
Dollar Value Per Unit	N(3.2) 999.99	Unit value; Approved Units X Dollar Value Per Unit = Fee Paid.
Fee Paid	N(8.2) 99999999.99	Actual dollar amount paid (for shadow billing, this amount is not actually paid) - negative for reversals/deletions.
Payment Code	A(2)	"SH" (shadow billing), blank (regular fee paid).
Compensation Variable	A(10)	Up to five 2-digit variables separated by comma 10 = Precept Premium Applies

5.2.2 PAYMENT ADJUSTMENT RECORDS

Field	Format (Max. Length)	Value
Record Type	A(1)	"A" (payment adjustment)
Group Number	N(6)	Unique identifier for a provider group
Provider Type	A(2)	"PH" for physician, "OP" for optometrist, "NP" Nurse Practitioner
Provider Number	N(6)	Unique identifier for the provider
Business Arrangement Number	N(7)	Unique identifier for a business arrangement
Payment Adjustment Number	N(7)	Unique identifier for a payment adjustment
Payment Run Number	N(7)	Internal MSI identifier for the payment run
Adjustment Amount	N(8.2) 99999999.99	Adjustment amount on a business arrangement (negative or positive)

Adjustment Type	N(5)	

5.2.3 PROVIDER TOTAL RECORDS

Field	Format (Max. Length)	Value
Record Type	A(1)	"T" (Total)
Group Number	N(6)	Unique identifier for a provider group
Provider Type	A(2)	"PH" for physician, "OP" for optometrist, "NP" Nurse Practitioner
Provider Number	N(6)	Unique identifier for the provider
Business Arrangement Number	N(7)	Unique identifier for a business arrangement
Payment Run Number	N(7)	Internal MSI identifier for the payment run
Statement Start Date	N(8) YYYYMMDD	Start date of payment period
Statement End Date	N(8) YYYYMMDD	End date of payment period
Total Units	N(8.2) 99999999.99	Total approved units
Total Fees	N(8.2) 99999999.99	Total fees paid, before adjustments (+ or -)
Total Adjustments	N(8.2) 99999999.99	Total payment adjustments (+ or -)
Total Preceptor Premium	N(8.2) 99999999.99	Total preceptor premiums
LFM Rural Amount	N(8.2) 99999999.99	Total LFM Rural service modifier amount
Total Paid	N(8.2) 99999999.99	Fees paid + adjustments (+ or -)
Number of Service Encounters	N(5)	Number of service encounters per provider

Number of Reversals	N(5)	Number of reversals per provider

5.2.4 PROVIDER GROUP TOTAL RECORDS

Field	Format (Max. Length)	Value
Record Type	A(1)	"G" (Group Total)
Group Number	N(6)	Unique identifier for a provider group
Business Arrangement Number	N(7)	Unique identifier for a business arrangement
Payment Run Number	N(7)	Internal MSI identifier for the payment run
Statement Start Date	N(8) YYYYMMDD	Start date of payment period
Statement End Date	N(8) YYYYMMDD	End date of payment period
Total Units	N(8.2) 99999999.99	Total approved units (+ or -)
Total Fees	N(8.2) 99999999.99	Total fees paid, before adjustments (+ or -)
Total Adjustments	N(8.2) 99999999.99	Total payment adjustments (+ or -)
Total Paid	N(8.2) 99999999.99	Fees paid + payment adjustments (+ or -)
Number of Service Encounters	N(5)	Number of service encounters per group
Number of Reversals	N(5)	Number of reversals per group

SECTION 6: VENDOR FILE RECORD LAYOUTS

This section contains the record layouts of the files (comma delimited) that are available to vendors to download.

Service File (SERVICES.DAT)

Contains the unique combinations of health service codes and explicit modifiers that are or have been available for claims submission.

Field	Format (Max. Length)
Program ID	A(5)
Health Service Code	A(8)
Explicit Modifiers	A(128)
Implicit Modifiers	A(128)
Category	A(15)
Description	A(255)
Unit Value	A(128)
MSI Fee Code	N(5)
Effective Date	N(8)
Termination Date	N(8)
Modified Date	N(8)

Update Unique File (UPUQNUSE.DAT)

Contains updates to the Service file noted above.

Field	Format (Max. Length)
Unique Number	N(6)
Program ID	A(5)

Health Service Code	A(8)
Explicit Modifiers	A(128)
Implicit Modifiers	A(128)
Category	A(15)
Description	A(255)
Unit Value	A(128)
MSI Fee Code	N(5)
Effective Date	N(8)
Termination Date	N(8)
Modified Date	N(8)
Change Indicator	A(1) Values: A (Added); U (Updated)

Injury Diagnostic Code Description File (DIAG_INJ.DAT)

Contains ICD9 injury diagnostic codes.

Field	Format (Max. Length)
ICD9 Injury Code	A(5)
Description	A(50)
Date	N(8)

Explanation Code File (EXPLAIN.DAT)

Contains all explanation codes assigned to a claim during claims processing.

Field	Format (Max. Length)
Explanation Code	A(5)
Explanation Description	A(512)

Modified Date	N(8)

Modifier Type File (MOD_TYPE.DAT)

Contains all modifier types for claims submission.

Field	Format (Max. Length)
Modifier ID	A(2)
Description	A(80)
Implicit Modifier Indicator	A(1)
Modified Date	N(8)

Unique Numeric Index Service File (UNQNUSER.DAT)

Contains a unique number for each health service code modifier combination.

Field	Format (Max. Length)
Unique Number	N(6)
Program ID	A(5)
Health Service Code	A(8)
Explicit Modifiers	A(128)
Implicit Modifiers	A(128)
Category	A(15)
Description	A(255)
Unit Value	A(128)
MSI Fee Code	N(5)
Effective Date	N(8)
Termination Date	N(8)

Field	Format (Max. Length)
Modified Date	N(8)

Service Provider Number File (PROVIDER.DAT)

Contains all registered providers.

Field	Format (Max. Length)
Service Provider Number	N(6)
Provider Type	A(2)
Last Name	A(20)
First Name	A(20)
City	A(30)
Modified Date	N(8)
College of Physicians & Surgeons of N.S. Number	N(9)
Specialty Codes	A(4) Can be present up to 6 times

Program File (PROGRAM.DAT)

Contains programs under which payments are made to providers.

Field	Format (Max. Length)
Program ID/Sub Program	A(5)
Description	A(30)
Effective Date	N(8)
Modified Date	N(8)

Service Description File (SERV_DSC.DAT)

Contains a description for each health service code.

Field	Format (Max. Length)
Health Service Code	A(6)
Description	A(255)
Alternate Wording	A(255)
Modified Date	N(8)

Modifier Value File (MODVALS.DAT)

Contains all modifier values for claims submission.

Field	Format (Max. Length)
Modifier ID	A(2)
Modifier Value	A(4)
Description	A(255)
Modified Date	N(8)

Diagnostic Code File (DIAG_CD.DAT)

Contains the diagnostic codes for claims submission.

Field	Format (Max. Length)
ICD9 Code	A(5)
Description	A(50)
Modified Date	N(8)

Special Code File (SPECLTY.DAT)

Contains the provider specialties associated with claims submission.

Field	Format (Max. Length)
Specialty Code	A(4)
Specialty Description	A(50)
Modified Date	N(8)

Facility File (FACILTY.DAT)

Contains the facilities associated with claims submission.

Field Description	Format (Max. Length)
Location Code/Facility Type	A(4)
Facility Number	N(6)
Facility Description	A(50)
Functional Centre	A(4) Can be present up to 6 times

Index File (INDEX.DAT / INDEX.TXT)

Contains a listing of the vendor files available for download.

Field Description	Format (Max. Length)
Filename	A(20)
Filler	A(10)
Last Modified Date	A(10) DD/MM/YYYY

APPENDIX A: MSIELINK COMMUNICATION PROTOCOL STANDARD

1.0 INTRODUCTION

SUBJECT

This document is the specification of the MSIeLink communication protocol. This protocol is used for interfacing to the MSIeLink HOST component ***Service Provider Electronic Claims Submission System*** (also referred to as the communications server).

It includes a brief overview of the protocol, followed by text descriptions of the states including the allowable state transitions. This is a simple protocol, using HTTPS based GETs and POSTs.

AUDIENCE

This document is intended for anyone wishing to understand or implement the MSIeLink communication protocol. An understanding of the concepts of communication protocols, state diagrams, and state tables will assist the reader in understanding the material.

TERMINOLOGY

The document will make reference to the Client side and the Host side. These are explained as follows.

Client refers to the submitter site (or terminal side) from which a MSIeLink session is initiated. It is typically a PC or MAC with an internet connection, connecting to the MSIeLink server.

Server refers to the process running on the communications server. This is the system that the clients (remote submitters) will connect to.

2.0 PROTOCOL OVERVIEW

The MSIeLink protocol is an asynchronous, state-event driven protocol using industry standard secure communications protocols allowing simple implementations using a variety of communications packages or computer languages.

Connection to the MSIeLink Host is currently performed over the public Internet using a HTTPS secure connection.

The protocol standard is an open standard, and will be used as the interface specification for the ***Service Provider Electronic Claims Submission System.***

The protocol is based around the sending of a file from the client to the server, the client querying the server, one or more times, for progress, the client retrieving the response file from the server, and, finally, the client requesting the summary file from the server.

All transactions must use the HTTPS secure protocol.

2.1 PROTOCOL STATES

The major states involved in a MSIeLink session are listed below (note that there are more states, but these are listed for this overview section). Each state has associated transaction records. The major states are as follows:

- Logon State
- Client Post File State, Host Receive File State
- Client Query Progress State, Host Processing State
- Client Receive Response File State, Host Send Response File State
- Receive Summary File State, Host Send Summary File State
- Logoff State

2.2 STATE EVENT PROCESS FLOW

A condensed process flow is as follows:

1. A client initiates the session by HTTPS GET to the configured HostURL with the appropriate query parameters added to the URL describing the service request
2. If the client is not associated with a valid logged in session, the host responds by HTTPS redirecting the client to the logon page (3). If the client is associated with a valid logged in session, the host responds by returning the framing HTML page (5).
3. The client HTTPS POSTs the User and Password information to the redirected URL.
4. The host responds with an error message and goes to (3), or redirects the client to the framing HTML page and establishes a valid session for this client.
5. The client receives the framing HTML page and HTTPS POSTs the request file to the host.
6. The host receives the request file and begins processing it. When the complete file has been received (but not processed yet), the host returns a HTTPS redirect to the client to the download page.
7. The client queries the download page using an HTTPS GET, the host responds with an HTTPS header value showing the current progress as a percentage done.
8. When the client receives the progress complete indication (101% done), the client does an HTTPS GET to the download page, receiving the response file. The host, when receiving a GET request and the processing is complete, returns the response file, setting a flag to indicate the summary is next.
9. After the client has received the response file, it does a HTTPS GET to the download page, receiving the summary file. The host receives the GET request, knows the response file has been returned, and knows the client has successfully received the complete response file. The host updates its records (showing the service request completed successfully) and returns the summary file.
10. The client receives the summary file, then does a final HTTPS GET to the logoff page to invalidate this session on the host. If this step is not competed, the session will invalidate itself after a short timeout period.

2.3 ERROR RECOVERY

To simplify the protocol, any errors result in the aborting of the session currently in progress. The entire session must be restarted.

Examples of errors include the following:

- Insecure HTTP data transmissions.
- Multiple service requests within one valid session.
- Timeouts while communicating.