Payroll and Information Reporting Standards

Electronic Filing and Forms Design Guidelines

1969 Celebrating 50 Years 2019

NACTP

A Respected Voice for the Tax and Payroll Industries

The NACTP is committed to working together with government agencies to achieve success.

www.nactp.org

Revised May 2023

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Introduction to the National Association of Computerized Tax Processors

History

In recognition of the increasing value and need for streamlined income tax preparation, six computerized tax processing firms founded the National Association of Computerized Tax Processors (NACTP) in 1969. Today, the NACTP includes in its membership over 50 payroll and tax preparation software companies, electronic filing processors, tax form publishers, tax processing and payroll service providers, and others. The Association has grown to now represent over 1 million employers in addition to individual taxpayers.

Goals

Through the Association, these competing firms work together to accomplish the following goals:

- Improve the relationship and communication between the computerized return processing industry and government tax authorities.
- Maintain professional standards in the computerized return processing industry.
- Promote the standardization and simplification of electronic and alternative filing systems.
- Encourage the standardization of tax forms; the timely distribution and clarification of forms, instructions, specifications, and regulations; and the simplification of approval procedures.
- Function as a nonprofit association formed for the mutual benefit of its members and government tax authorities.

The NACTP works to accomplish these goals by meeting with federal, state, and local tax agencies; encouraging use of its broadcast email notification system to streamline communication by agencies to the Association; and providing standards on the NACTP website at www.nactp.org. In addition to content for members, helpful information such as a listing of current members, contact information for NACTP Board members, guideline documents, and liaisons for each state is available on the website.

The NACTP and government tax agencies share a common goal by working together to provide the best possible service to taxpayers. NACTP is dedicated to achieving this goal by using member companies' expertise and knowledge of software systems to help government tax authorities streamline processing and implement new technologies.

Organizational Structure

The NACTP has three committees:

- Payroll and Information Reporting Committee (PIRC)
- Government Liaison Committee (GLC)
- Electronic Filing Committee (EFC)

The **Payroll and Information Reporting Committee** focuses on issues relating to the electronic and paper-based filing of unemployment and withholding taxes, as well as W-2s, 1099s, and 1095s. This Committee addresses electronic filing best practices; manual and automated return processing; forms design, distribution, and approval; and maximization of taxpayer compliance and accuracy.

The **Government Liaison Committee** addresses issues related to paper-based filing of income tax returns with both federal and state tax authorities. This Committee helps resolve processing problems and reinforce information exchange. This allows the computerized return processing industry to create high-quality products that can be efficiently processed through each tax authority's system.

The **Electronic Filing Committee** works with the IRS and state tax authorities to research and develop the electronic filing process for individual and business income tax returns as well as to establish electronic filing standards. More returns are filed electronically every year, making it especially important for the data transfer between processor and receiver to be accurate and efficient.

Payroll and Information Reporting Committee

The NACTP established the **Payroll and Information Reporting Committee** to focus on issues relating to the wage reporting sector (unemployment, withholding, W-2s, 1099s, and 1095s) for electronic and paper-based filing.

Goals

The Payroll and Information Reporting Committee has established the following goals:

- To serve in an advisory role to tax authorities to address payroll and information reporting issues of mutual concern.
- To help government agencies benefit from maximized compliance and minimized costs due to less manual processing by providing compliant products and services to employers.
- To promote the standardization and simplification of electronic and alternative filing systems.
- To provide employers with a method of form preparation that is less costly, less time-consuming, and considerably more accurate than manually prepared forms.

The purpose of the NACTP Payroll and Information Reporting Committee is to serve in an advisory role, providing a forum for tax authorities and member companies to discuss payroll and information reporting issues of mutual concern to increase taxpayer compliance.

The Payroll and Information Reporting Committee actively works with tax authorities to assist in the smooth transition from manual processing to automated tax return processing technology. Areas of assistance include the development of transmitter-friendly electronic filing processes, construction of consistent paper and electronic data formatting, creation of specifications for automated forms processing, and design and implementation of scannable forms.

Electronic filing offers the benefits of decreased time, effort, and cost in processing tax and information returns for both the employer and tax authority and is the preferred filing method by member companies. However, since many agencies still process paper, one goal of the Payroll and Information Reporting Committee is to establish consistency of computerized substitute tax forms throughout the return processing industry. NACTP members follow basic standards when redesigning federal, state, and local tax forms to make them compatible with hardware and software restrictions.

Although government tax authorities may prefer to process official forms, most employers generate returns from software packages. Therefore, the need for information and expertise to be shared between the computerized return processing industry and government tax authorities increases. The need for consistent forms design also becomes more important in order to streamline processing of these forms.

Computer prepared forms are generally more accurate than manually prepared forms. Therefore, processing costs are reduced on the part of the tax authority when errors do not have to be addressed. Automated processing systems are also able to “read” computer generated data better than manually prepared data thus reducing the need for data verification.

The Payroll and Information Reporting Committee works with tax authorities to create products that are compatible with government processing systems. The Committee created this Payroll and Information Reporting Standards booklet to assist in that effort. The Payroll and Information Reporting Committee welcomes the opportunity to continue to develop strong working relationships between member companies and government tax authorities in order to provide the best possible service to our mutual customer, the employer.

Section 1 Electronic Filing

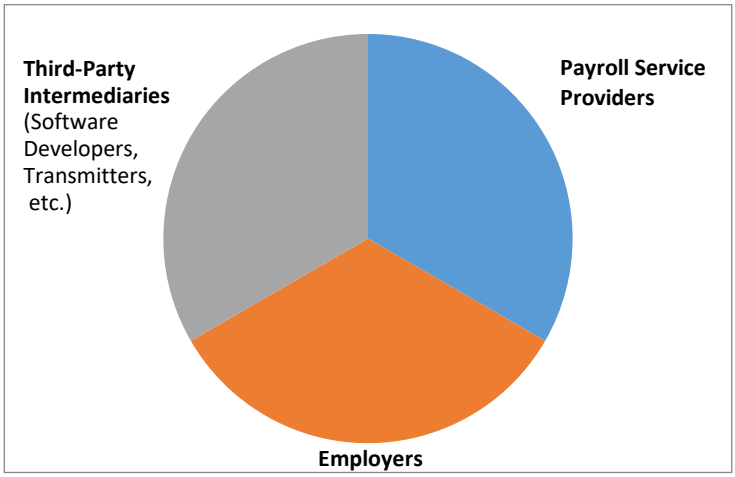
1.1 Goals

Electronic filing is in the best interest of all parties involved in payroll tax and information return processing. It offers the opportunity to decrease the time, effort and cost involved in processing tax and information returns for both the taxpayer and tax authority. Properly implemented, electronic filing systems also facilitate compliance and improve accuracy through automating processes that were previously subject to human error.

The most effective electronic filing systems are designed and implemented through the cooperative efforts of the taxpayer, the tax authority, and the computerized return processing industry. The standards described in this section are intended to serve as guidelines to the design and implementation of an electronic filing system based on the consensus experience of the NACTP as representatives of the computerized return processing industry.

The filing industry is broken down into three general categories: Employers, Payroll Service Providers, and Third-Party Intermediaries.

1.2 Audience Characteristics



In order to gain widespread participation and greater compliance, all electronic filing policies and processes should be designed so that they support these three categories and the various roles involved in the entire electronic filing process, bearing in mind that entities can assume multiple roles. These roles include:

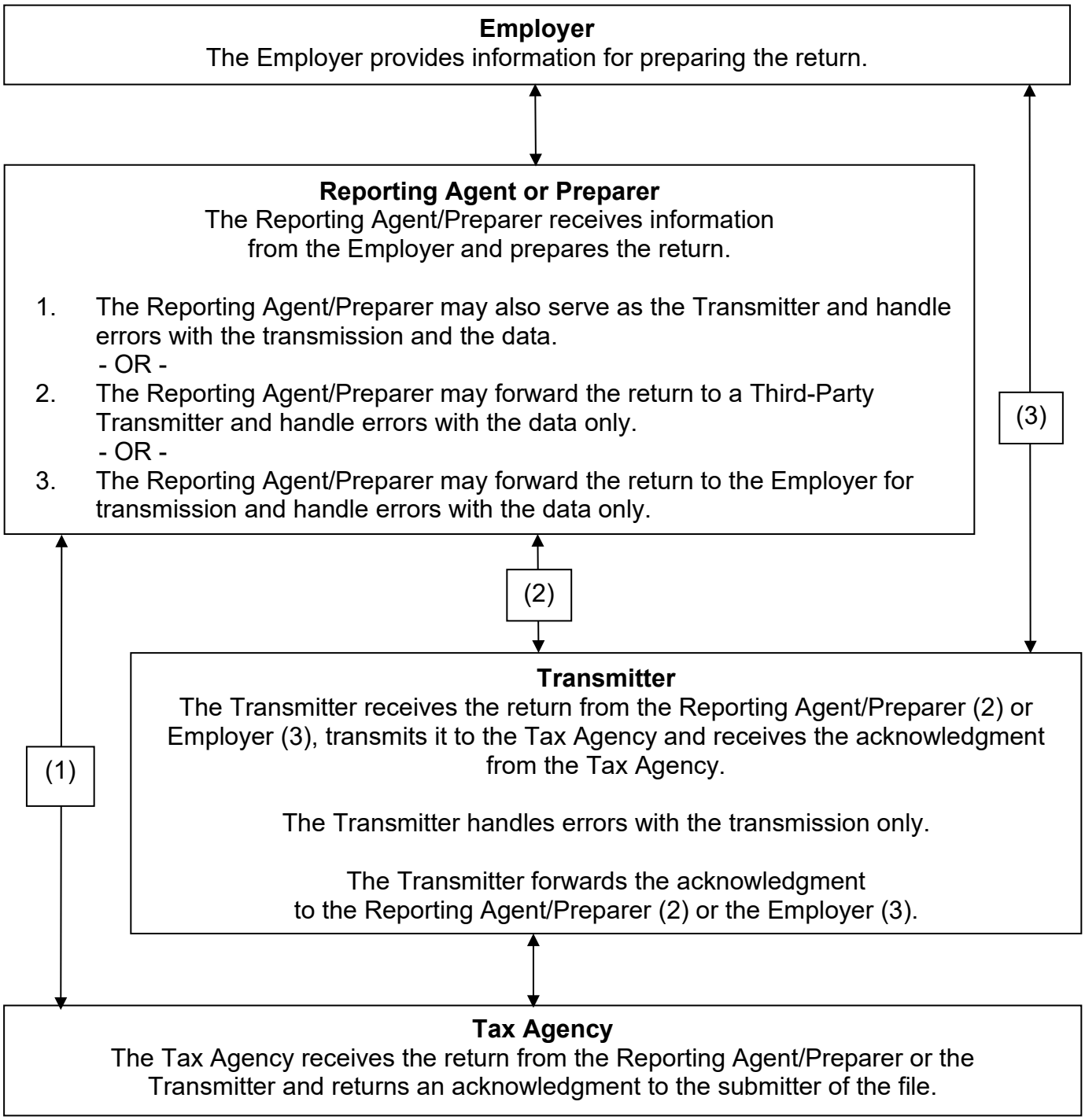
- **Employer**
- **Payroll Service Provider**—The payroll service provider produces paychecks and related reports for employers.

- **Third-Party Intermediary**
    - *Preparer*—There are two types of preparers. 1) An employer may prepare returns for his own company, or 2) A paid third-party preparer receives payroll information from employers and prepares returns. The preparer may transmit returns to the appropriate agencies, return them to the client for transmission, or forward them to a third-party transmitter. The third-party preparer has authority to communicate with tax agencies on behalf of his clients.
    - *Reporting Agent*—The reporting agent receives payroll information from employers and prepares returns. The reporting agent complies with Revenue Procedure 2012-32. The reporting agent may either transmit returns to the appropriate agencies or forward them to a third-party transmitter. If transmitting returns, the reporting agent can transmit files using a single PIN/password for all of his clients. The reporting agent has authority to communicate with tax agencies on behalf of his clients.
    - *Transmitter*—The transmitter receives prepared returns and serves as a pass-through, transmitting the returns to the appropriate agencies. The transmitter receives acknowledgements from tax agencies, which he forwards on to his clients. The transmitter has authority to communicate with tax agencies on behalf of his clients regarding the success of the transmission, but no authority to communicate regarding the data that is transmitted.
    - *Software Developer*—The software developer provides the software used by preparers and/or employers. The software developer has no access to employers' payroll information and has no authority to communicate with tax agencies on behalf of the preparers' clients or employers.

The key item to note is that the entity submitting the return to the tax agency may not necessarily have direct access to the employer. Therefore, it is critical when designing an electronic filing system to <u>not</u> require employer authorization just to submit data. If necessary, authorization should only be used in cases where the entity is acting on behalf of the employer and wants access to the employer's account, not in the case where the entity is simply sending data to the agency.

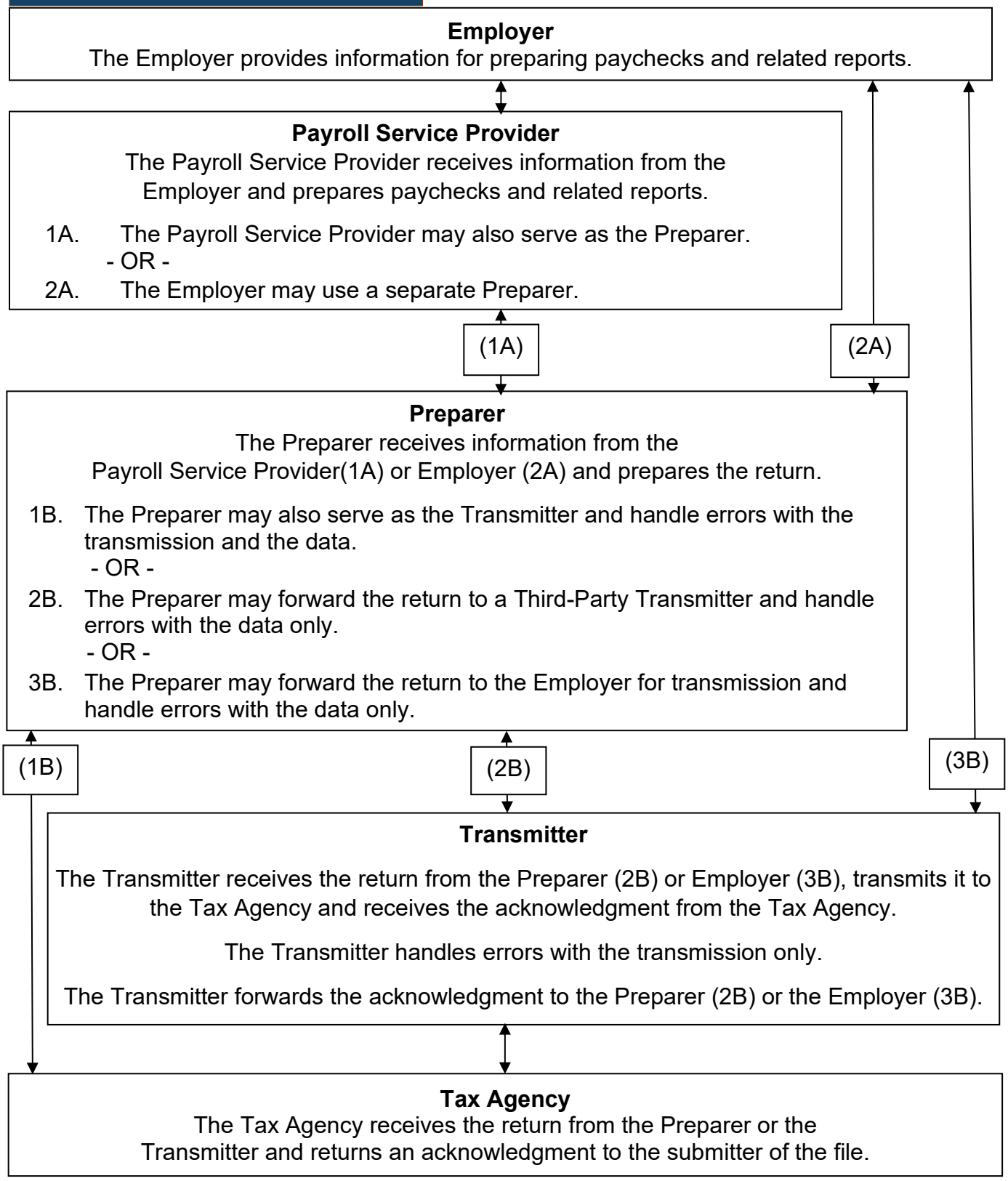
On the next two pages are illustrations outlining the flow of information between each of these roles.

Reporting Agent / Preparer Flow Chart



Note: The **Software Developer** provides tools for performing each of the required functions.

Payroll Service Provider Flow Chart



Note: The **Software Developer** provides tools for performing each of the required functions.

1.3 Enrollment Procedures

Business registration is the act of an employer applying for a Withholding Tax and/or Unemployment Tax Account number with the tax agency for the purpose of collecting and reporting payroll taxes. When a business registers with a tax agency, there should be automatic enrollment for all filing processes that are in compliance with the agency's requirements. This enrollment would include both paper and electronic filing. Since a separate enrollment is not required for paper filing, a separate enrollment should not be required for electronic filing. Implementing an enrollment process for electronic filing introduces a strong deterrent to the employer to adopt electronic filing.

On the other hand, transmitters and software developers should be required to enroll in the electronic filing program to provide a means for tax agencies to track these entities. Enrollment procedures should be electronic, provide immediate login credentials, and should not require a client list.

1.3.1 Communications

Email should be used to provide notification about the status of the transmitter and software developer enrollment system that is posted on the State Exchange System (SES) or the agency's website if SES is not available. Any changes posted to SES or the agency's website should be followed with an email listing the changes and where they are posted. The computerized return processing industry should be notified via the NACTP Payroll and Information Reporting Committee (PIRC) listserv: nactp_pirc@nactp.org.

1.4 File Format Standards

1.4.1 Standards-Based Implementation

The NACTP strongly advises that all new and upgraded implementations of electronic filing adhere to the Federal/State Employment Taxes (FSET) standards developed by E-Standards as a part of the American National Standards Institute's Accredited Standards Committee X-12. These standards include a set of XML schemas designed to accommodate all agency filing needs. These schemas have been successfully implemented and proven in a production environment. More information can be found at http://www.statemef.com.

The FSET XML schemas define a set of field (XML tag) names that apply to all agencies. Tax authorities should strive to use the FSET designation for existing fields regardless of whether or not that agency uses different terminology.

Agencies that cannot follow the FSET standards for filing of payroll data should consider the use of the EFW2 format as defined by the Social Security Administration. See information at http://www.ssa.gov/employer/pub.htm.

Agencies that cannot follow the FSET standards for filing 1099 data should use the format defined by the IRS in Publication 1220 (https://www.irs.gov/pub/irs-pdf/p1220.pdf) until this format is retired. IRS is currently developing XML schemas to replace the Publication 1220 format for 1099 reporting. There will be a transition period where both XML and Publication 1220 will be supported by IRS; however, when IRS retires the Publication 1220 format, both the computerized return processing industry and state agencies must support the new XML schemas in order to have a consistent format for both state and federal reporting.

The agency should provide a clear mapping of form fields to the electronic document fields. Standards should be consistent across electronic filing, magnetic media, and paper to simplify processing procedures and encourage participation in electronic filing by minimizing the learning curve.

Samples of the schema, agency-specific business rules regarding the use of optional fields, testing scenarios, and errors should be documented and available on:

- The State Exchange System (SES) (https://taxadmin.kiteworks.com), a secured site operated by the Federation of Tax Administrators (FTA) or,
- The agency website if SES is not available.

Accurate examples are a critical factor in an efficient and successful implementation.

High level file format specifications outlining the file structure, such as XML, ASCII, comma-delimited, etc. should be available for industry review one year prior to planned implementation. Specific field definition and mapping should be available six months prior to tax period end date. Tax authorities are encouraged to make use of the NACTP for review and advice on development of specifications. As representatives of the computerized return processing industry, the NACTP can provide valuable experience and guidance to ensure that the final specifications are comprehensive and positively received.

1.4.2 Communications

Email should be used to provide notification of changes in file format specifications that are posted on SES or the agency's website if SES is not available. Any changes posted to SES or the agency's website should be followed with an email listing the changes and where they are posted. The computerized return processing industry should be notified via the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org.

1.5 Electronic Signature Requirements

An electronic signature is a unique access code or other unique electronic identifier assigned or approved by the agency for use in communications with the agency.

Agencies should provide electronic signature guidelines to participants based on the type of role: reporting agent, preparer, or employer.

1.5.1 Recommendations

- A reporting agent needs to sign all returns and payment authorizations on behalf of his clients, using a single electronic signature. Typically, a Reporting Agent Authorization, IRS Form 8655, needs to be completed for each client.
- A return is considered unsigned if the appropriate electronic signature is not provided with the e-file or e-payment submission.

1.6 Transmission and Security

The NACTP recommends that automated application-to-application (A2A) transmission and processing should be supported, such as server-to-server capabilities for high-volume filing versus browser-based electronic filing. Browser-based file uploads can be acceptable, but they rely on human interaction which is subject to error. Additionally, browser-based systems are difficult because of the need to coordinate routine website changes (e.g., screen layouts), and additional steps are necessary to capture data such as acknowledgements and error messages.

The Application Programming Interface (API) for A2A transmission should be available for industry review at least six months prior to the planned implementation tax period end date and should include a well-defined data format and a secure transmission protocol. The purpose of the API is to allow integration and data transmission between industry and agency systems. The API should be supported by thorough technical documentation so that software developers are able to interact successfully with the tax authority's system.

The NACTP is opposed to tax authorities asking the computerized return processing industry to install software developed by the tax authority or an external source such as Excel, for example. Some arrangements may violate software development control environments. Also, not all software is compatible with industry languages and development tools.

The A2A transmission protocol should support batched submissions; that is, a file containing one or more repeating groups of standardized records such as in the case of filing and/or paying on behalf of multiple employers in a single file.

The tax authority should acknowledge the receipt of each batch, or the filings within each batch, in real-time. This does not imply that the agency must accept or reject the tax return data in real time, but it should provide some level of validation of the transmission to ensure the transmission is complete and correct.

Industry security standards that allow for well documented, interoperable, vendor, and tool-supported security implementations should be adopted. Privacy and confidentiality concerns are paramount in A2A transactions. The IRS MeF system has chosen Security Assertion Markup Language (SAML) as a security mechanism and many systems that are current with security standards use Transport Layer Security (TLS) 1.2 or greater for encryption and server authentication.

Refer to Section 4 of IRS Publication 4164 *Modernized e-File (MeF) Guide for Software Developers and Transmitters* at https://www.irs.gov/pub/irs-pdf/p4164.pdf for further direction on A2A transmission and security.

1.7 Testing

Test packages should be available electronically on SES or the agency's website if SES is not available.

- Test packages should include all relevant approval deadlines.
- The number of test returns should be limited to 10 returns or less AND should be available in one package.
- Test packages should be clearly defined and documented, and comparison data sets (answer keys) should be provided.
- Test packages should identify a technical contact. Email, fax, and phone number should be provided.

- Test packages should be available at least three months prior to implementation (at least one month prior to the initial testing period).

- Test packages should include optional test cases that are intended to cause rejections so that vendors can test the ability of the software to properly process rejection acknowledgements.

Testing procedures should allow the use of test account numbers rather than require the use of valid account numbers. Generally, transmitters and software developers are not located in every state for which they provide services; therefore, they do not have access to valid account numbers other than their clients' information. The purpose of testing is to ensure that transmitters and developers are formatting data correctly and complying with filing specifications, not to validate actual data. It is not good practice to test with live data; clients are uneasy about having their data used for testing purposes; and transmitters and developers do not have the authority to use actual client data for the purpose of testing.

A separate system or separate logins and IDs should be provided for testing. For the sake of ongoing development, test facilities should remain accessible even after approval has been granted.

Testing facilities should be available and fully functional at least three months prior to implementation.

Test return results should be available within 24 hours of retrieval to ensure timely response. All testing errors should be included in the results, rather than issuing errors on a piecemeal basis.

Approval should be for a software developer or transmitter, not for an individual taxpayer or preparer. A list of approved vendors should be publicly displayed on the agency website.

Test environments should include all elements of the production environment, including error handling and reporting, file and return acknowledgements, and security, to enable a robust test capable of identifying any issues that may arise in production. Test environments should use the same client API as the production environment.

In addition to testing, agencies may want to consider offering a separate pre-filing taxpayer information validation program. This is a system that allows providers to send data prior to live filing to verify and correct taxpayer information up front. Examples of data that can be validated are employer identification numbers (EINs), business names, tax rates, and filing and deposit schedules. By offering this service, providers can identify any discrepancies between client data and agency data prior to live filing. Although validation programs provide value, the use of such programs should not be required. As an alternative, agencies may want to consider posting rates per employer on agency websites.

1.7.1 Communications

Test return examiners should notify the computerized return processing industry via the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org if they foresee any delays during testing. This could include when examiners will be away on vacation, closed for holidays or if they are having hardware/software problems. An alternate contact person should be assigned and contact information should be provided.

1.8 Processing Procedures

Entities that process numerous returns for multiple taxpayers should be provided a process for the efficient transmission of several returns simultaneously (bulk filing).

The gateway used at the agency must include the ability to post individual acknowledgements for retrieval by the transmitters. Because the acknowledgement of an employer's filing is considered confidential information in most cases, the capability to authenticate transmitters by means of PIN/Password or Public Key Infrastructure (PKI) connection to the gateway is recommended. If acknowledgements are not automatically sent, the agency should send an email directing the transmitter to retrieve acknowledgements when posted. A transmission timestamp should be used as proof of timely filing, even if a return is later rejected.

If a bulk file contains multiple taxpayer returns and/or payments, the agency should process the returns and/or payments that have been accepted. For those returns and/or payments that have been rejected, the agency should reject the employer record, and indicate which employee record is erroneous. The agency should only reject the entire bulk file because of an error that affects the integrity of the entire batch.

It is highly recommended that agencies provide an accurate listing of potential errors that can be encountered along with solutions to allow for more efficient management of errors and rejects. All error conditions should be provided in the specifications, including name and address error criteria. NACTP recommends that agencies follow the Social Security Administration's name and Social Security Number specifications located at http://www.socialsecurity.gov/employer/critical.htm. For every error condition, an indication should also be provided as to which errors cause a rejection as opposed to a warning. Warnings should be returned when the data can be processed, but a more "clean" file can be submitted in a future filing period. Rejections should only occur when the submitted data cannot be processed.

While most errors should only cause a warning, the following situations, if not followed, may justify rejecting an employer's return:

- The Employer Identification Number (EIN) must be valid.
- The Employee Social Security Number (SSN) must be a 9-digit numeric value.
- The Employee Name must be alphanumeric with no leading spaces. Special characters and punctuation should be allowed.
- Employee wages and withholding amounts must be positive numeric values.

Each error message provided by the agency to the transmitter should be clearly written and actionable so the messages can be passed directly to the taxpayer without having to be interpreted and rewritten by the transmitter in terms the taxpayer will understand. A good error message lets the taxpayer instantly know that an error occurred along with a description of the error and how to correct the error.

Multiple error conditions should not be combined into one message. For example, an error message that states "employer account not on file" could mean the account is either:

- valid but inactive
- valid but pending
- invalid and was never assigned

In this case, each of the above scenarios should be a separate error message.

Examples:

Error Scenario – The taxpayer has not entered the report quarter.

Bad Error Message:

Error #	Error Message	Corrective Action
123	Report Quarter is missing	Blank

Better Error Message:

Error #	Error Message	Corrective Action
123	Report Quarter is missing	Please provide Quarter

Best Error Message:

Error #	Error Message	Corrective Action
123	Report Quarter is missing	Please provide Quarter. Valid values are 1, 2, 3 or 4.

NACTP recommends that tax authorities provide a preliminary list of error conditions to NACTP prior to implementation for review. By doing so, NACTP can help tax agencies to identify any potential issues prior to full implementation of the e-file system.

To encourage paperless filing, signature documents should not be required to be passed to the tax authority. More preferable still is the elimination of signature documents where allowed by law. Any required documents should be available on SES or the agency website if SES is not available.

Automated transmission and processing should be supported. There should be no required interpersonal interaction except in error conditions.

Payments should be supported both separately and at the time of return filing.

1.8.1 Agency-Sponsored Data Entry Systems

Agency sponsored data entry systems are stand-alone applications or websites developed by the tax authority intended to allow taxpayers or their representatives to enter return information directly into the website or software application for processing.

In addition to being problematic to maintain and market to a large audience, agency sponsored data entry systems are counter-productive for the majority of the return processing industry. Use of integrated accounting software is widespread. This software typically aggregates and formats data without requiring the return preparer to key data directly. By requiring return preparers to re-key data into a proprietary application or website, agency sponsored systems add a very time-consuming step to return preparation and markedly increase the probability of data entry errors. Furthermore, these systems put government agencies in direct competition with private industry, and if use is mandated, implicitly eliminate a valued source of revenue for many private firms.

The NACTP is stridently opposed to these systems. All interests are better served when government agencies work in conjunction with industry firms so that the broadest audience can be reached and all participants can focus on their specific areas of expertise.

By developing a standards compliant electronic filing system in partnership with the computerized return processing industry, the tax authority outsources the preparation and filing process to an industry that, in turn, provides services to the taxpayers in the most efficient and least disruptive manner possible. This maximizes the acceptance rate among taxpayers while allowing the tax authority to reduce costs by focusing its support efforts on a smaller, more knowledgeable community of users.

1.8.2 Communications

Email should be used to provide notification about the status of the electronic filing system that is posted on SES or the agency's website if SES is not available. Any changes posted to SES or the agency's website should be followed with an email listing the changes and where they are posted. Problems that affect processing should prompt email notification. Issues that affect the industry should be communicated via the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org.

1.9 Magnetic Media

"Mag media" refers to the physical means used to deliver the file such as sending CDs, magnetic tapes, and other media to an agency. It does not refer to the actual format of the data file being transmitted. EFW2 is one example of a definition of the format for data to be transmitted. Although some tax authorities make use of magnetic media, the NACTP is in favor of the elimination of magnetic media. E-file is the preferred method of filing returns. Please see the section below entitled Technology Transition for guidelines on moving to new formats and technologies.

1.10 Technology Transition

Moving to an electronic filing system is a significant change for the filing population. The tax authority should adhere to the following conditions when making this change:

- There should be a transition period of at least one year between discontinuing a program and mandatory use of a new program.

- The tax authority should allow electronic filing that supports all the audience types as described above and adheres to the above guidelines regarding enrollment, file formats, electronic signatures, transmission and security, testing, and processing. The tax authority should also offer a program that allows for transmission of files from large transmitters while also accommodating the small filer.

The NACTP will provide assistance and advice as tax authorities implement technology to develop electronic filing programs. Tax authorities are strongly encouraged to use the NACTP as a resource for review of system design and implementation policy.

1.11 Mandates

To encourage electronic filing, tax authorities may be tempted to mandate electronic filing. However, tax authorities are strongly encouraged to work with the NACTP and utilize industry expertise to ensure the broadest acceptance of an electronic filing system prior to resorting to mandates.

Guidelines to follow when considering an electronic filing mandate are as follows:

- Taxpayers and firms in the return processing industry should be notified at least two years prior to the mandate becoming effective.
- Complete specifications for the entire processing system should be made available at least one year prior to the effective date of the mandate.
- Electronic filing should be available on an optional basis for at least two full filing periods prior to the mandate becoming effective.
- There should be reasonable opt-out circumstances for small taxpayers such as those with less than 50 employees. There should also be opt-out options for all taxpayers in the case of extraordinary circumstances.

Section 2 Business Registration, Authorization, and Enrollment

2.1 Introduction

Electronic filing is the preferred reporting method since it reduces the time, effort, and cost involved in processing tax and information returns for both the employer and tax agency. Therefore, in order to encourage participation, the process for an employer or a payroll service company to begin to e-file should be simple and streamlined.

- **Business Registration**—the initial act of an employer applying for a Withholding Tax and/or Unemployment Tax Account number with the tax agency for the purpose of collecting and reporting payroll taxes.
- **Power of Attorney (POA)/Authorization—**the act of a business granting a reporting agent the authority to intercede on the company's behalf with the tax agencies relating to payroll reporting matters.
- **Enrollment**—the means for a transmitter and software developer to register to participate in the electronic filing program.

2.2 Goals

By following the recommendations outlined in this section, tax agencies and the computerized return processing industry can achieve the following common goals:

- Payroll service companies can provide electronic tax payment and reporting services to their clients as soon as the business initially registers with the tax agency for the purpose of collecting and reporting payroll taxes.
- Employers are able to file tax payments and reports electronically as soon as they are ready to do so.
- Government agencies benefit from maximized compliance and data accuracy.

2.3 Audience Considerations

As mentioned in Section 1, the filing industry is broken down into three general categories: Employers, Payroll Service Providers, and Third-Party Intermediaries. In order to gain widespread participation and greater compliance, all electronic filing policies and processes should be designed so that they support these three categories and the various roles involved in the entire electronic filing process, bearing in mind that entities can assume multiple roles. These roles include:

- **Employer**
- **Payroll Service Provider**—The payroll service provider produces paychecks and related reports for employers. No Power of Attorney is required between the payroll service provider and its clients.
- **Third-Party Intermediary**
    - *Preparer*—There are two types of preparers. 1) An employer may prepare returns for his own company, or 2) A paid third-party preparer receives payroll information from employers and prepares returns. The preparer may transmit returns to the appropriate agencies, return them to the client for transmission, or forward them to a third-party transmitter. The third-party preparer has authority to communicate with tax agencies on behalf of his clients. NACTP prefers that no Power of Attorney is required between the third-party preparer and his clients.
    - *Reporting Agent*—The reporting agent receives payroll information from employers and prepares returns. The reporting agent complies with Revenue Procedure 2012-32. The reporting agent may either transmit returns to the appropriate agencies or forward them to a third-party transmitter. If transmitting returns, the reporting agent is able to transmit files using a single PIN/password for all of his clients. The reporting agent has authority to communicate with tax agencies on behalf of his clients. The *Reporting Agent Authorization*, IRS Form 8655, is required between the reporting agent and his clients.
    - *Transmitter*—The transmitter receives prepared returns and serves as a pass-through, transmitting the returns to the appropriate agencies. The transmitter receives acknowledgements from tax agencies, which he forwards on to his clients. The transmitter has authority to communicate with tax agencies on behalf of his clients regarding the success of the transmission, but no authority to communicate regarding the data that is transmitted. No Power of Attorney is required between the transmitter and his clients.
    - *Software Developer*—The software developer provides the software used by preparers and/or employers. The software developer has no access to employers' payroll information and has no authority to communicate with tax agencies on behalf of the preparers' clients or employers. No Power of Attorney is required between the software developer and the preparers and/or employers.

NOTE: The key item to note is that the entity submitting the return to the tax agency may not necessarily have direct access to the employer. Therefore, it is critical when designing an electronic filing system to <u>not</u> require employer authorization just to submit data. If necessary, authorization should only be used in cases where the entity is acting on behalf of the employer and wants access to the employer's account, not in the case where the entity is simply sending data to the agency.

2.4 Business Registration

Business Registration is the act of an employer applying for a Withholding Tax and/or Unemployment Tax Account number with the tax agency for the purpose of collecting and reporting payroll taxes.

When a business registers with a tax agency, there should be automatic enrollment for all filing processes that are in compliance with the agency's requirements, including paper and electronic filing. No separate enrollment should be required for electronic filing.

2.5 Authorization

The goal of many agencies considering a requirement of the taxpayer's authorization for the submitter of the return is to prevent or reduce fraud and identity theft. Authorization should only be required when the submitter requires access to the taxpayer's account information, but not for simply filing payroll tax returns.

2.5.1 Power of Attorney / Authorization Agreement

Power of Attorney (POA)/Authorization is the act of an employer granting a reporting agent the authority to intercede on the employer's behalf with the tax agencies relating to payroll reporting matters.

Below are the business roles defined earlier that are used in preparing and filing returns:

- Payroll Service Provider
- Preparer
- Reporting Agent
- Transmitter
- Software Developer

No Power of Attorney should be required between the **payroll service provider** and his clients.

The third-party **preparer** has authority to communicate with tax agencies on behalf of his clients. NACTP prefers that no Power of Attorney be required between the third-party preparer and his clients.

The **reporting agent** has authority to communicate with tax agencies on behalf of his clients. The IRS *Reporting Agent Authorization*, Form 8655, is required between the reporting agent and his clients.

The **transmitter** has authority to communicate with tax agencies on behalf of his clients regarding the success of the transmission, but no authority to communicate regarding the data that is transmitted. No Power of Attorney should be required between the transmitter and his clients.

The **software developer** has no access to employers' payroll information and has no authority to communicate with tax agencies on behalf of the preparers' clients or employers. Therefore, no Power of Attorney should be required between the software developer and the preparers and/or employers.

When submitting data to an agency, an otherwise-valid return should not be rejected simply due to lack of authorization. If necessary, POA/authorization should only be used in cases where a reporting agent is acting on behalf of the employer and wants access to the employer's account, not in the case where a transmitter is simply sending data to the agency.

The best practice for agencies is to outline those cases specifically needing a Power of Attorney (POA)/authorization. Most tax agencies have found it unnecessary to track authorization between taxpayers and the computerized return processing industry. The Social Security Administration (SSA) is a good example of an agency that does not require authorization.

Further, it is NACTP's position that if authorization is necessary, tax agencies should rely on a Memorandum of Understanding (MOU) between the agency and the reporting agent, rather than requiring a physical POA.

2.5.2 Memorandum of Understanding (MOU)

A Memorandum of Understanding (MOU) between an agency and a reporting agent certifies that the reporting agent has a signed authorization on file from each client employer expressly authorizing and directing the reporting agent to:

- Pay and file wage and tax information on behalf of the employer;
- Receive information about the employer's account, and
- Resolve tax questions or correspondence concerning the subject matter on behalf of the client.

The reporting agent agrees to provide a copy of any written authorization upon request to the tax agency and also agrees to certain standards of confidentiality and security.

According to the MOU, the reporting agent agrees to restrict access to the information provided to authorized personnel, to instruct authorized personnel as to the confidentiality requirements, and to maintain appropriate security measures.

2.5.3 MOU Template

In order to standardize the MOU, the NACTP has created a template for the Memorandum of Understanding and encourages agencies to use this template.

Memorandum of Understanding

PURPOSE
The purpose of this Memorandum of Understanding (MOU) between the [State Agency] and [Reporting Agent] is to certify that [Reporting Agent] has on file a signed authorization from each client employer that expressly authorizes and directs [Reporting Agent] to pay and file Wage and Tax information on their behalf, to receive information about the employer's account, and to resolve tax questions or correspondence concerning the subject matter described herein on the client's behalf.

State Information

State Name _____

Agency Name _____

Address _____

City, State, Zip _____

Contact Name _____ Phone _____ Fax _____

Email _____

Reporting Agent Information

Name _____

Address _____

City, State, Zip _____

Contact Name _____ Phone _____ Fax _____

FEIN _____ Email _____

A. **Duties**
Under this MOU, the [State Agency] agrees to rely on this certification to periodically provide current deposit schedule assignments; verify state employer identification numbers; and notify [Reporting Agent] of errors or possible discrepancies, at such times and in such formats as may be mutually agreed upon. [Reporting Agent] agrees to provide a copy of any written authorization upon request to the [State Agency].

B. **Confidentiality**
[Reporting Agent] agrees to restrict access to the information provided to authorized personnel and to use the information exclusively to produce more accurate wage and tax reports. [Reporting Agent] agrees to instruct authorized personnel as to the confidentiality requirements for protecting the data.

C. **Security**
[Reporting Agent] will maintain appropriate computer system security measures to restrict access to system files, records, and databases to authorized persons. [Reporting Agent] will permit the [State Agency] to make reasonable onsite inspections to ensure that the requirements of this MOU are being met.

D. **Termination**
Either party may terminate this MOU by giving written notice to the other party at least sixty (60) calendar days prior to the effective date of termination.

APPROVALS

[State Agency Representative Name]	[State Agency Authorized Signature]	[Title]	[Date]
[Reporting Agent Representative Name]	[Reporting Agent Authorized Signature]	[Title]	[Date]

2.6 Enrollment

Enrollment is the means for a transmitter or software developer to register for participation in the electronic filing program in advance of filing returns electronically.

When an employer registers with a tax agency, there should be automatic enrollment for all filing processes that are in compliance with the agency's requirements, including both paper and electronic filing. Since a separate enrollment is not required for paper filing, a separate enrollment should not be required for electronic filing for employers. Implementing an enrollment process for electronic filing introduces a strong deterrent to the employer and computerized return processing industry to adopt electronic filing.

If enrollment is necessary, here is a list of best practices and strategies to consider that help minimize the impact this additional electronic filing hurdle may present.

- Enrollment procedures for transmitters and software developers should be electronic.
- Login credentials should be immediately provided.
- Transmitters and software developers should not be required to provide a client list.
- The login can be used to identify the company transmitting the return.
- File formats and sample transmissions should be available on the State Exchange System (SES) (https://taxadmin.kiteworks.com), a secured site operated by the Federation of Tax Administrators (FTA) or the agency website if SES is not available.
- Communication procedures should be identical to return processing. Using the same system for enrollment as is used for return processing is highly recommended.
- Effective quarter/year dates for enrollments should be avoided. Tax agencies should consider that an employer may assign more than one transmitter or service provider for a period of time especially during a business merger or acquisition. Tax agencies should not block the prior transmitter from filing a last wage/tax report because a new service provider has enrolled the employer with the tax authority in preparation for the upcoming quarter.

2.7 Conclusion

The NACTP strongly encourages developing registration procedures in partnership with the computerized return processing industry. We support electronic filing as the preferred reporting method, but the system must be simple and streamlined. When an employer initially registers with a tax agency for the purpose of collecting and reporting payroll taxes, the registration should also automatically enroll the business for all filing processes that are in compliance with the agency's requirements, including both paper and electronic reporting.

Secondly, a POA/authorization should not be required for most business roles in the electronic filing process. However, NACTP's position is that, if necessary, tax agencies should instead rely on a Memorandum of Understanding between the agency and the reporting agent. By doing so, paper handling is drastically reduced by both the reporting agent and the tax authority.

Lastly, if enrollment into the electronic filing program is required for transmitters and software developers, the process should be electronic, provide immediate login credentials and not require a client list.

Section 3 File Formats

3.1 Introduction

Many state agencies use FSET, EFW2, Publication 1220, or NASWA (formerly ICESA) filing specifications for electronic filing of unemployment, wage and information reporting. While NACTP member companies support the use of these filing standards, it should be understood that even slight alterations of the standards by government agencies lead to compliance problems.

3.2 Goals

By following these standards, government tax agencies and the computerized return processing industry can achieve more efficient testing and approval processes and maximize compliance. When software developers can leverage existing code, already tested with other agencies, to implement electronic filing with new agencies, the time required for development, testing and implementation is much shorter for both the agency and developer. It is important for agencies to recognize the benefit of following these standard specifications, without introducing agency-specific modifications.

3.3 FSET Specifications

3.3.1 Background

Federal/State Employment Taxes (FSET) is an XML schema set that contains all of the data elements used by all participating states in the filing of the specific tax (typically unemployment or withholding) in question. The schema sets are under the control of E-Standards, which is a work group of the American National Standards Institute's Accredited Standards Committee X-12 and co-sponsored by the Federation of Tax Administrators (FTA). E-Standards has been charged by the FTA and IRS with the development and maintenance of the XML schema standards.

The mission of the FSET program is to reduce employer burden by simplifying the process of employment tax reporting and payments. A key advantage is that the FSET standard covers withholding and unemployment insurance. The program seeks to facilitate the development of commercial software applications for the single point electronic transmission of these specific taxes (typically unemployment or withholding) that can satisfy both state and federal obligations.

3.3.2 Objective and Goals

The purpose of this section is to outline standards for implementing the FSET format to encourage early adoption by the computerized return processing industry and to streamline the process for tax agencies. This section provides a high-level overview of FSET. Specific technical details are not included; however, references to the technical details are provided at the end of this section.

3.3.3 Agency Requirements

Agencies that plan to implement FSET should provide the needed requirements to the computerized return processing industry for implementation. In general, the information that will ensure a successful partnership and implementation include:

- Transmitter and Software Developer Enrollment Information
- Electronic Signatures
- "Postmark"/Timing Considerations
- Transmission Specifications
- File Format Samples Specific to the Tax Agency
    - Single and Batch
- Transmission Format Examples
    - Successful transmission
    - Failed transmission
- Acknowledgement Information and Examples
    - All error conditions including name and address error criteria. (NACTP recommends that agencies follow the Social Security Administration's name and Social Security Number specifications located at http://www.socialsecurity.gov/employer/critical.htm.)

For examples of well documented requirements, please contact either the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org or the E-Standards (formerly Tax Information Group for E-commerce Requirements Standardization (TIGERS)) team at Standards.Committee@taxadmin.org.

3.3.4 FSET Schema

When implementing FSET for unemployment insurance or withholding it is recommended that the latest version of the schema is used, which is located at https://www.statemef.com.

3.3.5 Recommendations

Intra-state agencies should work together when feasible to develop a joint mechanism for filing. A number of agencies have provided one location for transmission to the agency. The agency then disburses the filings as appropriate for processing. This has benefits to the agencies, including but not limited to, saving time, resources, and cost for implementation.

Avoid customizing the FSET schema. If additions or changes are needed, contact the E-Standards team at Standards.Committee@taxadmin.org. This will ensure the schema expands to meet the needs of all agencies and vendors.

3.3.6 Resources

FTA has a listserv available that is specific for E-Standards (formerly TIGERS). This is an excellent forum to stay up to date on changes to the schemas and to receive guidance on schema implementation. E-Standards provides information on upcoming meetings, new efforts, guidance on implementation, and resource pages to learn more about Tax XML.

The State Schema Development site was created as a collaborative source of information for the various schemas available to agencies and vendors. More information is located at https://www.statemef.com.

3.4 EFW2 Specifications and Publication 1220

EFW2 is a file format developed by the Social Security Administration for electronic filing: https://www.ssa.gov/employer/EFW2&EFW2C.htm. This format is used for reporting annual W-2 wage information. IRS Publication 1220 outlines the specifications for electronic filing of 1099s and other information returns: https://www.irs.gov/pub/irs-pdf/p1220.pdf . Government agencies supporting EFW2 and Publication 1220 should conform to these standards with no variations. (A variation would be, for example, requiring the optional Carriage Return/Line Feed (CR/LF) at the end of a record in the EFW2 file.)

The NACTP has developed the following specifications for the RV record in the EFW2 file to encourage standardization among state agencies. These specifications utilize the RV record to summarize information reported in the RS records.

Record RV – State Total Record			
RV Position	Field Name	Length	Specifications
1-2	Record Identifier	2	Constant "RV"
3-4	State Code	2	Enter the appropriate postal **NUMERIC** code of State Records (RS) reported since the last Employer Record (RE).
5-9	Taxing Entity Code	5	Defined by State/local agency.
10-29	Employer Account Number	20	An identification number assigned by a government agency to an employer for the purpose of filing wage and tax reports to state or local government tax agencies. Left justify and blank fill.
30-36	Number of RS Records	7	Enter the total number of State Records (RS) reported since the last Employer Record (RE). Right justify and zero fill.
37-42	Reporting Period	6	Enter the last month and the four-digit year for the calendar quarter for which this report applies; e.g. "032023" for January through March of 2023.
43-57	State Quarterly Unemployment Insurance Total Wages	15	Right justify and zero fill. **Applies to unemployment reporting.**
58-72	State Quarterly Unemployment	15	Right justify and zero fill. **Applies to unemployment reporting.**

	Insurance Total Taxable Wages		
73-87	State Taxable Wages	15	Right justify and zero fill. **Applies to income tax reporting.**
88-102	State Income Tax Withheld	15	Right justify and zero fill. **Applies to income tax reporting.**
103	Tax Type Code	1	Enter the appropriate code for the entries in the next two fields: C = City Income Tax D = County Income Tax E = School District Income Tax F = Other Income Tax
104-118	Local Taxable Wages	15	Right justify and zero fill. **Applies to income tax reporting.**
119-133	Local Income Tax Withheld	15	Right justify and zero fill. **Applies to income tax reporting.**
134-512	Blank	379	Fill with blanks. Reserved for SSA use.

3.4.1 Annual Reconciliation

The NACTP recommends that agencies no longer require a separate submission of annual reconciliation information when filing electronically. Agencies should calculate the necessary reconciliation data from the W-2 or 1099 information submitted. If an annual reconciliation is required, multiple reconciliation forms/submissions per employer should be allowed for the following reasons:

- Developers will send an annual reconciliation with each submission because a reconciliation is required, and developers will have no way of knowing if the employer plans to send additional submissions.

- Accounts payable departments generally handle 1099 reporting while payroll departments process W-2 filing. Employers may use different software packages for reporting W-2s and 1099s. The 1099 payment information needed to complete the annual reconciliation may not be available to the software package used to prepare the EFW2 file.

- Requiring only one annual reconciliation per employer would affect the current work process of employers by requiring that all W-2s, 1099s and reconciliation amounts are prepared before any of these files can be submitted.

- The due dates for reporting W-2 and 1099 information are not always the same. Employers may not have the 1099 information required by the reconciliation prepared by the W-2 filing due date.

- Many employers choose to report W-2 information in multiple files. For example, some employers choose to file W-2s for highly compensated employees in a separate submission from the W-2s of the general employee population for confidentiality purposes. When multiple files are submitted, software packages would need a means of determining which file should contain the combined reconciliation amounts.

For these reasons, the NACTP believes that electronic filing of annual reconciliation information should be allowed for each W-2 or 1099 submission rather than requiring only one annual reconciliation per employer.

3.5 NASWA (formerly ICESA) Specifications

ICESA is a file format originally developed by the Interstate Conference of Employment Security Agencies and is currently under the name NASWA (National Association of State Workforce Agencies). This format is used for reporting quarterly unemployment wage information. Government agencies supporting NASWA (formerly ICESA) should conform to these standards with no variations.

Section 4 Forms Design Standards

4.1 Introduction

When printing substitute forms, most software users are restricted by laser and ink jet printers that have margin restrictions, are limited in the print colors available and have a limited number of fonts. Because of the known limitations that exist with laser and ink jet printers, the computerized return processing industry designs substitute tax forms following guidelines that make their forms compatible with most processing and printing systems.

Government agency designers should also follow these standards in order to gain processing efficiencies. One consistent design between the official government form and the computerized substitute form streamlines processing and ensures that the computerized return processing industry can more closely replicate the form layout and accommodate known printer and operating system restrictions.

4.2 Goals

By following these standards, government tax agencies and the computerized return processing industry can achieve the following common goals:

- Government agencies benefit from maximized compliance and minimized costs due to less manual processing.
- Employers are provided with government and computer generated forms that are almost identical, resulting in increased employer confidence.
- Employers are provided with a method of form preparation that is less costly, less time-consuming, and considerably more accurate than manually prepared forms.

4.3 Forms Design Standards

The NACTP works to support the achievement of these goals by maintaining standards which limit the amount of manual processing required by submitted forms. By following these standards, government tax agencies can maximize the number of forms which are scanned properly, resulting in more efficient and accurate tax processing.

This section describes basic design standards for these categories:

- Paper and ink
- Page layout
- Text and variable data fonts
- Variable data fields

4.3.1 Paper and Ink

4.3.1.1 Paper Size for Forms

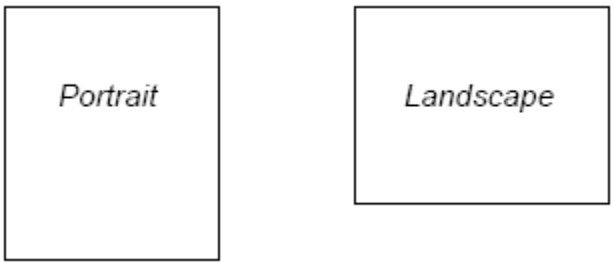
A form is an image that requires an entire sheet of paper. 8-1/2 inches by 11 inches is the most commonly used paper size in the U.S. today. Virtually all desktop printers support it. Use of 8-1/2 inch by 14 inch paper (also known as legal size paper) is strongly discouraged. Legal size paper is not supported by all desktop printers. For employers who do have the proper equipment, it is impossible to ensure that they will always switch between 8-1/2 inch by 11 inch and legal size paper at the appropriate time, particularly during high volume print jobs. Compliance is more likely when all forms are printed using 8-1/2 inch by 11 inch paper.

4.3.1.2 8 1/2 Inch Wide Vouchers and Coupons

Vouchers and coupons are small forms that do not take up an entire sheet of paper. These forms are typically fed into a scanner that reads the pertinent information. Vouchers and coupons should be designed with a width of 8-1/2 inches and a maximum height of 5-1/2 inches. Employers are often required to cut their vouchers to size before submitting them to the tax authority. The cut edges of vouchers are rarely straight or perfectly positioned, causing misreads when run through a scanner thus resulting in increased manual processing. So, developers try to have users make as few cuts as possible. Positioning a single voucher at the bottom of the page avoids having two horizontal cut lines, at both the top and bottom of the voucher. It also preserves a clean long edge along the bottom of the page to feed into the scanner. Designing a voucher to be 8-1/2 inches wide also avoids any vertical cut lines. Forms with a height greater than 5-1/2 inches should be considered full-page forms, avoiding any cut lines.

4.3.1.3 Portrait (Vertical) Page Orientation

A portrait (vertical orientation) form is 8-1/2 inches wide by 11 inches high. A landscape (horizontal orientation) form is 11 inches wide by 8-1/2 inches high. The computerized return processing industry requests that all pages of a multi-page form should have the same page orientation.



4.3.1.4 Single-Sided Printing

Many desktop printers can only print single-sided documents. Consequently, the computerized return processing industry cannot force their customers to print double-sided documents. Tax authorities are encouraged **not** to require the use of duplex (double-sided) printing.

4.3.1.5 Black Ink or Toner

Black ink provides a high degree of legibility, is easy to photocopy, and is readily available. Black is the most common toner color for desktop printers. Official forms may be printed with drop-out ink, but substitute forms should not require the use of drop-out ink. Although the color generated by various printer models may be similar to the color of drop-out ink on the official form, the likelihood of an exact match is almost impossible, and the colored ink may not drop out correctly.

4.3.2 Page Layout

4.3.2.1 Six (6) Lines Per Vertical Inch

Standard substitute form line spacing is 6 print lines per vertical inch (1/6 inch, or 12 points, or 1 pica). All forms developers can support this layout grid, and some cannot support anything else.

4.3.2.2 Ten (10) Characters Per Horizontal Inch

Standard substitute form character spacing is 10 characters per inch (1/10 inch) horizontally. This is also known as 10-pitch spacing.

4.3.2.3 Margin Restrictions – Half Inch Margin Required

Desktop printers have stringent mechanical margin and print driver limitations, usually **requiring a half-inch margin on all sides of the page**. When data is printed too close to the edge of the page, the information is either truncated or reduced in size, depending upon the printer model. These problems exist whether printing form text, variable data, scan lines or registration marks, resulting in inaccurate scanning of data.

In order to avoid the limitations of current desktop printers, developers must design forms with half-inch margins on all four sides. This has proven to work consistently on desktop printers, and it produces the best read rates for scannable forms.

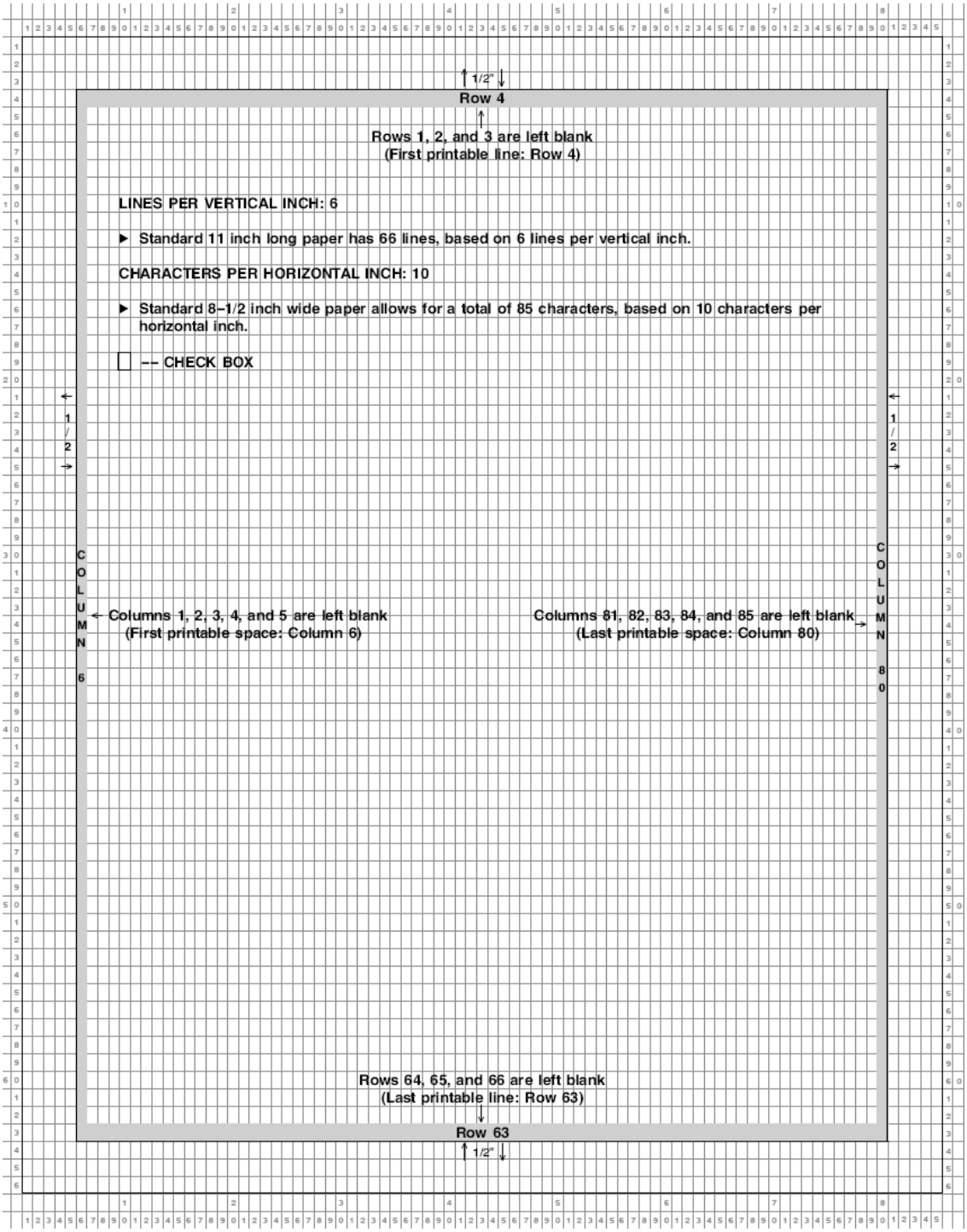
It benefits the tax authority to develop official forms with half-inch margins, because the agency can eliminate the risk of receiving forms with missing vital tax information when the user's printer cannot print in the half-inch margin area. The NACTP strongly urges tax authorities to design original forms with half-inch margins.

4.3.2.4 Sample Page Layout

A properly designed form is printed on 8-1/2 inch by 11 inch paper and is based on six lines per vertical inch, ten characters per horizontal inch and half-inch margins. When these requirements are met, the following rows and columns are available for printing:

- First printable line: Row 4
- Last printable line: Row 63
- First printable space: Column 6
- Last printable space: Column 80

The following grid, though not drawn to scale, illustrates the available printable area.



4.3.2.5 Check Box Size

A check box must be a minimum of 1/10 inch wide by 1/6 inch high in order to enclose a 12 point Courier/Courier New “X” or any other single Courier/Courier New character.

Other options to denote data selection (e.g., radio buttons, circling data, or crossing out deselected data) should be avoided. These are difficult for developers to implement and may not print correctly for all users.

4.3.3 Text and Variable Data Fonts

Text fonts are the fonts used in printing the static information that is part of the form itself. Variable data fonts are the fonts used in printing the dynamic information that varies between the employers being reported.

4.3.3.1 Text Fonts

While the computerized return processing industry has access to commonly available desktop publishing fonts, many member companies have customers that are still limited by a smaller set of fonts. Designing forms limited to the fonts and point sizes that the computerized return processing industry can support ensures that all members can meet government requirements.

NACTP supported fonts and point sizes:

- Supported Fonts: Helvetica or Arial
- Minimum Point Size: 6 point
- Maximum Point Size: 14 point

NACTP supported font styles:

- 6 point regular
- 8 point regular
- **8 point bold**
- **10 point bold**
- **12 point bold**
- **14 point bold**

4.3.3.2 Variable Data Fonts

Scannable forms generally use a monospaced font to display and print variable data fields. A monospaced font is one where the horizontal space allocated to each character is exactly the same. An "**M**" and a "**W**" have the same width as a "**,**" or an "**i**". Courier/Courier New and OCR-A are the monospaced fonts most easily read by scanning equipment and most often specified for variable data fields.

Courier/Courier New is the default monospaced font found in most desktop printers. The NACTP encourages the use of Courier/Courier New for all variable data fields including scan lines because it is readily available to practitioners and employers; it minimizes the possibility of font substitution (see below); and it meets the criteria for easy recognition with imaging equipment.

NACTP supported font and point size:

- `Courier/Courier New, 12 Point, 10 Pitch`

4.3.3.3 Font Substitution

The NACTP strongly urges tax authorities to design forms that avoid the use of OCR-A, OCR-B, or other specialty fonts. When a specialty font is required that is not available on the user's computer system, font substitution occurs. The printer defaults to printing in another font that is available, such as Courier/Courier New or possibly even an unreadable font like Symbol or Wingdings.

Even though the computerized return processing industry has development systems that support OCR-A, it must be understood that users may have different variations of this font, and this font may not be available on many users' computer systems.

OCR-B should be avoided because most tax software customers and tax practitioners do not have this font available. Several states have removed OCR-B from their forms resulting in an increase in the number of successfully read forms. Although systems for processing these forms were already established, these agencies found it worthwhile to update their systems because of the decreased cost of manually processing forms.

The likelihood of font substitution occurring is drastically increased when specialty fonts are used. Substitution of fonts causes forms to be scanned improperly, resulting in a higher number of forms requiring manual processing and increased processing costs for the tax authority. Therefore, the NACTP recommends that Courier/Courier New be supported when implementing automated processing in order to eliminate font substitution and streamline processing.

4.3.3.4 Special Symbols

The figure below shows the symbols available to the computerized return processing industry. This set of characters is available on most printers. Characters that are not listed here should be avoided. These are the most-preferred symbols for use on substitute tax forms and can be safely used for marking key data fields or as form registration marks.

4.3.3.5 Shading or Screens in Text Areas

Shading and screens are often used on official forms. While these features may be used to enhance official forms, they should not be required on computer generated substitute forms. It is difficult to maintain consistent images using shades and screens because of the density differences between desktop printers. Additionally, shading causes an increased scanned file size and can also interfere with the read rate on scannable forms.

4.3.3.6 Reversed Letters and Numbers

Avoid requiring reversed letters and numbers (white characters on a black background) on substitute forms. Many older printers cannot print reverse letters and numbers.

4.3.3.7 Rotated Text

Although rotated text is often used on official forms, it should not be required on computer generated substitute forms. Not all forms layout packages that developers use support it, and many older printers require special landscape fonts to print rotated text.

4.3.3.8 Unique Logos and State Seals

Avoid requiring unique graphics such as state seals/logos on computer generated substitute forms. Since these are not supported as standard fonts, they must be inserted as bitmap, .jpg, .gif, and .png files which drastically increase the file size, and thus slow printing.

4.3.4 Variable Data Fields

Special requirements or unique scenarios (e.g., transitional periods when changing employer account numbering schemes, format variability across sections or pages of form(s) within an agency, specific characters that must be excluded, etc.) should be explained with examples on a separate instruction sheet for software developers.

4.3.4.1 Variable Data Field Delimiters

Data areas for identifying negative numbers, dates, social security numbers and telephone numbers should be free from preprinted dashes, slashes, and parentheses. These delimiters will print as part of the variable data generated by the software application.

Data such as social security numbers, dates, negative values, telephone numbers, and federal employer identification numbers will print as follows:

Data Type	**Example**	**Delimiter**
Social Security Numbers	XXX-XX-XXXX	"-" Hyphen
Dates	XX/XX/XXXX XX-XX-XXXX XX/XX/XX XX-XX-XX	"/" Slash or "-" Hyphen
Negative Values	-XXXXXXXXXX (XXXXXXXXXX)	"-" Floating minus sign directly to the left of the first number with no extra space between the minus and the number "( )" Within parentheses
Telephone Numbers	XXX-XXX-XXXX (XXX) XXX-XXXX	"-" Hyphen "( )" Parentheses, Space, and Hyphen
Federal Employer Identification Number (FEIN)	XX-XXXXXXX	"-" Hyphen

4.3.4.2 *Variable Data Field Lengths*

There are several data types, usually identifying the employer and/or return preparer, which are common to most payroll tax forms. Listed below are descriptions of each data type and the **minimum** number of print positions required for each. Field dimensions should be based on 10 characters per inch.

Data Type	**Minimum Number of Print Positions Required (allowing for 10 characters per inch)**
Dollar Amounts	14 (handles amounts up to 999,999,999.99)
Employer's Name	35
In Care Of	35
Address	35
City, State, ZIP	35
City (if separate field)	21
State (if separate field)	3 (2 characters preceded by a blank space)
ZIP (if separate field)	11 (10 characters preceded by a blank space)
Federal Employer Identification Number (FEIN)	10
State ID Number	Long enough for the state's ID, including delimiters
Social Security Number (SSN)	11
Telephone Number including Area Code	15 (14 characters preceded by a blank space)

Section 5 Image Processing and Scannable Forms

5.1 Introduction

Every tax agency tries to find the most efficient and cost-effective means to process tax returns. Ultimately, electronic filing is the quickest and most accurate method. As tax agencies move taxpayers toward electronic filing, many agencies employ automated image processing systems as an interim way to improve their processing rate of paper returns. These systems scan, or mechanically read, paper returns to capture and electronically store pertinent tax data.

The majority of the tax agencies implement some type of image processing automation to read returns. The NACTP represents over one million employers. This number stresses the urgency of early involvement between tax agencies and the NACTP when implementing automated processing. This timely joint involvement has proven to be very cost-effective by identifying and resolving issues prior to implementation. The NACTP actively participates in the evolution of automated forms processing technologies by sharing its expertise and unique knowledge of software and desktop printing capabilities with tax agencies and automated processing vendors. This group has helped the IRS and most of the state revenue agencies as they have implemented image processing technology.

5.2 Designing Forms for Image Processing Systems

There are several different ways to design forms for image processing systems. These methods are broken down into two separate categories: 1) Forms Identification, and 2) Data Capture. Those methods listed under Forms Identification are strictly forms design features used by scanning systems to recognize the form. They do not contain any taxpayer-specific information. Those items listed under Data Capture include design features to help extract taxpayer-specific information. Forms identification methods can be used in conjunction with data capture techniques.

- **Forms Identification**
    - Document Identification (ID) Codes
    - Static One-Dimensional (1-D) Bar Codes
- **Data Capture**
    - Scanlines
    - Drop-Out Ink and Absolute Positioning of Data Fields
    - Answer or Data Sheets (Not Recommended other than for Employee Listings)

- Two-Dimensional (2-D) PDF417 Bar Codes
- Employer-Specific One-Dimensional (1-D) Bar Codes (Not Recommended)
- QR Codes (Not Recommended)

The following section explains each method, including definitions, advantages, and disadvantages. Since not all NACTP companies currently support 2-D bar code technology, employer-specific 1-D bar codes, or QR Codes, they should not be mandated. Answer or data sheets are also not recommended as a scannable form option, other than in the case of an employee listing, because taxpayers have difficulty understanding their returns since there is virtually no text to identify the data.

5.3 Forms Identification

5.3.1 Document Identification (ID) Codes

A document identification code, or "doc ID," is a string of characters placed on a document to easily identify a form for the accurate capture of information on that form. The document identification code can contain information such as the form type, filing period, quarter, and vendor identification. When the machine reads the document identification code, it is telling the machine where to look for other data such as taxpayer identification and amount fields.

Placement of the document identification code on the form should be in the same area on all forms. The characters should be placed horizontally and can be either alpha or numeric, or a combination of both. The preferred font for document ID codes is Courier/Courier New 12 point 10 pitch, as in the following example.

Sample document ID. `9872349876`

This sample document ID has encoded four pieces of information, as follows:

Form Number:	987
Filing Period:	23
Quarter:	4
Vendor Code:	9876

The NACTP strongly recommends standardizing document identification codes across all forms of a particular type. The NACTP also strongly encourages agencies to assign document ID codes before forms are released to software developers.

Advantages of Document ID Codes

- The document identification code takes up less space on a form than a bar code.
- If needed, the document identification code can be read visually.
- New forms can be easily added to the system.
- Taxpayers are provided with an easily read form.
- Document identification codes can be printed by a wide variety of printers.

Disadvantage of Document ID Codes

- In order to get the most accurate read, all data for a form must have the same placement; or a template must be programmed for each vendor.

5.3.2 Static One-Dimensional (1-D) Bar Codes

A one-dimensional bar code is an orderly collection of black bars (or lines) and white spaces that have a defined pattern and can be read by a scanner or a scanning wand. The bars and spaces have varying widths and distances apart from one another.

In a one-dimensional bar code, the relationship between the width of a wide bar and the width of a narrow bar is called the "wide to narrow ratio". A wide to narrow ratio of 3:1 means that the wide bars in the bar code are three times as wide as the narrow bars. The wide to narrow ratio is more important than the total width of the bar code because the ratio determines the readability of the bar code by scanning equipment.

Bar codes on government forms are used to identify forms to be imaged. Typical information contained in bar codes currently being used by tax agencies includes form number, filing period, quarter, and vendor number.

When selecting the type of bar code to use, keep in mind both present and future character requirements. Generally, bar codes that accommodate the use of alpha characters require more elements per character. If space on the form is limited, it is easier to implement a numeric-only bar code scheme. When designing forms, the computerized return processing industry recommends that the orientation and location of the bar code be identical from form to form and page to page.

Although there are many bar code types, the two types of one-dimensional bar codes that the NACTP recommends and that meet the current needs of tax agencies are the Interleaved 2 of 5 and Code 39 bar codes. An Interleaved 2 of 5 bar code represents numeric characters only. The Code 39 bar code represents numeric characters, uppercase alpha characters and seven special characters. Because it is more compact in design, the Interleaved 2 of 5 bar code should be used, unless alpha characters are required.

Interleaved 2 of 5

Code 39

In the preceding bar code examples, four pieces of information are encoded in ten numbers as follows:

3-digit Form Number:	123
2-digit Filing Period:	22
1-digit Quarter:	4
4-digit Vendor Code:	1234

Advantages of One-Dimensional Bar Codes

- Any form that the tax agency wishes to image and/or data capture can be easily added.
- Software providers do not need to meet exact row and column data positions, which allows for various formats and eases the approval process.

- Taxpayers are provided with a form that is similar to the form that has been provided to them in the past, with the only change being the addition of a bar code.

Disadvantages of One-Dimensional Bar Codes

- Tax agencies must program templates for the individual company's forms every year.
- Software and printers need to be capable of reliably producing bar codes. If the bar code is too compressed, some ink jet printers may not produce bar codes that can be read accurately.
- The bar code cannot be read visually without a specialized scanning application.

5.4 Data Capture

5.4.1 Scanlines

A scanline is a line of characters in a specific location that is scanned, such as a check digit line on the bottom of a voucher. The computerized return processing industry prefers that this line be produced in Courier/Courier New font. Scanlines are usually placed in absolute or fixed positions.

Some scanlines can look like document ID codes, but there is an important difference. Document IDs generally encode static data. They do not change from return to return. On the other hand, scanlines are dynamic. They often include data such as an employer's name or account number and/or the payment amount due, which will vary with each voucher or return.

Sample scanline. `22046 0022339997 06408`

This sample scanline encodes several pieces of information into three fields:

First field	
Filing period or due date:	22
Quarter:	04
Check digit:	6
Second field	
Employer Account number:	002233999
Check digit:	7
Third field	
Internal tax agency accounting code:	06408

Advantages of Scanlines

- A scanline provides a compact representation of any pertinent data that the tax agency wishes to capture.
- If needed, a scanline can be read visually.
- Taxpayers are given a "normal"-looking form.
- New forms can be easily added to the system.

- Scanlines can be printed by a wide variety of printers.

Disadvantage of Scanlines

- All data for a form must have the same placement to get the most accurate read.

5.4.2 Drop-Out Ink and Absolute Positioning of Data Fields

Drop-out ink is another approach to developing scannable forms for those portions of the form that are not required to be imaged or data captured. Drop-out ink is available in many colors and is not readable by scanners. Therefore, nonessential information printed in drop-out ink (such as text) is eliminated when scanned, thus reducing the file size and storage requirements.

Drop-out ink is often used for the official government forms. Software developers' computer generated forms cannot duplicate the use of drop-out ink because their customers generally use laser printers of which many print in black ink only.

Tax authorities that incorporate drop-out ink for the "official" form also design an alternate version for use by the computerized return processing industry. If an alternate design is not provided, then the NACTP recommends that agencies provide software developers with a copy of the official form with fields developed on a standard 6ths and 10ths grid showing exact starting and ending coordinates of each field on the form. These grids are required because they enable a forms developer to be precise in the placement of data in specific areas to match pre-defined scannable templates.

Absolute positions are used when any type of data field must be placed in an exact row/column position on the 10 characters per inch by 6 rows per inch grid.

Although this is a viable solution for automated forms processing, this variation is not user-friendly. To the taxpayer or preparer, it looks as if something is wrong when lines are missing and when the text is so far away from the data. They make numerous phone calls to the tax agency and to the software provider about the appearance of the form.

Advantages of Drop-Out Ink

- Any format that the tax agency wishes to data capture can easily be implemented.
- The imaged file size is smaller for easier data storage.

Disadvantages of Drop-Out Ink

- Since computer generated forms cannot duplicate drop-out ink, taxpayers and practitioners often question whether the form is authentic. Taxpayers frequently call the software developer and the tax agency, complaining that the form "doesn't look like the standard tax form."
- All data for a form must have the same placement to get the most accurate read.

5.4.3 Answer or Data Sheets (Not Recommended other than for Employee Listings)

Another approach to scannable forms development is the answer sheet, sometimes called a data sheet, which includes data only and no text describing the data. While this solution gains government approval and eases scanning issues, taxpayers find it disconcerting to see only their personal data printed on the page.

Overall, taxpayers are skeptical about signing a return in which only the signature information is clear and not the data. A readable copy needs to be provided to the employer.

The computerized return processing industry does support the answer sheet format for employee listings since the data is easily recognizable to the employer without the need for any field labels. Answer sheets are different than the use of drop-out ink in that there are generally no field labels on an answer sheet. For a computer generated version of a drop-out ink form, labels are present on the form making it easier for the taxpayer to understand the data on the return.

Advantages of Answer Sheets

- Less paper is used per return.
- A high rate of accuracy during data capture is achieved.
- The imaged file size is small for storage.
- Answer sheets can be printed by a wide variety of printers.

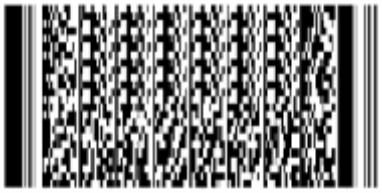
Disadvantages of Answer Sheets

- In addition to printing the answer sheet, preparers must print a different (standard) return for use as the customer copy.
- Taxpayers have difficulty understanding their returns because there is virtually no text.
- There is less perceived value by taxpayers and preparers.
- In order to get the most accurate read, all data for a form must have the same placement.

5.4.4 Two-Dimensional (2-D) Bar Codes

The standard type of two-dimensional or 2-D bar code used in the tax industry is called PDF417, or Portable Data File 417. It is a two-dimensional stacked bar code symbology that can encode up to 1800 printable ASCII characters. It performs error correction by making calculations, if necessary, to reconstruct undecoded or corrupted portions of the symbol.

2-D bar code



Error correction is a primary feature of PDF417. By inserting code words into the symbol, it is possible to compensate for damaged or unreadable bar codes. When a PDF417 bar code is printed, the user specifies a security level in the range of 0 to 8. A high security level will generate a large bar code, but will also increase the likelihood of recovering information from a damaged bar code. The error correction level for the 2-D bar code is set at **4** to meet the computerized return processing industry standards.

Two-dimensional bar codes can store up to 1800 printable ASCII characters. However, for technical reasons, the expected number of characters for tax applications is approximately 1200 with data from the entire return, not just the form on which the bar code is positioned.

To successfully implement this technology in return processing, government agencies need the cooperation of software companies that must incorporate 2-D output capability in the products they provide to taxpayers and

practitioners. Thus, government tax agencies and software developers have a mutual interest in ensuring that 2-D technology is implemented in as consistent a manner across agencies as possible.

Since 1999 the Federation of Tax Administrators (FTA) and the NACTP have worked together to create and maintain important guidance on the implementation of 2-D bar code processing.

For more information, see the two-dimensional bar code standards and guidance documents available at https://taxadmin.memberclicks.net/index.php?option=com_content&view=article&id=218:2-d-bar-coding-standards-revision-2010v1&catid=26:technology.

Advantages of Two-Dimensional (2-D) Bar Codes

- A large amount of data can be contained within a two-dimensional bar code, far more than within a one-dimensional bar code.
- Up to 50% of the bar code can be destroyed (torn, gotten wet, etc.) and, depending on the level of error correction, the bar code will still be readable.
- The read rate of a 2-D bar code is either 0% or 100% which eliminates the need for data verification.
- Software providers do not need to meet exact row and column data positions, which allows for various formats.
- New returns can be easily added to the system.

Disadvantages of Two-Dimensional (2-D) Bar Codes

- Not all software developers are able to produce the two-dimensional bar code.
- Special scanners are required to read two-dimensional bar codes.
- Usually, forms must be re-designed to gain the space needed for a two-dimensional bar code.
- Software and printers need to be capable of reliably producing two-dimensional bar codes. If the bar code is too compressed, some printers may not produce bar codes that can be read accurately.
- Employers and preparers may handwrite an update on the printed form. This change is not captured in the 2-D bar code.

5.4.5 Employer-Specific One-Dimensional (1-D) Bar Codes (Not Recommended)

As stated earlier, a one-dimensional bar code is an orderly collection of black bars (or lines) and white spaces that have a defined pattern and can be read by a scanner or a scanning wand. The difference between static one-dimensional bar codes described earlier and employer-specific one-dimensional bar codes, is that the data in employer-specific 1-D bar codes is dynamic.

The computerized return processing industry does not support dynamic data (employer-specific information) in one-dimensional bar codes. Dynamic data changes from return to return. Instead, all necessary information, including the employer's account number, can be captured on the form itself.

Advantages of Employer-Specific One-Dimensional (1-D) Bar Codes

- Form identification, as well as employer information, is easily captured in one bar code.
- Employers are provided with an easily read form.

- New forms can be easily added to the system.

Disadvantages of Employer-Specific One-Dimensional (1-D) Bar Codes

- Not all software developers are able to produce employer-specific one-dimensional bar codes.
- In order to get the most accurate read, all data for a form must have the same placement; or a template must be programmed for each vendor.
- Software and printers need to be capable of reliably producing bar codes. If the bar code is too compressed, some ink jet printers may not produce bar codes that can be read accurately.
- The bar code cannot be read visually without a specialized scanning application.

5.4.6 QR Codes (Not Recommended)

A QR Code (Quick Response Code) is a square, matrix style, specialized two-dimensional bar code consisting of black squares arranged in a square grid on a white background. It can be used to encode alpha-numeric data, as well as a limited set of special characters, with faster readability and greater storage capacity than other bar codes.

QR Code

In the preceding QR code example, four pieces of information are encoded in fourteen alpha-numeric fields as follows:

7-character Form Identifier:	Form123
2-digit Filing Period:	22
1-digit Quarter:	4
4-digit Vendor Code:	1234

Advantages of QR Codes

- Software providers do not need to meet exact row and column data positions, which allows for various formats and eases the approval process.
- New returns can be easily added to the system.
- Due to the small size of the QR code, redesigning forms may not be necessary.

Disadvantages of QR Codes

- The computerized return processing industry does not support dynamic QR codes.
- Not all software developers are able to produce the QR code.

- The dynamic version of a QR code font is not free.
- Software and printers need to be capable of reliably producing QR codes. If the QR code is too compressed, some printers may not produce codes that can be read accurately.
- Employers and preparers may handwrite an update on the printed form. This change is not captured in the QR code.

5.5 Conclusion

Document ID codes, scanlines, drop-out ink, and answer sheets all require absolute positioning of the data. NACTP supports absolute positioning; however, tax agencies should build in tolerance in their scanning systems to allow for slight variations in the placement of the data due to the variety of printers used by taxpayers.

Another option to requiring absolute positioning is for tax agencies to program a template for each vendor. Storing a template for each vendor allows for various formats and eases the approval process.

The computerized return processing industry highly discourages the use of dynamic QR codes since it is not supported by developers. If an agency would like to use 2-D bar code technology, the computerized return processing industry recommends the use of a PDF417 bar code rather than a dynamic QR code.

Clearly, scannable forms provide considerable cost savings for tax agencies. While these forms can pose certain challenges for both the computerized return processing industry and tax agencies, these challenges can be overcome by early discussions between both parties. Working together, success for everyone involved can be achieved.

Section 6 Forms Communication, Distribution, and Approval

6.1 Introduction

Tax authorities and the computerized return processing industry share a common goal. Both groups want to maximize the number of forms processed accurately and limit manual processing. Since NACTP represents over one million employers, it is important that tax authorities and the NACTP work together to attain this goal.

Computer generated forms are typically more accurate than manually prepared forms, and as a result, tax authorities benefit from higher quality and increased compliance when processing computer generated forms. Tax authorities are able to capitalize on these benefits when they work together with the computerized return processing industry by:

- Communicating changes that influence forms development or processing
- Distributing forms, instructions, specifications, and publications in a timely manner
- Creating an efficient forms approval process by following the standards outlined in this section

This cooperative effort can achieve results that benefit not only the tax authorities, but also the computerized return processing industry and the million plus employers who choose to use computer generated forms.

6.2 Communicating Status of Forms

The computerized return processing industry can best meet their goal of assisting employers if tax authorities release copies of forms, specifications, and instructions six months prior to the tax period end date. The reason for the advance notice is due to the numerous steps involved in the forms development process. After receiving the design specifications, the form is created in the computerized return processing company's development software and then tested. Once the form successfully passes the testing procedure, sample forms are submitted to the tax authority for approval. After receiving approval from the tax authority, the form is integrated into the company's forms program and packaged for delivery to their customers.

If it is not possible to release a 'final' version of the form six months prior to the tax period end date, releasing a preliminary version of the form by that date is preferred to allow companies to begin the development process. NACTP members provide an additional independent review of the preliminary forms and instructions to identify any calculation or forms design errors. Early detection of these issues reduces the agency's time and effort to address any concerns prior to final implementation.

Because of this lengthy process, advance notice of changes for future filing periods should be communicated as soon as possible.

The NACTP recommends that tax authorities use our broadcast email notification system for communication purposes. Tax authorities can send one email message to an NACTP email address, and the message is then broadcast to the membership. Here are two NACTP email addresses and the NACTP groups that use them.

nactp_list@nactp.org -- Entire NACTP membership list

nactp_pirc@nactp.org -- NACTP Payroll and Information Reporting Committee members

In order to minimize telephone calls and emails from the computerized return processing industry and streamline the approval process, tax authorities should provide the following information to the computerized return processing industry:

- Forms not requiring approval or not changing
- Changes in website address (URL) for forms or other tax-related information
- Announcements of form(s) postings as well as reposting of form(s)
- Changes in forms processing (may include changes in vendor contracts or possible consideration of new scanning technology)
- Miscellaneous information regarding forms changes, legislative changes, errors, etc.

The tax authority should share form and tax-related information as soon as it becomes available.

6.3 Forms Delivery

There are three preferred electronic ways that a tax authority can distribute forms, specifications, instructions, and publications to the computerized return processing industry:

- Post forms to the State Exchange System (SES) (https://taxadmin.kiteworks.com), a secured site operated by the Federation of Tax Administrators (FTA).
    - If an agency opts to use the SES as a means of distributing forms, those same forms should not also be shared on the agency's own website. A single point of reference is preferred to minimize duplication of maintenance efforts, as well as to avoid confusion about which site contains the most current information.
    - Forms other than those used by the payroll tax industry can also be stored and shared on the SES. However, if a Letter of Intent (LOI) is required to access the agency's information on the site, a separate LOI exclusively for payroll tax information should be used.
- Post forms to an Internet website, preferably on a secure site for the computerized return processing industry and then send an email notification to nactp_pirc@nactp.org.
- Email forms directly to the computerized return processing industry at nactp_pirc@nactp.org.

Providing a forms release schedule and revision notes regarding forms changes through electronic delivery systems will also reduce telephone calls or emails to tax authorities from the computerized return processing industry.

6.4 Preferred File Formats

NACTP prefers the PDF file format for forms, specifications, instructions, and publications.

A PDF file generated directly from page layout or word processing software is smaller in size and easier to work with than a PDF file created from a scanned image. If the form uses non-standard fonts or symbols, use an embed fonts option when creating the PDF file to ensure that the font or symbol will be able to be displayed on computers that may not have that font or symbol installed. If at all possible, keep the file size under 1 MB.

A layered PDF is preferred, incorporating a copy of the official form with fields and a standard 6ths and 10ths grid as a separate layer that can be electronically displayed or removed.

If an overlay template (a cardboard or plastic sheet with cut-out windows for confirming data positioning on the page) will be used for the review of absolute position forms, the agency should advise developers and make a copy of the template available upon request.

6.5 Substitute Forms Approval Process

Once the forms have been distributed to and developed by the computerized return processing industry, forms are generally submitted to the tax authority for approval before incorporating them into the developer's products. Adhering to the following recommended guidelines will ensure that both the tax authorities and the computerized return processing industry experience an efficient, smooth review process.

6.5.1 Contact Information

It is essential that both the computerized return processing industry and tax authorities keep each other informed about changes in contact personnel.

To avoid delays in forms submissions and approvals, tax authorities should inform the computerized return processing industry of key contact changes. Updates can be sent by email to nactp_pirc@nactp.org for distribution to NACTP members. Examples of critical information are:

- Primary forms and approval contact name(s), phone/fax number(s), and email address(es).
- Secondary or back-up contact name(s), phone/fax number(s), and email address(es).
- Special approval contact name(s) (scannable forms, etc.), phone/fax number(s), and email address(es).
- Complete mailing address for submitting substitute forms, including the private delivery address if the mailing address is a P.O. Box.
- Any extended leave(s) of absence, such as vacation, maternity leave, training sessions, etc., for the approval contact(s).

6.5.2 Submitting Forms for Approval

To ease the burden of issuing approval responses by the tax authority, NACTP members will include a cover sheet or letter listing the submitted forms. Each form listed should have a corresponding area where the tax authority approval contact can mark *Approved*, *Approved with Corrections*, or *Not Approved*. The cover letter should include a signature and date area and a comment section for use by the tax authority approval person.

6.5.3 Numbers and Type of Submission Samples

In this document, forms are identified as scannable and non-scannable. 'Scannable' forms contain information that is captured electronically with a scanner by the tax agency.

When submitting forms for approval, only one (1) form should be required for non-scannable forms (blank or with variable data, at the discretion of the developer).

A maximum of five (5) test samples with variable data should be sufficient to test electronic data capture on scannable forms. If a full-field sample is needed, this sample should be one of the five samples.

It is the NACTP's experience that using standardized test data can streamline the approval process. Therefore, it is recommended that test data for paper forms match the test data for electronic filing, if applicable.

6.5.4 Substitute Forms Approval

Employers or practitioners utilizing approved software packages to prepare their returns should not be required to obtain separate approval before filing.

Scannable forms should first be sent through the tax authority's scanner to validate the data that needs to be electronically captured. If scanned data is captured accurately, manual review should be brief or may not even be necessary.

Manual review, if necessary, should include examining forms for layout, completeness, and other key points. Proofreading word for word should not be necessary. To minimize the number of times a form would need to be sent in for approval, the entire form should be reviewed before it is returned to the developer for corrections.

Forms should be reviewed/tested in the order that they are received, rather than held in batches containing each developer's full set of submissions. The batching of full sets of forms should not be a requirement for submitting forms for approval.

Forms deemed *Approved with Corrections* should not require resubmission.

With the exception of scannable forms that require data-filled returns, forms deemed *Not Approved* should be allowed to be resubmitted by fax or as an email attachment in PDF format.

The approval of a form should not be rescinded by the tax authority. In situations where an error of serious consequence is detected, the tax authority and developers are strongly encouraged to work together to resolve the situation.

Tax authorities should send an approval status to developers within ten (10) business days of the receipt of the forms.

The computerized return processing industry requests that approval status be communicated by these methods (listed in order of preference):

- Email
- Fax—Notification of the incoming fax should be given to the recipient

- Phone/verbal—Verbal approvals should be followed up with a signed hard copy of the approval, which can be emailed or faxed.

Section 7 Government Specifications

7.1 Electronic Filing and Magnetic Media

The NACTP strongly advises that all specifications published for both electronic and magnetic media filing include the following items:

- File format specifications such as FSET, EFW2, Publication 1220, or NASWA (formerly ICESA)
- A cross reference between field elements and the official form line number
- A complete list of the record changes from the prior reporting period
- Revision marks within each release of the specifications, indicating changes from the previous release, along with an updated revision date of the guidelines
- A list of all error conditions including name and address error criteria along with understandable error messages that do not require translation on the part of the employer. NACTP recommends that agencies follow the Social Security Administration's name and Social Security Number specifications located at http://www.socialsecurity.gov/employer/critical.htm.
- Detailed contact information for both forms and data, with preferably more than one contact name, phone number, and email address. Contacts can be designated as "primary" and "secondary".
- E-file and magnetic media filing thresholds and filing deadlines
- File upload web address for electronic filing and/or mailing address for magnetic media filing
- A description of the transmitter and software developer enrollment process, if applicable
- Testing requirements, if applicable
- Payment information, if applicable

For data field formatting specifications:

- Indicate justification (right or left)
- Specify if fields are required to be padded (e.g., blank filled, zero filled, etc.)
- Designate whether or not fields are required
- Include a sample form with proper data formatting
- Include sample schemas when using FSET

NACTP is willing to review draft specifications for tax agencies so that any potential problems for either the agency or the computerized return processing industry can be identified prior to live processing. By identifying potential issues up front, unnecessary challenges and their associated costs can be avoided.

7.2 Reproduction of Payroll and Information Reporting Forms

In order for substitute forms developers to produce accurate substitute payroll forms, tax authorities must provide specifications for the reproduction of their forms.

The specifications for scannable forms are just as important as sample forms. The NACTP strongly recommends that tax authorities release specifications at the same time, if not earlier, than draft forms.

NACTP member companies are willing to review any draft specifications and provide feedback on their ability to conform to the requirements. This review provides tax agencies with early detection of errors and inconsistencies so the agency can modify the specifications before finalization. The NACTP has done so with great success with several agencies.

Items that should be included in the specifications include:

- Approval process guidelines, such as the types of companies that are required to submit forms and expected turnaround time for approval
- A list of forms that must be submitted for approval
- A list of forms that need to be submitted for approval with data, if sample forms are required
- Data placement requirements and bar code specifications for scannable forms
- All contact information for forms acquisition and approval, with preferably more than one contact name, phone number and email address; contacts can be designated as “primary” and “secondary”
- A new revision date on each release of the specifications
- Revision marks within each release of the specifications, indicating changes from the previous release’s specifications

For sample specifications please contact the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org.

Section 8 Payment Standards

8.1 Goals

Historically tax payments have been dominated by paper processes. Dealing with manual processing of check payments and paper forms can be time consuming both for the taxpayer and the tax authority. Therefore, electronic filing is in the best interest of all parties involved in payroll tax payment processing by offering the opportunity to decrease the time, effort and cost involved with processing tax payments.

The most effective payment systems are designed with cooperative efforts between the taxpayer, the tax authority, and the computerized return processing industry. The standards described in this section are intended to serve as guidelines to the design and implementation of an electronic payment system based on the consensus experience of the NACTP as representatives of the computerized return processing industry.

8.2 Payment Methods and Definitions

When discussing electronic tax payments, there are different methods of transferring tax payment data at a federal and state level. These options include the Electronic Federal Tax Payment System (EFTPS), Automated Clearing House (ACH) tax payments (both debit and credit methods), as well as credit card payments. This section will give a brief definition and the benefits of these payment methods in addition to the advantages of paper check payments.

- **Paper Check Payments**—This classic method of payment offers the flexibility of allowing individuals to pay their necessary taxes without the additional need of specialized software or other third parties.

- **EFTPS**—The Electronic Federal Tax Payment System (EFTPS) is a free service from the US Department of Treasury that allows businesses, individuals, tax professionals, and payroll services to make payments for all federal taxes via a website, a voice response system, and other methods designed for tax professionals, payroll services, and financial institutions.

- **ACH Payments**—Automated Clearing House (ACH) payments are electronic payments that are processed by a group of financial institutions that make up the ACH network. The rules and regulations that govern the ACH network are established by NACHA – The Electronic Payments Association (formerly the National Automated Clearing House Association). NACHA established two methods of processing ACH payments:

    - **ACH debit**—An ACH debit transaction is one in which the taxpayer, through the agency financial agent, initiates a tax payment crediting the agency's designated bank account and debiting its own account for the amount of the tax payment.

    - **ACH credit**—An ACH credit transaction is one in which the taxpayer, through its bank, originates an entry crediting an agency's designated bank account and debiting its own account for the amount of the payment.

- **Credit Card Payments**—This method involves allowing taxpayers to make a tax payment via a credit card through an outside company. These transactions normally require an additional service charge for processing the credit card payment in addition to possible interest charges via the credit card company.

- **Other terms and definitions:**

  - **Automated Clearing House (ACH)**—Any entity that operates as a clearing house for electronic debit or credit entries pursuant to an agreement with an association that is a member of NACHA – The Electronic Payments Association (formerly the National Automated Clearing House Association).

  - **NACHA - The Electronic Payments Association (formerly the National Automated Clearing House Association)**—The organization that establishes the standards, rules, and procedures that enable depository financial institutions to exchange ACH payments on a national basis.

  - **Electronic Funds Transfer (EFT)**—EFT refers to any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, that is initiated through an electronic terminal, or computer, to order, instruct, or authorize a financial institution to debit or credit an account.

  - **Federal Reserve Bank (FRB)**—The central banking system of the United States, consisting of twelve regional reserve banks and member depository institutions that are subject to Reserve requirements.

  - **Originating Depository Financial Institution (ODFI)**—The organization that originates ACH entries at the request of and by agreement with its customers. For ACH debit the customer is the agency, and for ACH credit the customer is the taxpayer.

  - **Cash Concentration of Disbursement Plus Addenda (CCD+)**—A standard NACHA data format used to make ACH credit/debit transactions. The CCD+ format combines the widely used CCD format with a single record that can carry 80 characters of payment-related data known as the Tax Payment (TXP).

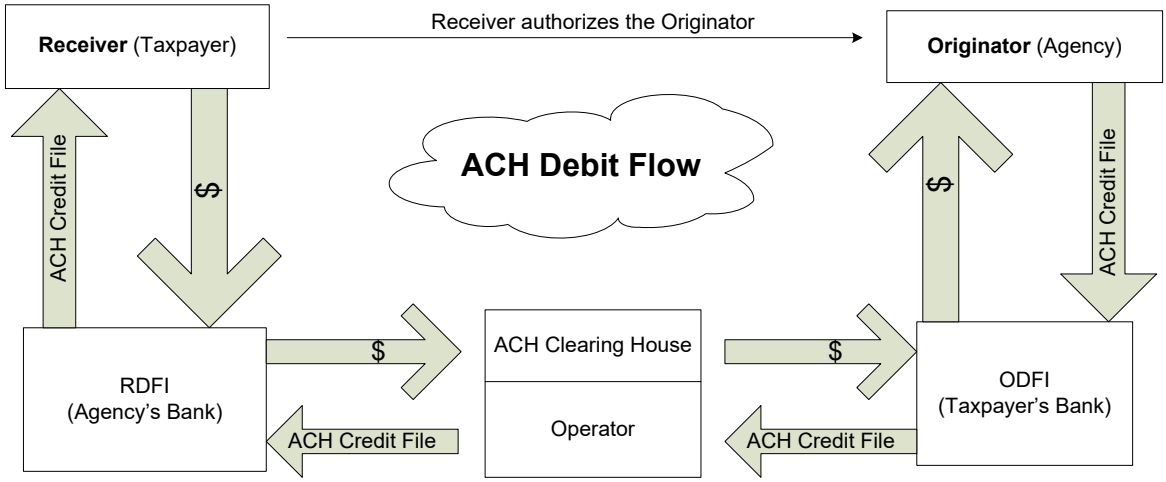
  - **Tax Payment (TXP)**—The banking convention record that contains the data format, contents, and implementation suggestions for taxpayers to pay taxes through the Automated Clearing House under the ACH credit method. This convention is to be used with the NACHA CCD+ format and is used by the majority of agencies using EFT for tax collections. The format is carried in the 80-character free form field of the addenda record. The TXP convention has been developed with input from corporate trade associations and state and federal government agency representatives. The TXP convention is a result of the joint efforts of the Federation of Tax Administrators (FTA), the Council on State Taxation (COST) and the Bankers Electronic Data Interchange (EDI) Council.

  - **Settlement Date**—The date an exchange of funds, with respect to an entry, is reflected on the books of the Federal Reserve Bank.

8.3 ACH Debit Payment Methods

As previously described, the ACH debit payments are initiated by an agency at the request of a taxpayer. The benefit of this payment method is that tax payments can be processed by the agency at no additional cost to the individual taxpayer. Taxpayers can request these payments by telephone, via an agency website or by including payment data with their electronic payroll tax reporting files. The downfall of this payment method is that unless

there is an option for including payment data with electronic payroll tax reporting files, ACH debit is not well suited to bulk filing of payments, as payments made via telephone or via an agency website are normally only available for individual client payments. Because of this downfall, the NACTP recommends that the option of including payment information in payroll tax reporting electronic files be available when using the ACH debit method (in addition to other options that may be available such as telephone or payments made via an agency website).



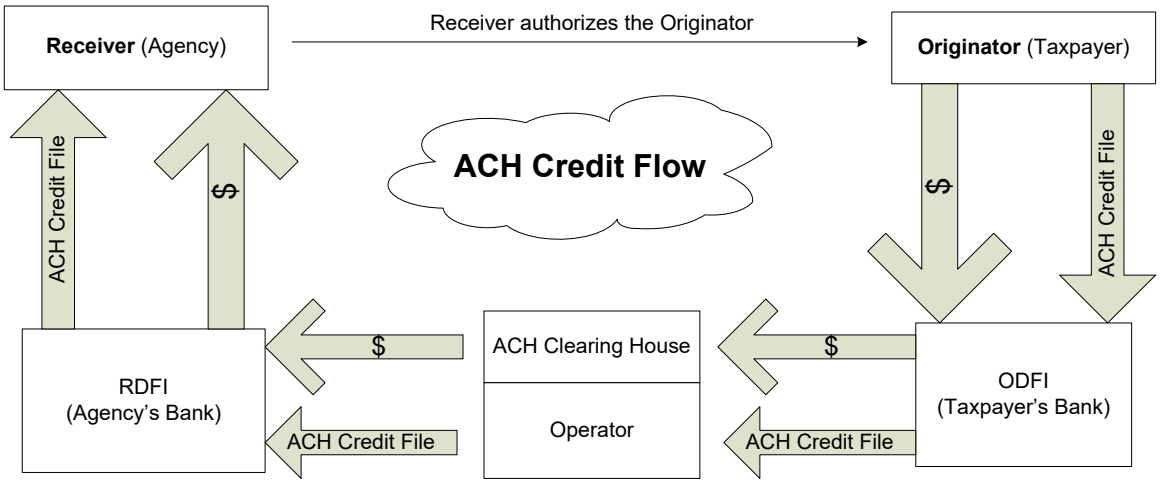
Note: In this example the Receiver is authorizing the Originator to withdraw money from its bank account.

8.4 ACH Credit Payment Methods

Unlike ACH debit which is initiated by an agency at the request of their taxpayer at no cost to the client, ACH credit must be initiated by the taxpayer or a third party authorized by the taxpayer to make payments on their behalf and processed through an ACH Clearing House. This ACH Clearing House is normally a bank contracted by the taxpayer or third party.

Although this method can involve additional costs to the initiating party, ACH credit can offer many benefits. This method specifically can have great benefit to payroll service providers because it offers the flexibility of bulk payment processing and the ability to manage and upload tax payment data without having to make individual file uploads or having to log on to multiple websites to set up payments.

ACH credit payments are processed using the NACHA CCD+ format. Under NACHA formatting guidelines, the 80 character free form addenda record is used to carry additional information about the CCD payment and is used by multiple industries. The Tax Payment (TXP) Banking Convention was prepared by the Bankers EDI Council of the National Automated Clearing House Association (NACHA), in cooperation with the Federation of Tax Administrators (FTA) and the Council on State Taxation (COST) and was approved by the Bankers EDI Council on March 7, 1990. The NACTP fully supports the use of the TXP convention and acknowledges that this formatting is mandatory and should not be altered in any way when implementing ACH credit payment systems. For more information on the Tax Payment Convention please visit the FTA web site at https://taxadmin.memberclicks.net/index.php?option=com_content&view=article&id=221:tax-payment-convention---explanation&catid=26:technology.



Note: In this example the Receiver is authorizing the Originator to deposit money into its bank account.

8.4.1 NACHA CCD+ Addenda Record Definitions

- **Segment Identifier**—Serves as the name of the segment. The identifier occupies the first three character positions of the segment and for the Tax Payment Convention it consists of upper case letters – TXP

- **Separator**—Denotes the end of each component of the convention. An asterisk (*) is used as the separator.

- **Taxpayer Identification**—The taxpayer's identification or registration number as assigned by the tax authority. This field can be a maximum of 15 characters; however, shorter lengths can be used.

- **Tax Type Code**—Identifies the type of tax being paid. The tax type code is a 1 to 5 character field which will allow the taxpayer to identify which tax is being paid. The NACTP recommends that agencies use the master code list the FTA has drafted to facilitate consistency with tax payments among agencies. https://taxadmin.memberclicks.net/index.php?option=com_content&view=article&id=222:txp-and-tpp-tax-and-amount-type-code-lists&catid=26:technology

- **Tax Period End Date**—Used to provide the necessary information to identify the time period covered by the payment. For the tax being paid, this could be based on the tax period end date, due date, or other relevant dates such as payroll check dates for more frequent deposit periods. The tax period end date will be six characters in the YYMMDD format.

- **Amount Type Code**—Identifies the type of payment or amount which follows. The NACTP recommends that agencies use the master code list the FTA has drafted to facilitate consistency with tax payments among agencies. https://taxadmin.memberclicks.net/index.php?option=com_content&view=article&id=222:txp-and-tpp-tax-and-amount-type-code-lists&catid=26:technology

- **Amount Fields**—These are used to carry the dollar amount(s) being paid. Only one amount field is required; the other two are conditional depending on the agency and type of tax being paid. The amount fields must contain cents (cc). Decimal points are not included. The last two digits will be read as the cents.

- **Taxpayer Verification**—This is a one to six character field to permit verification of the taxpayer. This can be used on an optional basis. It is used to ensure that the taxpayer identification number and other identifying information is correct. It may be the first four characters of the taxpayer's name or an agency-

specified code. The NACTP recommends the use of a taxpayer name check when this optional field is used.

- **Segment Terminator**—Used to terminate the segment or record. A backslash (\) serves as the segment terminator.

Below is the Standard TXP record formatting that should be used for ACH Credit Payments.

NACHA CCD+ Addenda Record (7 record)

Field	Position	Size	Contents	Description	Requirement
1	01-01	1	“7”	Record Type Indicator	M
2	02-03	2	“05”	Addenda type code	M
3	04-06	3	“TXP”	Segment Identifier	M
4	07	1	*	Data Element Separator	M
5	08-22	15	“Nnnnnnnnnnnnnn”	Taxpayer Identification	M
6	23	1	*	Date Element Separator	M
7	24-28	5	“XXXXX”	Tax Type Code	M
8	29	1	*	Date Element Separator	M
9	30-35	6	“YYMMDD”	Tax Period End Date	M
10	36	1	*	Data Element Separator	M
11	37	1	“X”	Amount Type Code	M
12	38	1	*	Data Element Separator	M
13	39-48	10	“$$$$$$$cc”	Amount 1	M
14	49	1	*	Data Element Separator	M
15	50	1	“X”	Amount Type Code #2	O
16	51	1	*	Data Element Separator	M
17	52-61	10	“$$$$$$$cc”	Amount 2	O
18	62	1	*	Data Element Separator	M
19	63	1	“X”	Amount Type Code #3	O
20	64	1	*	Data Element Separator	M
21	65-74	10	“$$$$$$$cc”	Amount 3	O
22	75	1	*	Data Element Separator	M
23	76-81	6	“XXXXXX”	Taxpayer Verification	O
24	82	1	“\”	Segment Terminator	M
25	83-84	2	Blank Fill	Reserved	M
26	85-88	4	"0001"	Addenda Sequence Number	M
27	89-95	7	“Nnnnnnn”	Entry Detail Sequence Number	M

M = Mandatory
O = Optional

8.4.2 Examples

The following are three alternative uses of the Tax Payment Convention:

Example 1: Tax Payment Convention using all fields (full length) and a shortened Tax Type Field

TXP*123456789012345*041*230331*T*1221210050*P*1000050000*I*1000036000*JOHNST\

The sample TXP record has twenty-two pieces of information, as follows:

Segment Identifier:	TXP
Separator:	*
Taxpayer Identification:	123456789012345
Separator:	*
Tax Type Code:	041
Separator:	*
Tax Period End Date:	230331
Separator:	*
Amount Type Code:	T
Separator:	*
Amount:	1221210050
Separator:	*
Amount Type Code:	P
Separator:	*
Amount:	1000050000
Separator:	*
Amount Type Code:	I
Separator:	*
Amount:	1000036000
Separator:	*
Taxpayer Verification:	JOHNST
Segment Terminator:	\

NOTE: In the example above, tax type "T" represents a tax payment, the type "P" represents a penalty payment, and the type "I" represents an interest payment.

Example 2: Tax Payment Convention using only required fields (no optional), shortened fields, and a shortened tax type.

TXP*12345678901*011*230331*T*1210050\

The sample TXP record has twelve pieces of information, as follows:

Segment Identifier:	TXP
Separator:	*
Taxpayer Identification:	12345678901
Separator:	*
Tax Type Code:	011
Separator:	*
Tax Period End Date:	230331
Separator:	*
Amount Type Code:	T
Separator:	*
Amount:	1210050
Segment Terminator:	\

NOTE: In the example above the segment terminator immediately follows the mandatory Amount 1 when the optional fields are not used.

Example 3: Tax Payment Convention using two optional fields and a full length tax type code. All fields are full length.

TXP*123456789012345*04101*230331*T*1221210050*T*1000050000***JOHNST\

The sample TXP record has twenty pieces of information, as follows:

Segment Identifier:	TXP
Separator:	*
Taxpayer Identification:	123456789012345
Separator:	*
Tax Type Code:	04101
Separator:	*
Tax Period End Date:	230331

Separator:	*
Amount Type Code:	T
Separator:	*
Amount:	1221210050
Separator:	*
Amount Type Code:	T
Separator:	*
Amount:	1000050000
Separator:	*
Separator:	*
Separator:	*
Taxpayer Verification:	JOHNST
Segment Terminator:	\

NOTE: In the example above the second tax amount (also using tax code type "T") could be used to pay additional tax amounts to the same agency. For example, this may be used when an agency breaks out portions of unemployment tax that would otherwise be lumped together, or it would be used to pay both a withholding tax payment as well as an unemployment tax payment in situations when both taxes are paid to the same agency. Also note that when optional fields are not used, a separator must be used to designate the optional fields when that field is followed by data.

8.5 Conclusion

In conclusion, the NACTP recommends agencies support both ACH Credit and ACH Debit payment methods. By supporting both methods, agencies satisfy the need for providing a no-cost electronic payment method for taxpayers and third party authorized agents (ACH Debit) while also satisfying the need to provide the flexibility of bulk payment processing and the ability to manage and upload tax payment data without having to make individual file uploads or having to log on to multiple websites to set up payments (ACH Credit).

Section 9 Rates and Taxable Wage Bases

9.1 Introduction

Government agencies assign unemployment rates to registered employers based on the amount of unemployment benefits collected by former employees. Most agencies assign rates on a calendar year basis; however, a few agencies issue rates on a fiscal year basis. The NACTP would like to be included in announcements regarding rate changes that impact taxpayers. The goal is to provide accurate and timely filings on behalf of the taxpayer. In order to achieve this goal, the computerized return processing industry has established standards outlining how the rate information should be communicated annually.

9.2 Standards

Consistency on when rates are issued each year allows the computerized return processing industry to make system and forms changes timely. The agency websites are an excellent tool to communicate rate changes. If at all possible, the rates should be published on the website two months prior to the effective date. The changes should be easy to find on the unemployment website and clearly marked as rate changes. The rates for the current and two prior years should be maintained on the website. Also, it is preferable that as rates change, an email message should be sent to the NACTP Payroll and Information Reporting Committee at nactp_pirc@nactp.org. This will reduce the number of calls received by the tax agencies inquiring about rate changes and will streamline communication to the computerized return processing industry.

In addition to posting rates on agency websites, agencies may also want to consider offering a pre-filing taxpayer information validation program. This is a system that allows providers to send data prior to live filing in order to verify and correct taxpayer information up front. Examples of data that can be validated are employer identification numbers (EINs), business names, tax rates, and filing and deposit schedules. By offering this service, providers can identify any discrepancies between client data and agency data prior to live filing. Although validation programs provide value, the use of such programs should not be required.

9.2.1 Printable Format

The following items should be included in a printable format:

- Employer Contribution Rate Notice
  - Date notices were mailed to taxpayers
  - Effective date
  - Voluntary contribution due date
  - Non-FUTA taxes

- Rate Schedule
    - Indicate if the rate schedule is a change from the previous year

9.2.2 Display Format

Use the following format to display the rates:

- Employer
    - Minimum/Maximum rates
    - New Employer rate
    - Construction New Employer rate
    - Taxable wage base
    - Delinquent rate
    - Any variable rate components applicable to all employers
    - Disability Insurance (if applicable)
- Non-FUTA certified rate (portion not recognized by the IRS for federal unemployment insurance)
    - Provide this information as soon as it becomes available to allow for programming changes to remove from the total rate
    - Clearly identify on the rate notice
    - Specify on the form on a line item by itself
- Sample of the rate notice with changes for the affected year highlighted. For example, if surtax is added the impact should be clearly defined.
    - Effective date
    - Expiration date
    - Amount of the surtax
    - Which employers are affected (all or some with a specific rate)
    - Will the surtax add a line item to the contribution form?
- Voluntary contributions
    - Clarify who is eligible for voluntary contributions
    - Indicate if voluntary contributions are permitted
    - Identify the deadline by which the request must be submitted
    - Specify if an amended rate notice will be issued

  - Indicate the number of rate levels a taxpayer can buy down

- Transfer of business

  - Clearly define the guidelines for transferring a business and how the experience rate of the new business will be determined.

9.2.3 Sample Tax Rate Notice

As noted previously, state law determines individual unemployment insurance tax rates. All state laws use a system of experience rating by which individual employers' contribution rates are varied on the basis of their experience with the risk of unemployment. The experience rating provisions of state laws vary greatly. The most significant variations arise out of differences in the formulas used for rate determinations. At present, there are four distinct systems:

- Reserve Ratio
- Benefit Ratio
- Benefit-wage Ratio
- Payroll Variation

While all systems have certain common characteristics, the four systems differ greatly in the construction of the formulas, the factors used to measure experience and the methods of measurement, the number of years over which the experience is recorded, the presence or absence of other factors, and the relative weight given the various factors in the final assessment of rates.

The components of each state's unemployment contribution rate notice will vary from state to state, based on each state's funding method. Listed below are the most common elements that should be included on the notice:

- Agency Name
- Calendar Year
- Mailing Date
- Employer Account Number
- Taxable Wage Base as of MM/DD/YYYY
- Employer Contribution Rate as of MM/DD/YYYY
- Rate Contribution Factors:
  - Reserve Ratio Factor
  - + Benefit Ratio Factor
  - + State Adjustment Factor
  - + Basic Rate
  - + Increase for Unemployment Compensation Delinquency

  - + Surcharge Adjustment
  - + Additional Contributions
  - = Total Contribution Rate
- Employer Experience Record
  - Reserve Account balance as of MM/DD/YYYY
  - + Contribution Payments from MM/DD/YYYY to MM/DD/YYYY
  - - Benefit Charges from MM/DD/YYYY to MM/DD/YYYY
  - = Reserve Account Balance as of MM/DD/YYYY
- Additional Information (if applicable)
  - Average Annual Taxable Wages
  - Average Annual Benefits
  - Employer Percentage
  - Group Number
  - Explanation of all the fields listed on the rate notice
  - Telephone number for taxpayers to call regarding the rate notice
  - Other

Section 10 Out-Of-State Wage Reporting

10.1 Introduction

There are 53 agencies (50 states, Virgin Islands, Puerto Rico, and the District of Columbia) administering unemployment insurance (UI) benefit programs funded by an employer tax. This tax is calculated as a percentage of wages paid to each employee annually. To this end, agencies set an annual taxable wage limit by employee, which can vary by agency. Most agencies require employers to file reports on a quarterly basis detailing wages paid to each covered worker, as well as the total wages, total taxable wages, and tax due for the employer. The majority of employers generally remit this tax to the state where the employee works; however, reporting can also be completed when workers perform services in more than one state. When this happens UI reporting can become problematic and sometimes duplicate contributions are paid. (Note: See ***Challenges*** below.)

10.2 Recommendations

Below are two recommendations agencies should consider, in order of priority, if implementing Out-of-State Wage(s) (OSW) reporting:

1. Accept employer calculations and data initially, verify discrepancies after the fact by correspondence and audit, and do not modify the summary reports or wage detail page(s). This is the least complex and least costly option. Accepting employer calculations initially usually brings in more revenue to the agency. If currently requiring both summary and wage detail pages, agencies could lower costs more by eliminating the summary report and extracting all necessary data from the wage detail pages.

2. Slightly modify the employer tax summary report by adding any of the following:

    - A lump sum total of OSW paid for all employees
    - A checkbox to select if wages were paid to other agencies
    - An area to identify those agencies in which OSW were paid.

    While this data will not be as easily verifiable, existing correspondence and audit processes can be used to validate data randomly or based on specific employer demographics. Agencies should expect an increase in call volumes with any change to form or process. To best guarantee success, publish on the agency website explicit documentation as to how to correctly report OSW from the employer's perspective. Include definitions and examples based on common out-of-state scenarios involving permanent moves, temporary transfers, agencies for which reciprocity agreements exist and do not exist, etc.

10.3 Challenges

10.3.1 Agencies

Wages are often reported incorrectly. When the agency or agencies (to which employers should remit UI) cannot be identified, employers often mistakenly file reports in every state the employee performs services or only in the state of incorporation, and report wages regardless of whether such wages were subject to UI reporting and tax in the other state. Varying agency requirements increase the chance an employer will remit to an out-of-state agency based on in-state procedures. For example, some agencies allow OSW credits to be taken before filing and others do not allow OSW credits at all. Some states require employers to remit the entire UI tax due before seeking a refund.

For most states, OSW reporting documentation (guidelines, requirements, specifications, etc.) is nonexistent, vague, or inconsistent from document to document. When employers are unable to locate and understand any of this documentation, it leads to reporting UI wages improperly. For example, wage credits are not considered properly; duplicate or incorrect contributions for a single employee are paid; agency and employer calculations of tax owed are different. Any of these examples will create a substantial increase in agency correspondence and audit processes. To reduce improper reporting, agencies should develop explicit instructions detailing which agency has the right to claim coverage and provide examples addressing all possible out-of-state scenarios and combinations. Nothing should be implied.

Some agencies do not require the reporting of OSW data. Of those which do, the data collected and when the data is recorded is not consistent. Complications arise when there are unprocessed wage reports or mergers, successions and partial successions, or missing or changed Social Security Numbers (SSNs). In addition, amendments to reported data may not be recorded before the next report is filed. When employers file by paper, agencies should reduce expenses by eliminating the summary report page altogether and calculating taxable wages from the wage report. To best ensure accurate taxable wage calculations, for example, the actual OSW per SSN would be needed without rejecting any employees due to an invalid SSN. If the reporting of an invalid SSN is allowed by an agency, taxes could be calculated on total wages each quarter for all employees regardless.

Agencies will incur additional costs to distinguish valid reasons for discrepancies from employer error or fraud, and to validate credits taken for wages paid in other states. Agencies should also expect an increase in call volume about OSW reporting requirements, issues encountered due to changed processes, and reduced revenues if calculations are no longer in favor of the state.

10.3.2 Software Companies

Payroll is typically captured by looking back at a period in time based on those factors needed to calculate wages earned by the employee and not taxes owed by employers. Thus, the majority of payroll systems do not capture hours worked by work location or agency. The collection of data to this detail would, in many cases, require extensive changes programmatically and be overwhelming to employers and employees. Thus, knowing “where” services were performed is currently subjective and would not yield consistently accurate results.

Generally, instructions provided by agencies speak only to the completion of reports. These directions typically are not written in enough detail to understand the best process for capturing the needed data.

Some agencies only communicate with employers and design processes around employers. The customers of software companies are employers and third-party filers. Some software companies develop products just for third-party filers. Planning for and working with all who influence payroll processes is best.

10.3.3 Employers

Employers typically do not think about the need for tracking OSW data until submission of the quarterly report. Because employers often use third-party providers to meet filing requirements, these providers will not have the necessary data and cannot provide it without going back to the employer. Delays of this nature often negatively impact agency revenue streams.

The agency the employer should remit to and the amount to remit is not always clear. Agency documentation is not generally written in enough detail for proper evaluation of employee situations, reporting appropriate data for each of these situations, and what to expect when discrepancies arise.

Because these reports are filed quarterly, it is possible that an amended report for a prior quarter may be filed after the report for the current quarter, resulting in incorrect taxable wages and taxes being reported for the current quarter.

10.4 Summary

When workers perform services in more than one state, Unemployment Insurance reporting becomes difficult. Because of all the challenges faced by agencies, software companies, and employers, the recommendation for agencies is to accept employer calculations and data initially, verify discrepancies after the fact by correspondence and audit, and do not modify the summary reports or wage detail page(s). It is the least complex and least costly option.

Section 11 Websites

11.1 Introduction

A website is a valuable tool to use in posting material and conveying information. The NACTP highly encourages agencies to post information on the SES website or the agency's website if SES is not available. Any information posted on either website should be followed by an email to the PIRC listserv at nactp_pirc@nactp.org noting the changes and where they are located.

11.2 State Exchange System (SES)

The State Exchange System is a secured site operated by the Federation of Tax Administrators (FTA). Many state tax agencies are now using the SES to post forms, specifications, and e-file information. Although each agency may set up their SES folder structure at their discretion, the computerized return processing industry recommends the following folder structure on SES:

State
- Tax Year
  - Tax Type (For example, individual income tax, payroll tax, corporate tax, etc.)
    - Forms
    - E-file
    - LOI

Any new information posted to the SES site should be followed with an email to the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org listing the changes and where they are posted.

11.3 Tax Authority Website Design

Developers of payroll and information reporting software truly appreciate tax authorities' efforts to provide special web pages geared toward the needs of the computerized return processing industry. To ensure a highly effective and organized government-maintained web page, the NACTP recommends the following:

- As soon as they are available, forms, specifications, instructions, and publications should be posted in PDF format on a password protected secure page accessible to developers before the documents are released to the general public. If the tax agency is apprehensive about posting these documents prior to releasing them to the general public, consider emailing them directly to NACTP members at nactp_pirc@nactp.org. Once final forms and instructions are released to the general public, they should be copied to a non-password protected area on the website.

- Postings should be done on a document-by-document basis (rather than waiting for a group of documents to be available). Clearly indicate the form year or quarter (if applicable), either at the top of a section or next to the form itself. Since not all forms are revised annually, also indicate the upload and/or revision date for each form along with a description of the changes. Lastly, indicate the next expected revision date per form.

- Sorting forms listings by date posted, alphabetically by form name, and by tax authority division should be allowed.

- Forms that will not change for the upcoming filing period should be identified.

- A list of obsolete forms and their replacements, if any, should be provided.

- Post filing deadline calendars.

- Provide links to the NACTP website at http://www.nactp.org/.

To make it easier for developers to access the information they need, NACTP recommends that:

- User screens are menu-driven with quick access to action screens.

- Image-intensive pages are easily navigable and contain the same information when the images are turned off.

- Online Help options are made available.

- Vendors are notified when new or updated forms, instructions, specifications, and publications are added to the website by using the NACTP email address list at nactp_pirc@nactp.org.

- A "What's New" feature area for forms and/or legislation updates is available.

- A notice stating when each web page was last updated and what changed is included.

For examples of agencies that have well organized websites for forms and information, please contact the NACTP Payroll and Information Reporting Committee (PIRC) listserv at nactp_pirc@nactp.org.

Section 12 Terminology

12.1 Electronic Information Delivery Terminology

ASC X-12	Accredited Standards Committee (ASC) X-12 develops uniform standards for inter-industry electronic interchange of business transactions.
ASCII (American Standard Code for Information Interchange)	A popular coding method that assigns numeric values to text characters. Virtually all computers use ASCII codes to communicate with each other.
Bulk File	A file containing one or more repeating groups of standardized records, such as in the case of filing on behalf of multiple employers in one file.
Broadcast Email	A method of sending one email message to each member of a group simultaneously. Sending update notifications to nactp_pirc@nactp.org is an example of broadcast email.
EFW2	The data format established by the Social Security Administration for the filing of wage reporting information. This format is used for both reporting on magnetic media (only for participating magnetic media states) and electronic filing.
E-Standards (formerly TIGERS—Tax Information Group for E-Commerce Requirements Standardization)	A group formed by the Federation of Tax Administrators (FTA), states, IRS, and business and service provider representatives to provide an overall coordinative body for advice and counsel on government technical implementation of American National Standards Institute (ANSI)-based tax-related electronic data interchange applications.
FSET (Federal/State Employment Taxes)	A project initiated by TIGERS to reduce employer burden by simplifying the process for the quarterly filing of state and federal tax and wage reports and making employment tax payments. The FSET project's primary goal is the development of a standard XML format for the transmission of employment tax information.
FTP (File Transfer Protocol)	A method of transferring files from one computer to another over a network. The protocol ensures that the sending and receiving programs can check that the information has been transmitted and received correctly.
Magnetic Media	Objects on which data can be stored. These include CD-ROMs, DVDs etc.
Online Manual Entry	Keying in of individual records on a tax agency's website.
PDF (Portable Document Format)	An openly published file format used to represent a document independent of the application software, hardware and operating system used to create it. PDF files provide a way to distribute documents across diverse hardware and software platforms.
Quick Alerts	Instant notification subscription service from the IRS for electronic filing program participants. Notifications are in the form of email.
SGML (Standard Generalized Markup Language)	A structured document technology or "language" used by the electronic publishing industry for data design and delivery. SGML is used to mark up or "tag" the structural elements of a document or other electronic data delivery product. (See also "XML.")
Secured Area	Location on a website that requires access with a username and password. www.nactp.org as well as many tax authority websites have secured areas.

Tag	This is the popular name for an HTML element. A code within a data structure that gives instructions for formatting or other actions. E.G. XML tag.
Transmitter	A participant in an electronic filing program who receives prepared returns and serves as a pass-through, transmitting the returns to the appropriate agencies. The transmitter receives acknowledgements from tax agencies and forwards them on to his clients. The transmitter has authority to communicate with tax agencies on behalf of his clients regarding the success of the transmission, but no authority to communicate regarding the data that is transmitted. No Power of Attorney is required between the transmitter and his clients.
XML (Extensible Markup Language)	A widely used standardized markup language and file format for storing and transmitting data. XML documents are plain text, using markups that surround data in a structured manner that is both human and machine-readable.

12.2 Form Terminology

Computer Generated Substitute Form	A form entirely prepared by a software program and printed on a computer printer (such as laser or ink jet) so that the tax form format and variable data are printed entirely by the computer printer.
Computer Prepared Form	A form where a computer printer has inserted variable data as a calculated field.
Duplex Printing	Printing on both sides of one sheet of paper.
Fixed Pitch	Fonts can be either fixed or proportionally spaced. All character cells are the same width for fixed spaced fonts. For example, in a fixed space font, an "i" occupies the same amount of space as a "W". Pitch refers to the number of characters printed per horizontal inch.
Font	A typographic style used to display or print characters.
Forms Approval	The process of obtaining authorization of a substitute form from a tax authority to be used for live filing.
Graphics	Those parts of a printed tax form which are not variable data. Generally, these are line numbers, captions, shading, special indicators, special symbols, keypunch symbols, borders, rules, and strokes created by a page layout system.
Grid	A series of rows and columns used to identify variable data placement positioning. An 8-1/2 inch x 11 inch grid indicating standard computer spacing would contain 85 columns and 66 rows.
Manually Prepared Form	A form on which the taxpayer's variable data is entered using a pen, typewriter, or other non-automated equipment.
Monospaced Font	A font in which every character has the same horizontal width. Thus an "i" will have the same set width as an "M" or "W." Courier/Courier New is an example of a monospaced font.
Pica	1. A standard 12 point fixed pitch typeface that prints at 10 characters per inch. 2. The unit of measurement used to specify the height of character type. One pica equals 1/6th of an inch.
Pitch	In a monospaced font, the number of characters that fit in one horizontal inch. A 10 pitch font will have 10 characters in an inch.
Point	The unit of measurement used to specify text character height. One point is 1/72nd of an inch.
Proportionally Spaced Font	Fonts can be either fixed or proportionally spaced. For a proportionally spaced font, the amount of space between characters varies depending on the shape and size of the character. For example, an "i" will take up much less room than a "W".
Substitute Tax Form	A tax form that differs in any way from the official government version.

Variable Data	The information entered on a tax form in the data entry fields.
Voucher	A coupon smaller than an 8-1/2 inch x 5-1/2 inch paper form generally used to submit payments.

12.3 Image Processing Technology Terminology

Bitmap	Columns of dots that represent a visual image.
Check Digit	A digit that ensures data integrity. Using a special formula, the check digit is calculated from the user-entered data and added to a data string to verify that all information has been entered correctly. Most, but not all, scanlines have a check digit as the last number in the string. (See also "Scanline".)
Data Capture	The process of retrieving information from either an electronic picture (See also "Imaging") or the paper documents. (See also "Scanning".)
Data Verification	The process of confirming the data on a scanned or keyed document.
Document Identification Code (Doc ID)	A string of characters placed on a document in order to identify a form for the capture of information on that form.
Drop-out Ink	Ink that cannot be read by scanning equipment.
Dynamic Data	Information generated by a software engine, rather than as a static image. Two-dimensional bar codes can contain this type of information.
Full Field Sample	A form with every field filled in with "dummy" data, such as all X's, to be used for testing purposes by the tax authority.
Imaging	The process of sending a document through a scanner to create an electronic picture for either storage or further processing. (See also "Data Capture".)
OCR (Optical Character Recognition)	Machine recognition of data from printed, typed, or imaged text. The most easily recognized fonts are monospaced fonts such as Courier/Courier New.
One-Dimensional Bar Code	A pattern of lines of varying density and space that the scanner uses to identify, index, route, and track documents. Data is coded based on the position of these lines, their widths, and the widths of the white spaces between them.
Printer Driver	A program that controls how a computer and printer interact.
Registration Mark (Also called "Reference Mark" or "Target Mark")	A dark mark printed on a document or form to provide an accurate frame of reference for locating fields. On tax forms, registration marks most often appear at the four corners and look like crop marks.
Scanline	A line of characters in a specific location that is scanned, such as a tax voucher's check digit line on the bottom of the coupon. This line is generally produced in Courier/Courier New or OCR-A font. (See also "Check Digit".)
Scanning	The mechanical process that either produces an electronic picture or reads the paper document for data (See also "Data Capture" and "Imaging".)
Template	A pre-defined pattern contained in a file that is used as a guide in scanning tax forms accurately.
Variable Data Field	Any graphically defined area designated on a form for the insertion of data such as dollar amounts, quantities, responses, and check boxes. (Also called a "data entry field.")
Wide to Narrow Ratio	The ratio of the wide bar width to the narrow bar width in a one-dimensional bar code. A wide to narrow ratio of 3:1 would be represented using wide bars that are three times as wide as the narrow bars. The wide to narrow ratio is more important than the total width of the bar code.

12.4 Other Terminology

Delimiter	1. Symbols such as colons, commas, etc. separating data elements in a file. 2. Symbols such as dashes, slashes, and parentheses used in variable data fields on the printed form.
Employment Wage and Tax Reporting	Employers must comply with a number of employment tax rules and procedures contained in the Internal Revenue Code and State Revenue Codes. The Code's main payroll tax rules and procedures address the following issues: (1) determining whether the federal tax coverage rules apply; (2) computing an employee's taxable wages; (3) computing the amount of employment taxes to be withheld and/or paid by the employer; (4) depositing the correct amount of employment taxes with the government; and (5) filing employment tax returns, such as W-2's, 94X's and State reconciliation forms.
Information Return	A return that only communicates information to the tax authority relevant to tax liability but does not compute the actual liability of any taxpayer or accompany the actual tax payment.
Mandate	Any obligatory order or requirement under statute, regulation, or by a public agency.
Payroll Service Provider	A company that produces paychecks and related reports for employers. No Power of Attorney is required between the payroll service provider and its clients.
Preparer	There are two types of preparers. (1) An employer may prepare returns for his own company. (2) A paid third-party preparer receives payroll information from employers and prepares returns. The preparer may transmit returns to the appropriate agencies, return them to the client for transmission, or forward them to a third-party transmitter. The third-party preparer has authority to communicate with tax agencies on behalf of his clients.
Reporting Agent	An individual or company that receives payroll information from employers and prepares returns. The reporting agent complies with Revenue Procedure 2012-32. The reporting agent may either transmit returns to the appropriate agencies or forward them to a third-party transmitter. If transmitting returns, the reporting agent is able to transmit files using a single PIN/password for all of his clients. The reporting agent has authority to communicate with tax agencies on behalf of his clients. The *Reporting Agent Authorization,* Form 8655, is required between the reporting agent and his clients.
Tax Software Developer	An individual or company that provides the software used by preparers and/or employers. The software developer has no access to employers' payroll information and has no authority to communicate with tax agencies on behalf of the preparers' clients or employers. No Power of Attorney is required between the software developer and the preparers and/or employers.
Tax Withholding	Amounts deducted from an employee's wages as required by a tax authority. The amount of withholding varies with the amount of earnings, number of claimed exemptions, marital status, and individual selection of employer-provided fringe benefits. The amount withheld is a credit against the amount of income taxes the employee must pay on the income earned for the taxable year.
Unemployment Wage and Contribution Reporting	Tax report filed quarterly that includes gross payroll, taxable payroll, non-taxable payroll, state unemployment insurance (SUI) tax rate, and SUI taxes due. Certain state reporting will include or require information regarding supplemental taxes, surcharges, credits, penalties, and monthly employee counts. The information reported is used by the state agency in determining future SUI tax rates and may also be utilized by the federal government for statistical purposes in labor reporting.