



PAYE Online for Employers

Electronic Data Interchange (EDI)

EB2 (PAYE) Information Pack

1. **Glossary**
2. **Introduction**
3. **Background**
 - 3.1 What is filing digitally?
4. **EDI**
 - 4.1 What is EDI?
 - 4.2 Who can use EDI?
5. **Benefits**
 - 5.1 What are the benefits of EDI?
6. **Using EDI**
 - 6.1 Do I need to register to use EDI?
 - 6.2 What forms and returns can be sent and received using EDI?
 - 6.3 What do I need to send and receive PAYE forms using EDI?
 - 6.4 How can we keep track of what has been sent and when?
7. **Software**
 - 7.1 Payroll Software
 - 7.2 My payroll software provides an Internet solution to file digitally, but I want to use EDI, what can I do?
 - 7.3 Where can I get a list of recognised communication providers and software translation providers?
 - 7.4 How much does EDI Translation software cost?
 - 7.5 How soon could an employer start sending forms by EDI once they have EDI enabled Payroll and Communication software?
8. **ISDN**
 - 8.1 What is an Integrated Services Digital Network (ISDN)?
 - 8.2 What are the ISDN installation and call costs?
 - 8.3 How long does it take to install ISDN?
 - 8.4 We have existing ISDN capabilities, can this be used?
 - 8.5 What are the benefits of using ISDN/OFTP?

9. VANs

- 9.1 What is a Value Added Network (VAN)?
- 9.2 What are the costs associated with a VAN?
- 9.3 Will VANs support an ISDN Connection?
- 9.4 What are the benefits of using a VAN?

10. AS2

- 10.1 What is Applicability Statement 2?
- 10.2 What are costs associated with AS2?
- 10.3 What are the benefits of using AS2?

11.0 EDI Testing

- 11.1 What is the length of time between an employer registering for EDI for PAYE and being set up to test?
- 11.2 I am ready to start testing what do I do now?
- 11.3 During testing, what are the main causes of message rejections?
- 11.4 I have successfully tested what do I do now?
- 11.5 Will I need to retest at any time?

12. Where can I get more help and information?**13. Guidance material available****APPENDIX A**

Steps to consider for EDI

APPENDIX B

Enquiry form

APPENDIX C

Registration form

1. Glossary of Terms

AS2	Applicability Statement 2
BES	Business Exchange Services
EB	Electronic Business Information Series
EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange For Administration, Commerce and Transport (This is a United Nations standard)
GFF	Generic Flat File
HDS	HMRC Digital service
ISDN	Integrated Services Digital Network
I.T.	Information Technology
MIG	Message Implementation Guidelines
OFTP	Odette File Transfer Protocol
PAYE	Pay As You Earn
VAN	Valued Added Network
X.400	This is a communication method

2. Introduction

This document is for employers and their representatives. It gives an overview of what you need to know about sending and receiving PAYE forms digitally using EDI. It has answers to the most frequently asked questions about EDI.

3.1 Will penalties be imposed if I miss HMRC deadlines?

To avoid a late-filing penalty, you must ensure that all PAYE forms reach HM Revenue & Customs (HMRC) by their deadlines.

There are separate penalties if you file on paper when you are required to file digitally.

4. EDI

4.1 What is EDI?

It is a way of filing large amounts of information digitally using communications software, without manual intervention.

Paper forms are replaced by digital forms and these are exchanged in a standardised format.

It has been used successfully by businesses around the world for many years to send and receive information digitally.

There are currently over 25,000 Employers whose Employer's Returns are filed digitally using EDI, either directly or through the services of a pension or payroll bureau.

4.2 Who can use EDI?

Any employer, agent or payroll bureau can use EDI, although it is usually more suitable for those with thousands of employees, or a high turnover of staff.

5. Benefits

5.1 What are the benefits of EDI?

There are five main benefits:

- Accuracy

EDI improves the quality of service, as it allows information to be sent from one computer to another with no manual intervention. This reduces the likelihood of errors that could have occurred as a result of re-entering information from paper forms. It is a known statistic that 2% of all manual forms have errors when re-entered. By using EDI the forms are processed with 100% accuracy.

- Speed and acknowledgement of receipt

Using EDI means forms are sent digitally from one organisation to another with no manual intervention. This means information is sent in a matter of hours, even minutes, and not days.

Fast confirmation and acknowledgements of accepted documents are passed between the sender and the receiver. This reduces the need to make contact with the receiver to see if the document has successfully arrived.

- Savings

Not only does it free up storage space, it can cut down on paper, printing, postage and administration.

EDI can help control costs, increase efficiency and improve customer service.

- Flexibility

To ensure you get the best from EDI, you can arrange with HDS which forms you want to send and receive in the order you prefer. Forms requiring a high manual involvement for example P6, P6B and P9 can be delivered first for cost saving benefits.

EDI also allows you to send information to us at a time that is convenient to you.

- Security

All communication between the employer and HMRC is delivered through trusted (authorised certified bodies) 3rd party network providers. Either by:

- ISDN - see section 8 for more information
- VANs - see section 9, or
- AS2 - see section 10

Information regarding the security of data is available from individual communication software suppliers. The names and addresses for these companies are on our website at: www.hmrc.gov.uk/ebu/edi/edisoftware.htm

6. Using EDI

6.1 Do I need to register to use EDI?

Yes, you need to complete and send the Enquiry form at Appendix B. An Account Manager from HDS will contact you to assist you through the process of connecting to HMRC.

Once you have installed the communication links and are ready to start testing you need to complete the Registration form at Appendix C.

6.2 What forms and returns can be sent and received using EDI?

The RTI and PAYE forms and returns are listed below:

PAYE Transactions	Direction	Details
EAS	Employer to HMRC	Employer Alignment Submission
FPS	Employer to HMRC	Full Payment Submission
EPS	Employer to HMRC	Employer Payment Summary
EYU	Employer to HMRC	Earlier Year Update
NVREQ	Employer to HMRC	National Insurance number verification request
P11D	Employer to HMRC	Annual return for expenses payments and benefits.
P11D(b)	Employer to HMRC	Annual return showing Class 1A National Insurance contributions for the year.
P46(Car)	Employer to HMRC	When a car is provided for private use to an employee.
CIS300	Employer to HMRC	CIS monthly return
CISREQ	Employer to HMRC	Verification request for the Construction Industry Scheme

PAYE Transactions	Direction	Details
NVREP	HMRC to Employer	The NINO Verification Reply (NVREP) is used to either confirm or correct NINO details
GEN	HMRC to Employer	The Generic Notification is free-form text, and can be any message that HMRC wishes to communicate to an Employer
CISREP	HMRC to Employer	Verification reply for the Construction Industry Scheme
P6	HMRC to Employer	Notice of the tax code to use for an employee issued on a daily basis
P6B	HMRC to Employer	Notice of the budget tax code to use for an employee issued on an annual basis
P9	HMRC to Employer	Notice of the tax code to use for an employee issued on an annual basis
SL1	HMRC to Employer	Start notices for the collection of Student Loans
SL2	HMRC to Employer	Stop notices for the collection of Student Loans

6.3 What do I need to send and receive PAYE forms using EDI?

Communication links are required to carry the forms, or EDI messages, from the sender to the receiver. We accept EDI by:

- ISDN lines with Odette File Transfer Protocol (OFTP) software
- Valued Added Networks
- AS2
- X.400

6.4 How can we keep track of what has been sent and when?

We have a tracking system that monitors all files sent and received by EDI. This also includes acknowledgement receipts between HMRC and you.

All data files that we send are consecutively numbered giving an audit trail. You should contact your HDS Account Manager if you have any duplicate or missing files.

Hash control counts at message trailer level will record the number of employee records sent/received. This helps you to check that all the information sent to you has been received.

7 Software

7.1 Payroll Software

Your payroll software product is usually the main driver to influence your choice to use EDI or Internet.

To be able to send and receive PAYE information by EDI the payroll software needs to be able to produce and/or upload PAYE forms in either the Generic Flat File (GFF) or EDIFACT format.

If your payroll software produces output in xml format then you may wish to consider the Internet as your filing option.

Most Payroll Software Products should be able to provide digital filing that meets statutory requirements. You will first need to know what digital filing solution or solutions your payroll software provider has developed or is intending to develop for their payroll software product.

Another point to consider is whether or not you have one of the appropriate communications links in the business to send information digitally to us.

7.2 My payroll software provides an Internet solution to file digitally, but I want to use EDI, what can I do?

You can develop your own EDI capability in accordance with the Message Implementation Guides (EB5) go to: www.hmrc.gov.uk/ebu/ebu_paye_ts.htm

Alternatively you could purchase an EDI translation software product to create an EDI interface with the payroll product. A list of EDI translation software developers is available at: www.hmrc.gov.uk/ebu/edi/edi-software.htm

7.3 Where can I get a list of recognised communication providers and software translation providers?

For a list of these go to: www.hmrc.gov.uk/ebu/edi/edi-software.htm

7.4 How much does EDI Translation software cost?

The cost of EDI software varies depending on the software supplier, the service required and the number of PAYE forms to be translated.

7.5 How soon could an employer start sending forms by EDI once they have EDI enabled Payroll and Communication software?

As soon as you have completed the testing process. This process usually involves completing four consecutive successful tests per PAYE message type.

Only one successful test is required for:

- software that has passed the EDI Recognition Scheme
- messages that are received from HMRC

During the testing process, your Account Manager is available for advice and support.

8. ISDN

8.1 What is an Integrated Services Digital Network (ISDN)?

ISDN is a telecommunications link that provides high data transfer speeds at low cost.

It is a direct leased line or network line, and connects only when there is something to send or receive. The network line may have problems if the network is engaged, the leased line will not have this problem.

ISDN lines are available from telecommunications providers.

HMRC systems do not support dial up modems (data cannot be sent by email).

8.2 What are the ISDN installation and call costs?

Costs vary and you will need to contact the communication suppliers for more information.

8.3 How long does it take to install ISDN?

This can vary depending on how busy the communication suppliers are but it could be anything from a few days to a few weeks.

8.4 We have existing ISDN capabilities, can this be used?

Yes, you are simply calling a different number. We send and receive data over an ISDN connection with Odette File Transfer Protocol (OFTP) software. OFTP provides a standardised way for separate computer systems to communicate with each other. It is important to approach a supplier of OFTP software for advice on installing into your system.

8.5 What are the benefits of using ISDN/OFTP?

- Convenient

ISDN provides a direct link for transferring information between the employer and the HMRC. Our support staff can monitor the communication session as it happens and deal with any issues that may arise.

- Cost

OFTP uses a physical ISDN connection. Charges are determined by the length of time the line is in use. The cost of using the OFTP software will vary depending on the software provider and the platform on which it is to reside.

- Security

When you connect to us your user name and password are validated. ISDN is also a point to point connection, which in its self offers security.

- Control

You have control over when you connect to us both for sending and receiving information.

- Confirmation of transfer

OFTP includes the ability for the receiver of the data to automatically confirm that a data file has been received. This confirmation is logged in the OFTP audit trail.

- Data Monitoring

Throughout the call the OFTP software automatically checks that the amount of data that is sent and the amount of data that is received are the same. The OFTP software can detect if an error occurs during transmission and will automatically recover wherever possible.

9. VANs

9.1 What is a Value Added Network (VAN)?

A VAN is a communication service that will give:

- a mailbox
- connection to a network
- data transport across the network
- support
- acknowledgement of transmissions
- message control and traceability
- security

A list of communication providers is available at:

www.hmrc.gov.uk/ebu/edi/edi-software.htm

9.2 What are the costs associated with a VAN?

The costs are:

- Setting up the connection and continued use (line rental)
- Data transport (telephone calls). These charges are usually in "bands", the costs depend on the volume
- Storage of data (in the inbox)

9.3 Will VANs support an ISDN Connection?

Contact your VAN supplier for more information.

9.4 What are the benefits of using a VAN?

- Flexibility

A VAN is able to communicate using a wide variety of standard communication protocols therefore employers using EDI do not have to purchase separate protocol software. They only need to be concerned about their own connection to the VAN.

- Security

The VAN handles all transfer of information from the sender's post box into the receiver's mailbox. Employers can freely exchange information without giving direct access to their own internal systems.

- Costs and Auditing

Most VANs provide itemised charges in a similar way to telephone charges.

- User services

Some VAN providers offer consultancy and development services to help the planning and set up of digital trading with customers and suppliers. VANs may also offer other services that may add further value for example electronic payment services.

- Control

A VAN enables you to send and receive information to your digital post box and receive information from your digital mailbox at a time that suits your operation and not at times defined by HMRC.

10 Applicability Statement 2 (AS2)

10.1 What is AS2?

AS2 is a specification describing how to transport EDI data over the internet using the HTTP or HTTPS protocols. The purpose of AS2 is to ensure that transmission of EDI traffic is secure, reliable and authenticated.

AS2 specifies the means to connect, deliver, validate and reply to (receipt) data in a secure and reliable manner by creating an envelope around an EDI message which is then sent securely over the internet. The protocol supports the use of digital certificates and encryption to provide security and non-repudiation.

10.2 What are the costs associated with AS2?

- The SSL certificate may be either a “self-signed” certificate or a certificate purchased from one of the major SSL certificate vendors. A “self-signed” certificate is one signed by its creator.
- The monthly charge you pay to your Internet provider.

10.3 What are the benefits of using AS2?

- Cost

Reduced transmission charges

- Security

AS2 is designed to push data securely and reliably over the internet with 24x7 availability

Encryption ensures only the sender and receiver can view the data

- Convenient

Faster turnaround time for business processes with fast and reliable connectivity.

- Data Monitoring

Digital signatures ensure authentication

Non-repudiation of receipt (NRR) confirms that the intended party receives the data

11. EDI Testing

11.1 What is the length of time between an employer registering for EDI and being set up to test?

There is no set period for the length of time taken between registering and the set up for testing. There are many important EDI issues to discuss before testing is considered. You will need to establish your payroll software capability, select a communication method and install the appropriate software. Refer to the EB3 (PAYE) Step by Step Implementation Guide for more detailed guidance. For further help and advice, contact your Account Manager.

11.2 I am ready to start testing what do I do now?

Complete the Registration form at Appendix C of this booklet and return it by email to your Account Manager at HDS.

A minimum of seven working days from receipt is required to enable the set up to be processed. You will then be contacted to confirm that testing may begin.

Please note that if you register/test for P6 messages, you will not automatically receive P6B or P9s. You need to request each individual message on the Registration form at Appendix C.

11.3 During testing, what are the main causes of message rejections?

Message rejections are caused where the format of the data does not match the format specified in the relevant EB5 – Message Implementation Guideline.

If any information transmitted by you to us contains an error, this will be reported to the sender.

For more information of the typical problems please refer to the EB3 Step by Step Guide.

11.4 I have successfully tested what do I do now?

You should contact your Account Manager at HDS to arrange a mutually convenient date to 'go live' with each message type. A minimum of five working days notice is usually required to change your EDI status from 'test' to 'live'.

Remember to remove the test flag before submitting live data.

If you decide to use EDI for other forms you will need to complete a further Registration form ensuring the 'change' box is ticked.

This also applies if you are a payroll bureau and want to add or remove PAYE references.

11.5 Will I need to re-test at any time?

You will be required to complete a further Registration form and re-test if you change your EDI payroll software or communication link.

It is important to re-test if the communications link change, although the four test process would not be required for each message. A change in software would impact the data and the full four consecutive successful tests may be necessary.

12. Where can I get more help and information?

HMRC Digital Service
Victoria Street
Shipley BD98 8AA

Telephone: 0845 60 55 999

Fax: 01274 646257

email: helpdesk@ir-efile.gov.uk

www.hmrc.gov.uk

13. Guidance material available

This document is part of a set of guidance material for PAYE Digitally for Employers - EDI.

The guidance material includes:

EB2 (PAYE): Information Pack
EB3 (PAYE): Step by Step Guide
EB4: Software Supplier List
EB5 (PAYE): Message Implementation Guidelines

All the above documents are available on our website as follows:

- for the EB2 (PAYE), EB3 (PAYE) and EB4 go to:
www.hmrc.gov.uk/ebu/ebu_paye_ug.htm
- for the EB5 (PAYE) go to:
www.hmrc.gov.uk/ebu/ebu_paye_ts.htm

APPENDIX A**Steps to consider for EDI**

1. Does your payroll software have EDI functionality?
2. Do you need translation software so you can send forms in the correct format – GFF or EDIFACT?
3. Have you contacted HDS by completing the Enquiry form?
4. Do you have an HDS Account Manager?
5. Have you selected and installed a communication route – AS2, VAN or, ISDN with OFTP?
6. Have you completed a Registration form and sent it to HDS?
7. Have you tested your communication link and PAYE forms you want to file digitally with HDS?
8. Have you arranged a 'go live' date with HDS?

The above steps are meant as a general guide to Trading Partners considering using EDI. They are not prescriptive and the sequence may vary with different Trading Partners.

For more detailed information about setting up EDI you should refer to the EB3 (PAYE) at: www.hmrc.gov.uk/ebu/eb3paye.pdf

Appendix B

**HM Revenue & Customs PAYE
Electronic Data Interchange (EDI) – Enquiry form**

Use this form if you are considering sending and/or receiving PAYE information using Electronic Data Interchange

1	Employer/Bureau Name Address		
2	Contact Details Name Telephone Number Email Address	Payroll:	EDI:
3	District Numeral/PAYE ref	Employer name	

If there are several PAYE references involved, a separate list is acceptable. List attached

4	Number of employees Type of business Annual turnover of employees (%)		
5	Details of In-house or Bureau Payroll Operation		
6	Details of In-house or Package Payroll Solution		
7	Form Completed by	Name:	Date:

Please return completed form to:

HMRC Digital Service
Victoria Street
Shipley BD98 8AA
Telephone: 0845 60 55 999
Fax: 01274 646257
email: helpdesk@ir-efile.gov.uk
www.hmrc.gov.uk

Appendix B

**HM Revenue & Customs
PAYE**

Registration for Electronic Data Interchange (EDI)

Please indicate if this is a new registration, or a notification of change:

New	<input type="checkbox"/>	Complete all details in sections 1 - 7
Change	<input type="checkbox"/>	Please use this form to notify HMRC of any of the following: <ul style="list-style-type: none"> • Add employer/clients (complete sections 1 - 3 and 7) • Remove employer/clients (complete sections 1 - 3 and 7) • Additional messages you wish to test (complete sections 1, 2, 4, 5 and 7) • Changes to Communication method (complete sections 1, 2, 5, 6 and 7) • Changes to Payroll Software (complete sections 1, 2, 4, 5 and 7)

1	Employer/Bureau Name		
2	Contact Details Name Telephone Number Email Address	Payroll:	EDI:
3	District Numeral/PAYE ref	Employer name	

If there are several PAYE references involved, a separate list is acceptable. List attached

4	Details of In-house or Package Payroll Solution				
5	Message Type	X	Expected Testing Date (DD/MM/YY)	Format of Data (EDIFACT/GFF)	Message Version
	EAS: Employer Alignment Submission	<input type="checkbox"/>			
	FPS: Full Payment Submission	<input type="checkbox"/>			
	EPS: Employer Payment Summary	<input type="checkbox"/>			
	EYU: Earlier Year Update	<input type="checkbox"/>			
	NVREQ: NINO Verification Request	<input type="checkbox"/>			
	NVREP: NINO Verification Reply	<input type="checkbox"/>			
	GEN: Generic Notification	<input type="checkbox"/>			
	P6 (Daily)	<input type="checkbox"/>			
	P6B (Budget)	<input type="checkbox"/>			
	P9 (Annual)	<input type="checkbox"/>			
	SL1/SL2 (Student Loan notifications)	<input type="checkbox"/>			
	P11D	<input type="checkbox"/>			
	P11D(b)	<input type="checkbox"/>			
	P46CAR	<input type="checkbox"/>			

Please supply an email address/addresses for the receipt of Acknowledgement reports, Error reports and Response messages:

6	Communication Method	VAN <input type="checkbox"/> (complete section 6a) OFTP <input type="checkbox"/> (complete section 6b) X.400 <input type="checkbox"/> (complete section 6c) AS2 <input type="checkbox"/> (complete section 6d)
6a	VAN Details	EASYLINK <input type="checkbox"/> GXS TRADANET <input type="checkbox"/> GXS IE <input type="checkbox"/> GXS TGMS <input type="checkbox"/> DINET <input type="checkbox"/> VAN Mailbox ID SSID SFID Sender ID The generic Virtual Filename 'HMRC-EDI-DATA' is allocated to any files we transmit. If this is not acceptable please specify: Virtual Filenames
6b	OFTP Address Information	Odette SSID Odette Password Odette SFID NUA Sender ID The generic Virtual Filename 'HMRC-EDI-DATA' is allocated to any files we transmit. If this is not acceptable please specify: Virtual Filenames
6c	X.400 Address Information	
6d	AS2 Information <i>(details of the person who can be contacted to co-ordinate the AS2 connection)</i>	AS2 Contact Name AS2 Contact Telephone AS2 Contact Email URL including port no. EDI Sender ID
7	Form Completed by	Name Date (dd/mm/yy)

Please return completed form to:

HMRC Digital Service
 Victoria Street
 Shipley BD98 8AA

Telephone: 0845 60 55 999
 Fax: 01274 646257
 email: helpdesk@ir-efile.gov.uk
www.hmrc.gov.uk

