

CSV Specification – PAPDIS 1.0 – PAP01

This document is designed to provide supplementary guidance to software providers and industry professionals for the passage of data from payroll to the Smart Pension Scheme. This document must be read in conjunction with documentation issued by Pensions BIB and the PAPDIS Sub-Committee.

General principles

- Data can be transferred to the Smart Pension via CSV upload and/or via web services. Payroll Software providers wishing to submit data via web-services will be issued supplementary credentials and guidance. Please contact dev@smartpension.co.uk to receive request these details.
- The Smart Pension Scheme prefer to receive data using the Pensions and Payroll Data Interface Standard (PAPDIS). All validations by Smart administration systems, and the expected data items are in line with the PAPDIS version defined within field 1 of the file. However, this document aims to clarify any provider specific variables within the standard as well as any vague and/or non-confirmatory definitions within the document.
- This data file is in line with contributions calculated under HM Revenue & Customs' 'Net Pay Arrangement'. Contributions made under any other tax arrangement, are NOT processed via this specification document.
 - Depending on the Auto Enrolment functionality of the payroll software other (Non-PAPDIS) bespoke templates can be supplied, where necessary, although these must be agreed between all parties before its use.
 - Employment Leavers should be provided via the PAPDIS file relevant for the Pay Period the individual left employment (with reference to their employment leave date). If a Form P45 and/or employment leaver payroll process is conducted after the submission of the relevant PAPDIS file to Smart Pension, the employment leaver with their relevant employment leave date must be included in the next PAPDIS file submission.

General submission/data concepts

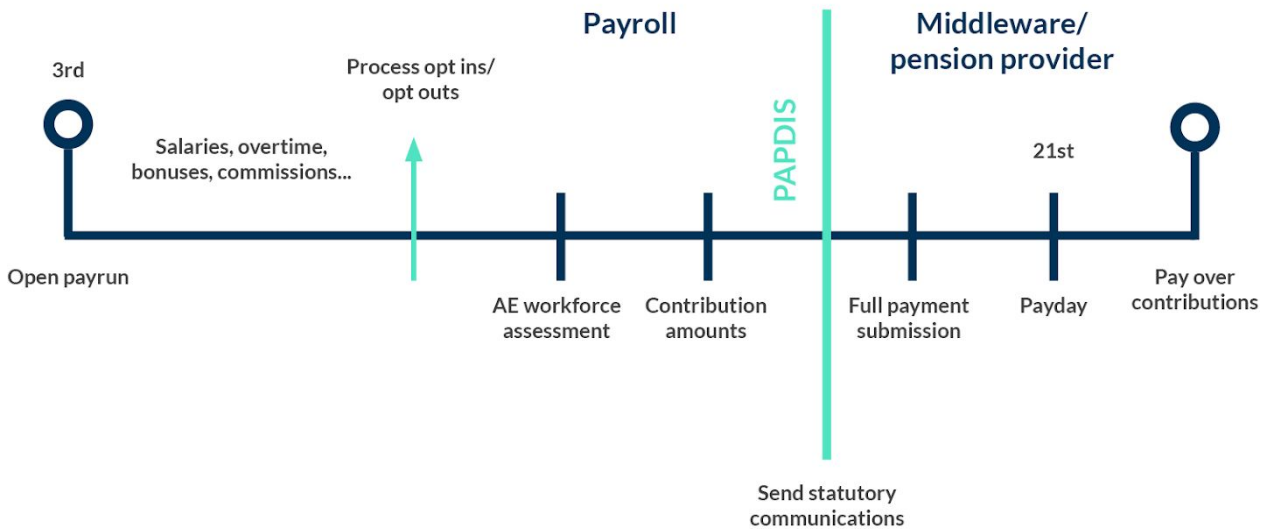
- Data must be submitted every pay period on or before the payment date in respect of the net remuneration due to the worker, following the same patterns of a Full Payment Submission under HM Revenue & Custom's Real Time Information.

- Data must be submitted every period from the employers Staging Date, irrespective of Postponement. Submissions during a Postponement Period may form a 'Nil Submission'.
- Submissions must be made in sequence by reference to the Pay Period frequency and annual calendar.

Data Specification below refers to the Version PAPDIS 1.0

Note:

- Data Descriptions in this document are designed to confirm the pension provider specific variables relevant to the Smart Pensions Scheme. They are not designed to override and/or change the ultimate principles and specification defined within the main PAPDIS 1.0 documentation release by Pension BIB.
- PAPDIS 1.0 assumes Auto Enrolment workforce assessment has been determined within payroll. If the Smart Pension portal needs to run workforce assessment, a different data template will be required, please visit Smart Pension Support website. For further assistance in this regard, contact adviser@smartpension.co.uk for payrolls / accountants and employer@smartpension.co.uk for direct employers.



Field no	Field name	Mandatory /conditional/optional	Field length	Format	Description	Note
1	PAPDISV ersion	Mandatory	5	PAP01	Version number of the standard	File rejected if omitted or if incorrect
2	Pension Provider ID	Optional	35	smartpens ion	Used to confirm Smart Pension is the correct recipient of the data	File rejected if omitted or if incorrect
3	EmployerID	Mandatory	40	Alphanum eric	The employer identifier supplied by Smart Pension	This will be issued by Smart Pension and used as the identifier for the employer's individual Payroll Centres. The payroll software provider must provide a field within the company record for the payroll/AE administrator to populate this field.
						The file will accept multiple employer uploads
						It can be either the company ID or the company account name
4	Group	Mandatory	40	Alphanum eric	Name of contribution group	If the employer has set up contribution groups on the Smart Pension account use the group name here. If a group name does not exist please use the word: default (lower case).
5	SubGroup	Optional	40	Alphanum eric	Employer/Pension sub identifier	Not currently in use.
				Blank		

6	PayPeriodStartDate	Mandatory	10	YYYY-MM-DD	The start date of the period in which the payroll is run	The start of the pay period which includes the relevant contribution deduction date
7	PayPeriodEndDate	Mandatory	10	YYYY-MM-DD	The end date of the period in which the payroll is run	The end of the pay period which includes the relevant contribution deduction date.
8	ContributionDeductionDate	Mandatory	10	YYYY-MM-DD	The date the contribution has been deducted from the employee's earnings.	Used to validate against duplicate submissions. Incorrect submissions can be deleted within the Smart Pension account before the 5th of a given tax month and resubmitted. Corrections required to a Pay Period after the 5th of the related tax month has passed cannot be deleted and must be corrected within later periods
9	FrequencyCode	Mandatory	2	W1 - Weekly W2 - Fortnightly W4 - 4 weekly/lunar M1 - Monthly M3 - Quarterly M6 - Biannually MA - annually	Frequency of the payroll period covered by the submission.	Used for a number of purposes including communications and checking the accuracy of contribution deductions.

10	TaxPeriod	Mandatory	2	Value Monthly will be 01 - 12 inclusive Weekly variations to be 01 - 56 inclusive (but never 55)	Tax period of the contribution deduction.	Used to determine that duplicate submissions are not provided for the same tax period. For clarity data should be uploaded only once for any given tax period, unless subsequent files are in respect of a different payroll centre within the same employing entity. This is identified via their works/employee/N I numbers.
11	Title	Optional	35	Alphanumeric	Employee's title	HMRC RTI data field & validation used in the standard.
						Data is used in employee communication.
						Must be one of: Mr, Mrs, Ms, Miss, or Dr
12	Forename 1	Mandatory	35	Any of A-Z, a-z, space, ' or hyphen(-)	Employee's first name	HMRC RTI data field & validation use in the standard. Data is used in employee communication Used as a tertiary identifier so include if available.
				1st character must be alpha		
13	Forename 2	Optional	35	Any of A-Z, a-z, space, ' or hyphen(-)	Employee's second name	HMRC RTI data field & validation used in the standard. Data is used in employee communication. Used as a tertiary identifier so include if available.
				1st character must be alpha		
14	Surname	Mandatory	35	Any of A-Z, a-z,	Employee's surname	HMRC RTI data field & validation

				space, ' or hyphen(-)		used in the standard. Data is used in employee communication. Used as a tertiary identifier so include if available.
				1st character must be alpha		
15	Employee ID	Mandatory	35	Any of A-Z, a-z, 0-9, space or ,.-()/=!"%&*;<>'+:?	Unique employee identifier	Unique at the payroll and employer level, and is used as the primary identifier of an individual. Could be payroll number, HR number, RTI number or any other identifier as long as it is unique. An Employee ID which is unique to the employee on the payroll. Please note - reusing an employee ID means it is no longer unique. Please ensure the employee ID is only ever used for one employee record, even if that employee is no longer in employment.
						If multiple contracts/posts/positions between a worker and a single employer constitute a single employment for the purposes of Auto Enrolment, their aggregated amounts may be material. A new work number will be treated as a new employee. If a person has no work number, Smart Pension will reject the file. We will not

						issue any work number on behalf of any user. If there are 2 work numbers issued to the same employee the file will be rejected.
						HMRC RTI data field & validation used in the Standard. Used in communications and as a tertiary identifier.
						On the Smart Pension platform, the EmployeeID is called External ID. File rejected if one or more employees who are already in the Smart Pension account do not have an External ID.
16	BirthDate	Mandatory	10	YYYY-MM-DD	Employee's date of birth	HMRC RTI data field & validation used in the standard. Used in communications and as a tertiary Identifier. HMRC RTI data field & validation used in the standard.
17	Current Gender	Mandatory	1	M or F	Employee's current legal gender	
18	National Insurance Number	Optional	9	2 alpha 6 numeric followed by one of A, B, C, D or space	Employee's NI Number	Must be provided if known.
				Blank		Must be updated if it changes. It may be amended by notification from HMRC to the

						Employer. A reference number that is issued to a person by the DWP/HMRC for participants in the National Insurance Scheme
19	Address1	Mandatory	35	Any of A-Z, a-z, 0-9, space or .,- (/=! "%&* ; <>' +: ?	Employee's Address line 1	Used for communications
						HMRC RTI data field & validation used in the standard.
20	Address2	Mandatory	35	Any of A-Z, a-z, 0-9, space or .,- (/=! "%&* ; <>' +: ?	Employee's Address line 2	Used for communications
						HMRC RTI data field & validation used in the standard.
21	Address3	Optional	35	Any of A-Z, a-z, 0-9, space or .,- (/=! "%&* ; <>' +: ?	Employee's Address line 3	Used for communications
						HMRC RTI data field & validation used in the standard.
22	Address4	Optional	35	Any of A-Z, a-z, 0-9, space or .,- (/=! "%&* ; <>' +: ?	Employee's Address line 4	Used for communications
						HMRC RTI data field & validation used in the standard.
23	Postcode	Conditional	12	Valid Universal Postal Union Postcode format	Employee's postcode	Used for communications
						Must be provided if known. Otherwise blank.
						HMRC RTI data field & validation used in the standard.
24	Country	Optional	35	Any of A-Z, a-z,	Employee's country of	HMRC RTI data field & validation used in the

				0-9, space or ., - ()/="!%&*; <>'+:?;	residence for address purposes	standard. Used for communications
25	EmailAddress	Optional	75	Valid e-mail address	Can be either a personal or work e-mail address.	Used for issuing communications as well as the log-in to their personal website (providing information on their fund values, for performing admin functions and for opt in/opt out decisions). If this field is left Blank, the communication will be issued to the designated payroll administrator (also known as Point of Contact of the pension scheme on Smart Pension).
					If 2 e-mail addresses are recorded within Payroll then the preference is for the personal e-mail.	
					E-mail addresses should be unique to each individual of the company	
26	EmploymentStartDate	Mandatory	10	YYYY-MM-DD	Date joined employment	This is the date the employee starts with the Employer. Used for preservation and is a key data item for pension administration purposes.
						In the event of a TUPE transfer or any form of payroll movement with an employing entity, this date must be included as the original employment date (i.e. continuous employment date).
27	ExitDate	Optional	10	YYYY-MM-DD	The date the employee leaves/exits the scheme.	Used for triggering leaving communications and leaver options.
					Must be included when payroll are	Contributions can be submitted for

					aware that an employee is leaving.	later pay periods after this date.
						Must be date not later than the Pay Period End Date (Field 6).
						Exit date to be completed for Reason Code 1. This must be provided if an employee exits a scheme, otherwise it should be left bank.
28	ExitReasonCode	Conditional	1	1 - Employee left employment		Used to determine the administration communications to be sent. Will ensure that Smart Pension is A) No longer looking for contributions related to this employee. B) Knows whether this employee may be subject to re-enrolment at a later date e.g. code 2 would let Smart Pension know that there is the potential for re-enrolment. Code 2 should not be used for AE opt outs - these will be determined by the Opt Out date having been populated with a date no later than the end of the optout period. This must be provided if an employee exits a scheme and the Exit Date field is completed, otherwise it should be left bank.
				2 - Ceased active membership, member still employed	Conditional on Exit Date being completed.	
				3 - Death	2 should not be used for AE opt outs - these will be determined by the Opt Out Date having been populated with a date no later than the end of the opt out period.	

29	AssessmentCode	Mandatory	1	0 - Excluded	Enrolment Category	Data is used in conjunction with the next field.
				1 - Eligible Jobholder		
				2 - Non-eligible Jobholder		See Appendix.
				3 - Entitled Worker		
				Blank		
30	EventCode	Mandatory	1	0 - Not an enrolment event		Data is used in conjunction with the previous field.
				1 - Automatic enrolment		See Appendix.
				2 - Opt-In		
				3 - Voluntary Joiner/Joiner		See Appendix.
				4 - Contractual Enrolment		
31	EventDate	Conditional	10	YYYY-MM-DD	The date of the event in field 31.	Must be provided if the member enrolls during the Pay Period of submission or if the member enrolled in a previous period and this has not been previously supplied. Condition is if Event Code is not 0 then Event Date should be included. If not provided then this may be

						deemed the 1st date of the pay period for the file uploaded or the later of employment start date.
					Not later than the Pay Period End Date, but can be earlier if this is the first time enrolment data is provided for the individual (e.g. if the first submission is post-Staging).	N.B. If a “backdated” enrolment event is provided with no Enrolment Date, then the Provider may also make the above Assumption. This may mean that an individual receives a refund that they are not entitled to, which could cause an unauthorised payment to be made. This could lead to significant Additional employer charges.
					Condition is if 39 is not equal to 0 then 40 should be included.	This may mean that an individual receives a refund that they are not entitled to, which could cause an unauthorised payment to be made. This could lead to significant additional employer charges.
32	Deferral Date	Conditional	10	YYYY-MM-DD	The date of the next assessment date following the current postponement period end. This is the day after the Postponement End Date. Can be uploaded every time, but must be	Must be provided if postponement is being used. Maybe used to issue Employee Postponement Communications.

					suppressed if the date is earlier than the Pay Period Start Date.	
33	AEOptOutDate	Conditional	10	YYYY-MM-DD	Date valid AE Opt Out notification received.	Used to confirm that member has opted out within the AE opt out period.
						Must be provided if member opts out – regardless of who received the notification (i.e. whether employer or provider).
						Not to be used for ceased scheme membership while remaining in active service.
34	AEOptOutReference	Optional	35	Blank	Optional if Opt-Out Date is populated	For AE Opt-outs only not ceased memberships.
35	EnrolmentCommunicationsIssuedDate	Optional	10	YYYY-MM-DD	Date on which enrolment communications were issued to confirm that enrolment was achieved.	Depending on the Assessment and Enrolment Code fields this could be used to determine the opt out period and other communications.
					This is not for use in respect of postponement or other communications.	It will be provided only where payroll/middleware know the date as they have provided the communication.
36	Employer Contributions Amount	Mandatory	13	Monetary value	Amount of employer pension contribution in pounds and pence	If salary sacrifice is used, then all contributions should be employer contributions. If there is a refund/adjustment on the employer contributions there may be a negative

						value provided by the payroll system.
				Stop separated	Can be negative, Smart Pension will NOT treat this as a zero. Negative Contributions may indicate a refund and/or payroll correction. It is up to the Employer to reconcile this amounts between the payroll and pensions systems.	
				No commas	Zero contributions should be entered as 0 or 0.00.	
				No currency sign		
37	Employee Contributions Amount	Mandatory	13	Monetary value	Amount of employee pension contribution in pounds and pence	If Salary Sacrifice is used, then this should be 0.00.
				Stop separated	Can be negative, Smart Pension will NOT treat this as a zero. Negative Contributions may indicate a refund and/or payroll correction. It is up to the Employer to reconcile this amounts between the payroll and pensions systems.	If there is a refund/adjustment on the employer contributions there may be a negative value provided by the payroll system.
				No commas	Zero contributions should be entered as 0 or 0.00	
				No currency sign		
38	Additional Voluntary Contributions Amount	Optional	13	Monetary value	Amount of employee pension contribution in pounds and pence	AVCs ideally should be separate but can be added to the Employee Conts.

				Stop separated	Can be negative, but Pension Providers will treat as 0.00	If Salary Sacrifice is used, then this should be 0.00, although certain circumstances can be agreed with Smart Pension direct.
				No commas	Zero contributions should be entered as 0 or 0.00.	If there is a refund/adjustment on the employer contributions there may be a negative value provided by the payroll system.
				No currency sign		
39	Additional Voluntary Contributions Percent	Optional		Number Max 3 decimal places Stop separated or whole number No % symbol	The percentage contributions used to calculate employee's Additional Voluntary Contributions	The percentage used to calculate the additional voluntary contribution value
40	Pensionable Earnings Amount	Conditional	13	Monetary value	The amount of pensionable pay used to calculate the pension contributions.	Used with each contribution percentage to determine whether the contributions are correct. If the payroll system has the pensionable earnings it must supply them. By supplying Pensionable Earnings the Smart
				Stop separated	When payroll has used Band Earnings, for the calculation of contributions, this amount must be reduced to sum of the earnings between the upper and lower thresholds.	
				No commas	Conditional on this data being held by Payroll and the pension contribution is calculated on a	

					percentage basis. This is best practice.	Pension is able to confirm (as required by 'Monitoring Employer Compliance' regulations) that the correct contributions (minimum % etc.) have been deducted.
				No currency sign	Salary Sacrifice - must include all pensionable pay used to calculate pension contributions, so must be the pre-sacrificed amount in respect of any Earnings Exchange or Sacrifice Arrangement.	
41	Employer ContributionsPercentage	Optional	7	Number	The percentage contributions used to calculate employer contributions (may be 0.00).	
				Max 3 decimal places	Can be negative, Smart Pension will NOT treat this as a zero. Negative Contributions may indicate a refund and/or payroll correction. It is up to the Employer to reconcile this amounts between the payroll and pensions systems.	
				Stop separated or whole number	So 25% is 25 or 25.00	
				No % symbol		
42	Employee ContributionsPercentage	Optional	7	Number	The percentage contributions used to calculate employee contributions (may be 0.00).	Even if AVCs are included within the Employee Contributions, this percentage should only relate to core contributions, as AVCs are often

				Max 3 decimal places	Can be negative, Smart Pension will NOT treat this as a zero. Negative Contributions may indicate a refund and/or payroll correction. It is up to the Employer to reconcile this amounts between the payroll and pensions systems.	paid as a fixed amount that does not relate to pensionable earnings.
				Stop separated or whole number	So 25% is 25 or 25.00	
				No % symbol		
43	SalarySacrificeIndicator	Conditional	35	Y, N or Blank		
				Blank if equivalent field in payroll.		Smart Pension does not currently offer salary sacrifice. So please use N.

Additional Integration Options:

PAPDIS 1.0 is designed to facilitate the passage of periodic worker specific pension information each period. Depending on the capabilities of payroll / middleware provider additional integration options can be provide to the user, where required. These options can facilitate the setup and/or update of employer/scheme/payroll centre information.

Any enquiries or assistance requests should be made to dev@smartpension.co.uk.

Appendix

The following matrix shows how Data Fields 29 for AssessmentCode and 30 for EventCode should be used in conjunction to allow the Pension Provider to understand the Assessment status of the employee reported by Payroll. Meaning is the result of the combination of AssessmentCode and EventCode.

AssessmentCode (Field 29)	EventCode (Field 30)	Meaning NB A worker can only be an Entitled Worker, Non-Eligible Jobholder or Eligible Jobholder after their employer has reached their staging date
0 – Excluded	0 – Not an enrolment event	An individual who has not and does not need to be assessed and who is either already a member of a scheme or who is not a member of any scheme
0 – Excluded	1 – Automatic enrolment / re-enrolment	Not applicable – EventCode should be disregarded
0 – Excluded	2 – Opt-In	Not applicable – EventCode should be disregarded
0 – Excluded	3 – Voluntary Joiner/ Joiner	A voluntary joiner who has not and does not need to be assessed (e.g. an excluded worker, a company director or a pre-staging company employee).
0 – Excluded	4 – Contractual Enrolment	Either a worker pre-staging or an excluded worker (e.g. an overseas resident) who is contractually enrolled.
1 – Eligible Jobholder	0 – Not an enrolment event	An eligible jobholder being contractually enrolled and either: - has previously Opted-out or ceased membership, but only needs to be assessed on re-enrolment, or - is under a period of postponement
1 – Eligible Jobholder	1 – Automatic enrolment / re-enrolment	An eligible jobholder being automatically enrolled or re-enrolled.
1 – Eligible Jobholder	2 – Opt-In	An eligible jobholder who has elected to Opt-in to an Automatic Enrolment scheme and either: - has previously Opted-out or ceased membership, but only needs to be assessed on re-enrolment, or - is under a period of postponement
1 – Eligible Jobholder	3 – Voluntary Joiner/ Joiner	An eligible jobholder who has agreed to join a different level scheme instead of the default automatic enrolment scheme
1 – Eligible Jobholder	4 – Contractual Enrolment	An eligible jobholder being contractually enrolled and either: - has previously Opted-out or ceased membership, but only needs to be assessed on re-enrolment, or - is under a period of postponement

2 – Non-eligible Jobholder	0 – Not an enrolment event	A Non-eligible jobholder, whether in postponement or not, until a future assessment deems them an Eligible Jobholder, an Entitled Worker or an excluded worker. They may or may not already be a member of a pension scheme
2 – Non-eligible Jobholder	1 – Automatic enrolment / re-enrolment	A Non-eligible jobholder being immediately re-enrolled (eg they are/were a member of a pension scheme which has become non-qualifying and so they are being enrolled into a new AE scheme).
2 – Non-eligible Jobholder	2 – Opt-In	A Non-eligible jobholder who has elected to Opt-in to an Automatic Enrolment scheme, whether in postponement or not.
2 – Non-eligible Jobholder	3 – Voluntary Joiner/ Joiner	A Non-eligible jobholder who has elected to join a different level scheme instead of the default automatic enrolment scheme.
2 – Non-eligible Jobholder	4 – Contractual Enrolment	A Non-eligible jobholder being contractually enrolled.
3 – Entitled Worker	0 – Not an enrolment event	An Entitled Worker, until an assessment deems them an Eligible Jobholder, Non-eligible Jobholder or an excluded worker. They may or may not already be a member of a pension scheme.
3 – Entitled Worker	1 – Automatic enrolment / re-enrolment	Not applicable – EventCode should be disregarded.
3 – Entitled Worker	2 – Opt-In	Not applicable – EventCode should be disregarded. A worker who requests to join or Opt-in, who is then assessed as an Entitled Worker is deemed to have made a request to Join a pension scheme (which does not have to be a qualifying or AE scheme, although the employer is free to allow this if they wish) – and so EventCode 3 should be used for this.
3 – Entitled Worker	3 – Voluntary Joiner/ Joiner	An Entitled Worker who requests to join a pension scheme (see meaning of Opt-in for an Entitled Worker above).
3 – Entitled Worker	4 – Contractual Enrolment	An Entitled Worker being contractually enrolled
Blank	0 – Not an enrolment event	An individual who is either already a member of a scheme or who is not a member of any scheme – where no worker category has been provided or is unknown.
Blank	1 – Automatic enrolment / re-enrolment	An eligible jobholder being automatically enrolled/re-enrolled or a Non-eligible jobholder being immediately re- enrolled.
Blank	2 – Opt-In	A jobholder (eligible or non-eligible) who has elected to Opt-in to an Automatic Enrolment scheme, whether in postponement or not.

Blank	3 - Voluntary Joiner/ Joiner	A voluntary joiner of an unknown worker category.
Blank	4 - Contractual Enrolment	An individual of unknown worker category being contractually enrolled.