



**ENVIRONMENT  
AGENCY**

# **XSD User Guide**

## **WEEE Producer Registration**

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Version 2.2

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## 1 BACKGROUND

Under new legislation coming into force on the 01 January 2007, producers of Electrical and Electronic Equipment (EEE) will be required to remove and dispose of a percentage of Waste EEE equivalents to their market share of EEE sales. The Regulations will require the Environment Agency to register all EEE producers (this includes importers and re-branding operations). The Regulations will allow for the use of "Compliance Schemes" where an organisation will act as an agent for a group of producers and undertake their combined liabilities. The Agency will have powers to determine whether a compliance scheme is acceptable, or not, before they register. The first Registrations were received in January 2007. From 2008 onwards schemes are not required to notify the Agency of the EEE placed on the market at time of registration. This is reflected in the modified structure of the XSD schema for 2008 onwards.

## 2 DOCUMENT OVERVIEW AND NAVIGATION

The user guide has been written in order to facilitate understanding of the XSD schema developed by the Agency for Producer Registration. This schema provides a full specification of the data and associated rules that relate to bulk registration of Producers by a Scheme.

In general, the information is split into two sections:

- Scheme details
- Producer details

The guide does not discuss the contents of the schema directly, examination and understanding of this artefact is left to the user. It is anticipated that Schemes will take necessary steps to engage appropriate technical expertise in relation. The guide does however focus on the generation of an XML file validated against this schema.

**Appendix A** presents a hierarchical overview of the required data structure within the XML documents.

These specific physical data attributes are then discussed in further detail within **Appendix B** in order that descriptions, data types, field lengths and constraints are made clear to the user. This view represents a data dictionary type view - the set of physical data that will need to be downloaded into XML from the various host systems/data repositories being operated by the Schemes.

## 3 XML HEADER INFORMATION

The XML header will be typically structured as follows :-

```
<scheme xsi:schemaLocation="http://www.environment-agency.gov.uk/WEEE/XMLSchema  
MemberRegistration.xsd" xmlns="http://www.environment-agency.gov.uk/WEEE/XMLSchema"  
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

Note that the appropriate XSD version must be provided as an element within the submitted data.

For example:

```
<XSDVersion>2.2</XSDVersion>
```

## 4 CHANGE MANAGEMENT

This User Guide accompanies release version 2.2 of the XSD schema for Producer Registration for the 2008 compliance year. The major changes in this release are described in Appendix C.

## 5 FILE SUBMISSION

The Agency would like to propose the following file naming convention for all XML files submitted to the Agency for purposes of Producer Registration.

The file name should be in the format SchemeNoYYYYMMDD.XML i.e. for a scheme with an approval number of “WEE/AB1234CD/SCH” submitting a member registration XML document on the 1<sup>st</sup> of October 2007 the file name should be:

WEEAB1234CDSCH20071001.XML

## 6 FREQUENTLY ASKED QUESTIONS

This section is populated with queries that arose principally during the process of User Acceptance Testing. This list will be maintained throughout further versions of the User Guide and will reflect any queries recorded with the Agency. Any required changes to the schema have been reflected in Version 2.0 of the Producer Registrations XSD Schema.

### 1. What is XML?

XML is the de facto standard used within IT for exchange of data typically between computer systems. The Agency require that Producer Registration submissions are provided in this file format for reasons of standardization and validation.

### 2. I understand that Producer Registration submissions need to be in XML, but what part does the XSD schema play in the overall submission process?

The Agency require that any XML file submissions from a Scheme are both generated and validated in accordance with the Agencies data requirements. In order to achieve this, schemes will need to utilize the provided XSD Schema definition which is fully representative of these requirements. The XSD Schema enables the generation of fully conformant XML submissions to the Agency by the Scheme and enables schemes to validate their registration documents before sending to the Agency.

### 3. How would you summarize the Schemes obligations with respect to Producer Registration?

Compliance Schemes will be required to submit an XML file representative of the required Producer registration data to the Agency by the published submission date. Further to this, the XML submission must have been generated and validated in direct compliance with the XSD provided by the Agency.

### 4. Why can't I open XSD Schema in Word?

In order to make use of the XSD schema, Schemes will need to procure appropriate IT expertise. XSD schemas may be examined via a number of proprietary products available on the market for specific use with XML Schema.

### 5. Why is the User Guide so technical? I don't understand it.

The User Guide is intentionally targeted at technical roles familiar with implementation of XML based interfaces. This is necessary since Schemes are required to implement their own solution for mapping of

data from in-house data stores into XML - according to the provided Schema. As such, it is expected that non-technical roles involved in receipt of the Schema from the Agency would immediately devolve understanding to appropriate technical roles.

The content of the User Guide contains sections that replicate the XML presentation formats available through many of XML tools on the market. These include :-

Appendix A : A grid view indicating the structure/composition/hierarchy of the data.

Appendix B : A data dictionary view provides the detail relating to all of the physical data attributes that must be provided within the XML such as field lengths, optionality, constraints and description.

Appendix C : An itemised list of changes since the previous release.

The User Guide must retain a technical bias. It is not a replacement or aid for alternative data submission channels. The Guide supports an XSD/XML solution and not one that includes intermediate steps involving HTML or Excel population. The contents reflect standard industry techniques for data specification and should therefore be understandable to any technical role with appropriate background.

6. Will the User Guide be maintained?

The User Guide will be maintained in line with releases of the schema and will be supplemented with any information that might be viewed as useful to Schemes, particularly via the Frequently Asked Questions section of the document. The Agency are happy to consider feedback in relation to this document. As previously indicated however, a centralised feedback channel such as the Schemes Forum would be preferable.

7. Could the Agency provide an example of a populated Producer Registrations XML file?

The Agency will provide an example XML file at the next release of the User Guide. Please note that many proprietary tools are capable of producing example XML based upon a selected Schema.

8. The mobile phone contact for producers and scheme operators you have as a mandatory field. Our system only holds one contact number therefore cannot populate this field. I do not think it is necessary to have 2 telephone contacts, we would like to ask that this is an optional field.

The mobile phone number has been modified to be an optional field. In addition, the Fax field has also been made optional leaving only the Phone Landline field as mandatory.

9. The XSD pattern restriction allows a phone number with a single digit; clearly not possible, perhaps this restriction should be changed to a minimum of 10 digits, for example.

Restrictions on the PhoneMobile field have been amended to reflect a restriction on field length to a minimum of 10 digits.

10. Partnership details. Can you please clarify the mandatory details you require for this area. I presume it is a list of all partner names and not contact details as well for each partner.

Yes. The regulations require that Partnerships provide a list of partner names. A minimum of two partners should be submitted and there is no upper limit to the number of partners. Contact details are not required for each partner as indicated in Appendices A and B.

11. Company number. Our system at present requires a company number for every producer, would it be acceptable to set a default number that is recognized as partnership (i.e. 9999999) and sole trader (i.e. 8888888).

The SoleTrader element has been removed from the XSD schema. You may now (optionally) submit company number where the organisation is a company. Where the organisation is a Partnership a list of partners must be submitted under in repeating partner elements. Where the organization is a Sole Trader

the organization should be submitted as a partnership with a single partner element. Do not use surrogate typing i.e. default numbers, such as 99999999 and 88888888, in the company number field.

12. Producers logo – this will cause us difficulty with the exact file size and valid URL. I would like to state that our system holds all these details but not in the exact format as required. I am sure other people will have difficulty in this area and would like to know if any changes will be made to this requirement.

Revised Guidelines for the provision of the graphic(s) are now provided within Appendix B : Data Dictionary in relation to the Graphic attribute. Also note that :

- a) A list of Identification Marks (graphics) is now allowed.
- b) For simplicity, graphic files are required to be submitted along with the XML on a CD.

13. Producer Identification Marks : Restriction of mark format to jpg and gif could be extended to include .png.

The .png format is now included as an allowable graphics format for representation of identification marks along with .gif and .jpeg and .jpg.

14. Producer Identification Marks : Image size of 310 x 90 pixels : User Guide Appendix B, Graphic definition. "the size should be 310 x 90 pixels" is this a maximum dimension or a requirement that all image files should be that size? Some image files may need to be padded with blank surround to fit this aspect ratio.

Revised Guidelines for the provision of the graphic(s) are now provided within Appendix B : Data Dictionary in relation to the Graphic attribute.

15. The image store process... "This element enables submission of a producer's logo in graphic file format (must be in GIF or JPG formats) and the size should be 310 x 90 pixels. The graphic element must specify valid URL of a graphic file which must be submitted along with the XML file to the agency. Pathnames may be included as part of the string." Just to clarify, am I to store a copy of the producer's image on my servers and submit you a URL so your system can link to these logos? If this is the case we have already hit a few barriers with this one.

There is no requirement to provide a URL to an Identification Mark held on some remote server. Within the User Guide, URL means file name of the graphic file with path name supplied in relation to the location of the XML. E.g. For a graphic file named "LogoA.JPG" residing in the same directory as the XML file, it is simply "LogoA.JPG". If the graphic file resides under a sub-directory named "images", it must be ".\images\LogoA.JPG".

16. Producer Identification Marks : URL supplied in test file is not valid as yet since this part of our system has not been implemented.

[Refer to previous Item](#)

17. SICCode is mandatory in the schema. Schedule 6 . 14. of the WEEE Regulations states that "the [SIC] code for any scheme member that has one" should be supplied. This implies that there may be situations where an SIC code is not available. SICCodeType should therefore be modified to allow a zero length string.

SIC Code is now modified to be a list of SIC codes. Additionally, SIC Code is now optional but may be submitted as a blank string in order to reflect the question of availability suggested in the regulations.

18. We have noted that the size for the SIC Code has been fixed as a maximum of 8 characters, however we may have companies who have more than one SIC Code. How should we send these through to you on the XML file? During this test we have only sent one through as the file failed because of the size issue encountered when we tried to send more than one separated by a comma.

[Refer to previous Item](#)

19. User Guide: Locality/Administrative Area are not entirely self explanatory. The assumption is that an administrative area would be a county. However, the definition of a locality, for the hierarchical structure of

the address suggests that it would be of greater importance than a post town. Expansion of the definition in the User Guide would be good perhaps with an example.

The user guide has been updated to provide better descriptions of Locality and Administrative Area. See Appendix B : Data Dictionary. The British Standard for addresses BS7666 should be referred to for further information.

20. PostCode : XML validation seems not to allow valid postcodes as values for the PostCodeType, however this may be a software problem as inspection of the regex as well as using the same regex pattern in Perl scripts show that it does match the postcodes used.

Some parsers have been found to have difficulty with the complex pattern match. The postcode format check has been relaxed to overcome this issue and to 'future proof' the schema against subsequent UK postcode changes.

21. How do you want us to let you know of any member who leaves the scheme. This could be because the business has closed down or the business has been taken over by somebody else. Companies are not allowed to leave a scheme during a scheme year at present. However, we are aware that there may be a change to the legislation regarding this, since companies that do not pay, go into liquidation, or are bought by another company will have to be able to leave a scheme. Can you let us know how you want this to be handled with the XML File.

The Agency does not need to be explicitly informed in relation to members who leave a scheme.

22. I would suggest that reverse date numbering the files would be safer than the forwards numbering they have chosen (20070206 rather than 06022007) - prevents problems with Americans!

This suggestion has been adopted and is featured within Section 6 of the document : File Submission.

23. The Schema requires that the ProducerBusinessType be defined as either a sole trader, a company or a partnership. As far as I am aware, the Regulations only require that partners' names are provided where the producer is a partnership. There is no difference in the information that is required by the producer a company or a sole trader. Is it therefore necessary to gather data on the status of the producer (company/sole trader) if it is known that it is not a partnership? In terms of the Schema, could the CompanyType, PartnershipType not be combined? Element for partners' names could be optionally included, perhaps.

The XSD schema now reflects the differentiation of Company and Partnership only. Sole Traders are considered to be a partnership with a single partner. Partnerships should offer names of at least two partners but not full contact details of each. Note that Company Number is now optional.

24. Why has the requirement for the Producer Compliance Scheme to supply details of their registered office and a nominated billing contact been removed?

The change to Schedule 6 in the WEEE Regulations removed the requirement for a PCS to provide their registered office details when applying to register a producer. The requirement to provide a nominated billing contact each time was also removed as this information is unlikely to change much from registration to registration

## 7 APPENDIX A : GRID VIEW

The following table shows a hierarchical view of the schema structure.

Hierarchy						Comments
Scheme						The overall container for general scheme details and market information Described within Appendix B Described within Appendix B Described within Appendix B
Scheme Business	<b>XSDVersion</b> <b>ApprovalNo</b> <b>Compliance Year</b> <b>TradingName</b>					Described within Appendix B
	Company					Described within Appendix B The overall container for Scheme contact details.
		<b>CompanyName</b> <b>CompanyNumber</b> RegisteredOffice	ContactDetails			Container for general company details and contact details (Optional). Excludes Sole Trader and Partnership on selection Described within Appendix B Described within Appendix B Self explanatory
	Partnership	<b>Partnership Name</b> PartnershipList		<b>Partner</b>		As above Container for general company details and contact details (Optional). Excludes Company and Sole Trader on selection. Described within Appendix B
		PrinciplePlaceOf Business				List of partner names, must be minimum of one. Described within Appendix B Self explanatory
				ContactDetails		As above



Hierarchy						Comments
			Partnership	<b>PartnershipName</b>		Described within Appendix B As above Described within Appendix B As above As above
				PartnershipList	<b>Partner</b>	
				PrinciplePlaceOf Business		
					ContactDetails	

## 8 APPENDIX B: DATA DICTIONARY VIEW

Attribute	Type	Length	Need	Constraints	Description
XSDVersion	Decimal		Man	Fixed value 2.2 required.	The XSDVersion element will be used to determine the version of XSD file that the XML file should be validated against. The EA will issue new XSD with an updated version number from time to time, so it is imperative to check with the EA that you are using the correct version of XSD for validating your member registration XML. The constant value of the XSD version may be identified from the header of the XSD schema provided by the agency
ApprovalNo	String	Exactly16	Man		This element is a number representing the Number or ID given to the Scheme Owner when their initial application was processed and approved. The format of the Approval Number has been defined as :- <b>WEE/AANNNA/SCH</b> where : <b>/SCH</b> suffix indicates a scheme number. Note that ATFs and Exporters will be allocated ATF and EXP suffixes on approval. <b>A</b> = alphabetic and <b>N</b> = numeric characters. E.g. WEE/AX1234BC/SCH
ComplianceYear	Integer		Man	Must be greater than or equal to 2008 and less than or equal to 3000	The compliance year for which the producer registrations are relevant.
TradingName	String	Max 70	Opt	May be left blank/null/empty	This element is used to name the scheme if there are different or multiple company names involved in running the Scheme.
Title	String	Max 35	Man		Self explanatory
Forename	String	Max 35	Man		Self explanatory
Surname	String	Max 35	Man		Self explanatory

Attribute	Type	Length	Need	Constraints	Description
PhoneLandLine	String	Min 10	Man	Must be formatted as a valid email address – must include @	Self explanatory
PhoneMobile	String	Min 10	Opt		Self explanatory
Fax	String	Min 10	Opt		Self explanatory
Email		Max 255			
PrimaryName	String	Max 100	Man		The PrimaryName is the designated premise number, and/or the PremiseName. Where neither of these exists then the PrimaryName is the name of the organisation in occupation, or a description of the addressable object.
SecondaryName	String	Max 100	Opt		The SecondaryName is the number, name or description used to identify the secondary addressable object within or related to a PrimaryName.
StreetName	String	Max 100	Opt		Self explanatory
Town	String	Max 30	Opt		Self explanatory
PostTown	String	Max 30	Opt		Self explanatory
Locality	String	Max 35	Opt		Locality - The locality name refers to a neighbourhood, suburb, district, village, estate, settlement, or parish that may form part of a town, or stand in its own right within the context of an administrative area. Where an industrial estate contains streets it is defined as a locality in its own right.
Administrative Area	String	Max 30	Opt		Administrative Area - The administrative area is a geographic area that may be the highest level local administrative area, which may be a county or a unitary authority, an island or island group or London.
PostCode	String	Max 8	Opt	Must be valid postcode format. See schema.	Note that one of PostCode or International postcode must be provided.

Attribute	Type	Length	Need	Constraints	Description
InternationalPost Code	String	Min 1 Max 35	Opt		Note that one of PostCode or International postcode must be provided.
Country	String	Enumerated	Opt	Enumerated List	ISO list of countries for selection.
CompanyName	String	Max 255	Man		Self explanatory
CompanyNumber	Integer	Max 8	Opt		Self explanatory
BusinessName	String	Max 255	Man	Where business is a sole trader	Self explanatory
PartnershipName	String	Max 255	Man	Where business is a partnership	Self explanatory
Partner	String	Max 70	Man	Partner list must contain minimum of one partner.	Where a single partner name is submitted the organisation is treated as a sole trader. Where multiple partner names are submitted the organisation is treated as a partnership.
Status	String	Exactly 1	Man	Valid Values 'I' and 'A' (Insert/Amend) Where status = I then registration number should not be included.	The EA will collect details of producers for both initial data submission and later amendments/corrections. For each producer, you can use status node to indicate whether this is for initial submission or for amendments.

Attribute	Type	Length	Need	Constraints	Description
RegistrationNo	String	Exactly16	Opt		<p>This element is a number representing the Number or ID given to the Producer upon approval. The format of the Approval Number has been defined as :- <b>WEE/AANNNNAA</b> where : <b>A</b> = alphabetic and <b>N</b> = numeric characters. E.g. WEE/AX1234BC</p> <p>Registration numbers are optional in that they will not be available to previously unregistered Producers. Numbers will always be quoted in cases of amendment however.</p>
TradingName	String	Max 255	Opt		
SICCode	String	Max 8	Man	May be left blank	
VatRegistered	Boolean		Man		
AnnualTurnover	Float		Opt		
Turnover Band	String		Man	Enumerated type, one or the other selected.	<p>This enables specification of limits for turnover in terms of bands. There are two bands :-</p> <ol style="list-style-type: none"> <li>1. Where turnover &lt;= 1 million pounds</li> <li>2. Where turnover &gt; 1 million pounds</li> </ol>
Obligation Type	String		Man	Enumerated type, one of three values selected.	<p>This element enables the specification of obligation i.e. the operational mode of the Producer. One of three values may be selected.</p> <ul style="list-style-type: none"> <li>• B2B</li> <li>• B2C</li> <li>• Both</li> </ul>

Attribute	Type	Length	Need	Constraints	Description
Graphic	String	Max 255	Man	<p>The graphic field can be modified as a list with no upper limit but minimum of one graphic file. PNG, GIF and JPG file formats allowed.</p>	<p>Image size can range from smallest of 120 pixels by 120 pixels to largest of 310 pixels by 232 pixels with aspect ratio reflecting the actual company logo. For simplicity, graphic files are required to be submitted along with the XML on a CD. The URL means file name of the graphic file with path name in relation to the location of the XML. E.g. For a graphic file named "LogoA.JPG" residing in the same directory as the XML file, it is simply "LogoA.JPG". If the graphic file resides under a sub-directory named "images", it must be ".\images\LogoA.JPG". Schemes do not need to store graphic files on their server or provide URL of graphic files on their server.</p>

## 9 APPENDIX C: CHANGE SUMMARY

<b>Change Ref.</b>	<b>Description</b>
2.2.1	Removed the requirement for schemes to provide correspondents for notices and approvals.
2.2.2	Removed the requirement for schemes to provide a nominated billing contact.