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DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT
DIRECTORATE-GENERAL FOR ENERGY
SRD - Shared Resource Directorate
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European Product Registry for Energy Labelling (EPREL)

Assumptions

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1.1. Document History

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| 2.80 | 05/03/2018 | Reviewed by PT, LG, RN: present tense replacing future, clarifications, new diagrams, some functionalities moved to v2. |

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1.2. Bibliography

- [1] EPREL, *Business Glossary*, 2016.
- [2] EPREL, *REGULATION (EU) 2017/1369 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (Text with EEA relevance)*.
- [3] EPREL, *DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast) (Text with EEA relevance)*, 2009.
- [4] DPO, *REGULATION (EC) No 45/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data*, 2001.
- [5] DPO, *Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data*, 1995.
- [6] EC, *COMMISSION DECISION (EU, Euratom) 2015/443 of 13 March 2015 on Security in the Commission*, 2015.
- [7] EC, *COMMISSION DECISION (EU, Euratom) 2017/46 of 10 January 2017*, 2017.
- [8] EPREL, *COMMISSION DELEGATED REGULATION (EU) No 1059/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household dishwashers*.
- [9] EPREL, *COMMISSION DELEGATED REGULATION (EU) No 626/2011 of 4 May 2011 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of air conditioners*.
- [10] EPREL, *COMMISSION DELEGATED REGULATION (EU) No 65/2014 of 1 October 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of domestic ovens and range hoods*.
- [11] EPREL, *EPREL XML Exchange Model - Product Exchange Model*, 2017.

1.3. Abbreviations and Glossary

See document "EPREL – Business Glossary" [1]

In this document the "Regulation (EU) 2017/1369" [2] is also mentioned as "The Regulation".

2. INTRODUCTION AND PURPOSE

"REGULATION (EU) 2017/1369 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU" (hereafter called the 'Regulation') [2] requires the European Commission (EC) to establish a product database where all new models (including second hand imported models), covered by a delegated act (Energy Labelling regulation) have to be registered before they are placed on the EU market for the first time:

Article 12 Product database

1. *The Commission shall establish and maintain a product database consisting of a **public part, a compliance part and an online portal** giving access to those two parts. The product database shall not replace or modify the responsibilities of the market surveillance authorities.*
2. *The product database shall serve the following purposes:*
 - a. *to support market surveillance authorities in carrying out their tasks under this Regulation and the relevant delegated acts, including enforcement thereof;*
 - b. *to provide the public with information about products placed on the market and their energy labels, and product information sheets;*
 - c. *to provide the Commission with up-to-date energy efficiency information for products for reviewing energy labels;*
3. *The public part of the database and the online portal shall contain the information set out in points 1 and 2 of Annex I respectively which shall be made publicly available. The public part of the database shall meet the criteria in paragraph 7 of this Article, and the functional criteria set out in point 4 of Annex I.*
4. *The compliance part of the product database shall be accessible only to market surveillance authorities and to the Commission and shall contain the information set out in point 3 of Annex I, including the specific parts of the technical documentation as referred to in paragraph 5 of this Article. The compliance part shall meet the criteria in paragraphs 7 and 8 of this Article, and the functional criteria set out in point 4 of Annex I.*
5. *The mandatory specific parts of the technical documentation that the supplier shall enter into the database shall cover only:*
 - a. *a general description of the model, sufficient for it to be unequivocally and easily identified;*
 - b. *references to the harmonised standards applied or other measurement standards used;*
 - c. *specific precautions that shall be taken when the model is assembled, installed, maintained or tested;*
 - d. *the measured technical parameters of the model;*
 - e. *the calculations performed with the measured parameters;*
 - f. *testing conditions if not described sufficiently in point (b).*

In addition, the supplier may upload additional parts of the technical documentation on a voluntary basis into the database.

6. *When data other than those specified in paragraph 5 or not available in the public part of the database would become necessary for market surveillance authorities and/or the Commission for carrying out their tasks under this Regulation, they shall be able to obtain them from the supplier on request.*
7. *The product database shall be established in accordance with the following criteria:*
 - a. *minimising the administrative burden for the supplier and other database users;*
 - b. *user-friendliness and cost-effectiveness; and*
 - c. *automatic avoidance of redundant registration.*
8. *The compliance part of the database shall be established in accordance with the following criteria:*
 - a. *protection from unintended use and the safeguarding of confidential information by way of strict security arrangements;*
 - b. *access rights based on the need-to-know principle;*
 - c. *processing of personal data in accordance with Regulation (EC) No 45/2001 and Directive 95/46/EC, as applicable;*
 - d. *limitation of data access in scope to prevent copying larger data sets;*
 - e. *traceability of data access for the supplier with regard to its technical documentation.*
9. *The data in the compliance part of the database shall be treated in accordance with Commission Decision (EU, Euratom) 2015/4431. In particular, the specific cyber-security arrangements of*

Commission Decision (EU, Euratom) 2017/462 and its implementing rules shall apply. The confidentiality level shall reflect the consequential harm resulting from disclosure of the data to unauthorised persons.

- 10. The supplier shall have access and editing rights to the information it enters in the product database pursuant to Article 4(1) and (2). A record of changes shall be kept for market surveillance purposes, keeping track of the dates of any editing.*
- 11. Customers using the public part of the product database shall be able to easily identify the best energy class populated for each product group, allowing them to compare model characteristics and to choose the most energy efficient products.*
- 12. The Commission shall be empowered to specify, by means of implementing acts, the operational details of the product database. After consulting the Consultation Forum provided for in Article 14, those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 18(2).*

ANNEX I

INFORMATION TO BE ENTERED IN THE PRODUCT DATABASE AND FUNCTIONAL CRITERIA FOR THE PUBLIC PART OF THE DATABASE

- 1. Information to be entered in the public part of the database by the supplier:
 - (a) the name or trademark, address, contact details and other legal identification of the supplier;*
 - (b) the model identifier;*
 - (c) the label in electronic format;*
 - (d) the energy efficiency class(es) and other parameters of the label;*
 - (e) the parameters of the product information sheet in electronic format.**
- 2. Information to be entered in the online portal by the Commission:
 - (a) contact details of Member State market surveillance authorities;*
 - (b) working-plan pursuant to Article 15;*
 - (c) minutes of the Consultation Forum;*
 - (d) an inventory of delegated and implementing acts, transitional measurement and calculation methods and applicable harmonised standards.**
- 3. Information to be entered in the compliance part of the database by the supplier:
 - (a) the model identifier of all equivalent models already placed on the market;*
 - (b) the technical documentation as specified in Article 12(5).**The Commission shall provide a link to the Information and Communication System on Market Surveillance (ICSMS), which includes the outcome of compliance checks performed by Member States and provisional measures adopted.**
- 4. Functional criteria for the public part of the product database:
 - (a) each product model shall be retrievable as an individual record;*
 - (b) it shall generate a single viewable, downloadable and printable file of the energy label of each model, as well as the linguistic versions of the complete product information sheet, in all official languages of the Union;*
 - (c) the information shall be machine readable, sortable and searchable, respecting open standards for third party use, free of charge;*
 - (d) an online helpdesk or contact point for the supplier shall be established and maintained, clearly referenced on the portal.**

This document "EPREL – Assumptions" lists a number of business assumptions established by the European Commission for the implementation of such a database and related web portal.

The assumptions have been presented and discussed with the Consultation Forum Sub-group 'Suppliers' on the product registration database for Energy Labelling established under Article 18 of the Ecodesign Directive (2009/125/EC) [3] during three meetings (i.e. on 15 September and 24 October 2017, and 12 March 2018). They also take into account observations and suggestions received by stakeholders.

3. GLOBAL ASSUMPTIONS

The EPREL system is divided in two parts as shown in figure 1 below, in line with the requirements of the Regulation:

- A Compliance part: a secured database hosted by the European Commission (EC) for all the energy efficient models introduced by suppliers. It is the access point for entering/editing the required public and compliance data by Suppliers, and for consulting compliance information by Member State Authorities (MSAs).
- A Public part: a database that will include relevant information about products cloned from the public data in the compliance database. Citizens, resellers, researchers and any other stakeholder will be able to access all relevant public information and, in particular, to consult the public data for all registered models.

The EPREL database will be accessible through a public web portal, on which the EC will also include wider information pertaining to the Energy Labelling (and Ecodesign) policy.

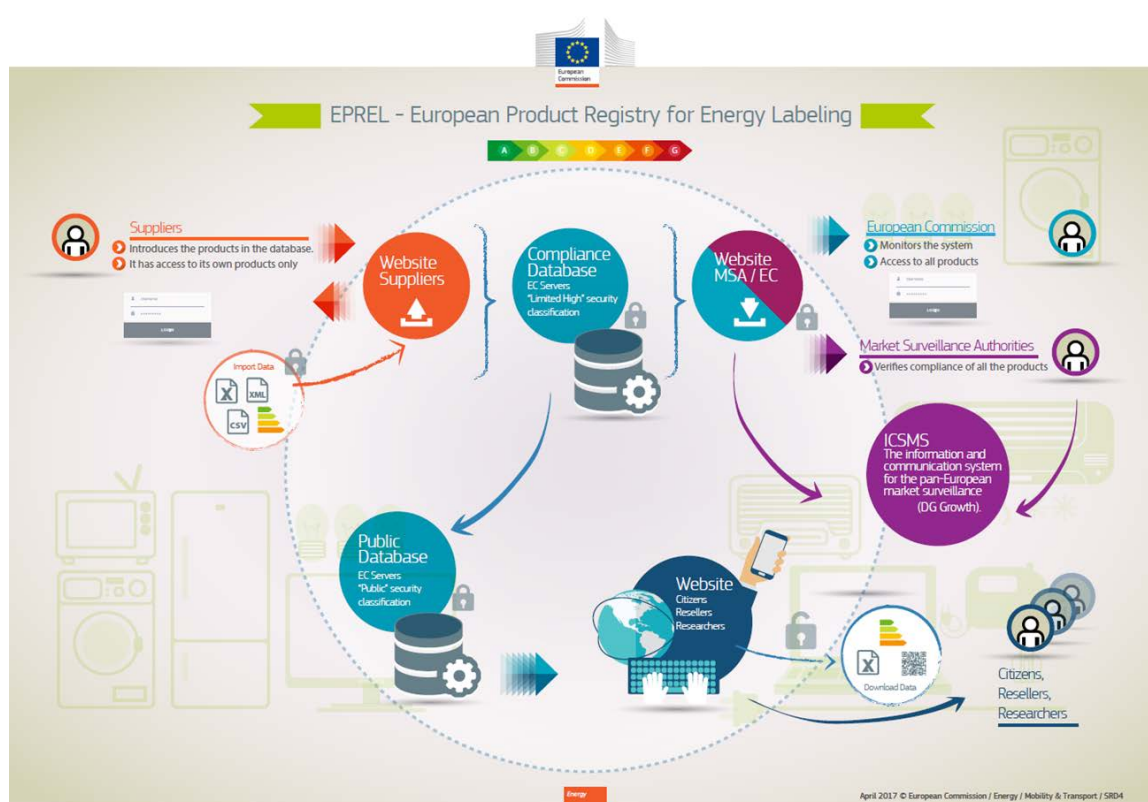


Figure 1 EPREL Architecture

Registered users for the EPREL system with access to the Compliance part are categorised within three different user groups:

- Suppliers (Importers/Manufacturers/Authorised Representatives)
- Market Surveillance Authorities (MSA)
- EC officials

Envisaged non-registered user categories with access to the Public portal and the public part of the database will be:

- Consumers
- Dealers

- Experts and researchers, such as those interested in energy/resource policy analysis.
- Others

Suppliers are able to enter the required model information (creation/modification) exclusively for their own product models in three different modes:

- **Interactive mode:** via a web application, the registered supplier is allowed to interactively create/modify the information for its own models. No access, to competitors' compliance data is possible.
- **System-to-system:** via an eDelivery¹ endpoint, the supplier is allowed to send secured messages containing both metadata of the model registrations in XML format as well as product labels, technical documents and any other additional files in PDF, text, PNG, GIF, JPEG².
- **File upload:** via a web application, the registered supplier is allowed to upload Zip files containing both metadata of the models registration in XML format as well as product labels, technical documents and any other additional files in PDF, text, PNG, etc. Same as "system-to-system" but uploaded manually by the user.

"Article 12

8. *The compliance part of the database shall be established in accordance with the following criteria:*

- (a) protection from unintended use and the safeguarding of confidential information by way of strict security arrangements;*
- (b) access rights based on the need-to-know principle;*
- (c) processing of personal data in accordance with Regulation (EC) No 45/2001 [4] and Directive 95/46/EC [5], as applicable;*
- (d) limitation of data access in scope to prevent copying larger data sets;*
- (e) traceability of data access for the supplier with regard to its technical documentation.*

9. *The data in the compliance part of the database shall be treated in accordance with Commission Decision (EU, Euratom) 2015/443 [6]. In particular, the specific cyber-security arrangements of Commission Decision (EU, Euratom) 2017/46 [7] and its implementing rules shall apply. The confidentiality level shall reflect the consequential harm resulting from disclosure of the data to unauthorised persons."*

Security for the Compliance site is of utmost importance; all the appropriate measures (i.e. physical, technical and system authentication/authorisation and restriction of downloading mass data) are put in place to ensure data security.

¹ **eDelivery:** The CEF eDelivery building block helps users to exchange electronic data and documents with one another in a reliable and trusted way based on an OASIS open standard (<http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/profiles/AS4-profile/v1.0/os/AS4-profile-v1.0-os.html>)

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/CEF+Digital+Home>

² The complete list of possible standardised or commonly available file formats may be modified.

4. LANGUAGE REGIME

Annex I (4)

*"it shall generate a single viewable, downloadable and printable file of the **energy label** of each model, as well as the **linguistic versions of the complete product information sheet, in all official languages of the Union;***"

The system provides information in all EU languages (Irish and Norwegian may be considered in future); for the application user interface (UI), the generation of the Labels and the Product Information Sheet, as follows:

- Attributes of the Product information Sheet: these are the names shown in the user interface (i.e. "Trademark", "Energy Efficiency Class", "annual electricity consumption", "power consumption", etc.). The linguistic versions of these attributes are in line with the translated language versions of the Regulations.
- List of values available for attributes of the Product Information Sheet: non-numerical attribute values of the fields in the user interface appear as items from a list with multiple options (e.g. in the interactive user interface they may be selected via a pull-down menu, radio-buttons, check boxes). The user interface may provide pop-up dictionaries (i.e. for Dishwashers (Commission Delegated Regulation (EU) No 1059/2010 [8]): "True/False" or "Built-in/Not build-in"; for Air Conditioners (Commission Delegated Regulation (EU) No 626/2011 [9]): "cooling season", "heating season": "average / colder / warmer"). The Regulation does not mention these lists of values but they are necessary for guaranteeing search functionalities³.
- Values to assign to attributes of the Product Information Sheet: in the user interface, when creating a model, users will have to fill some fields with free text, like descriptions. If finally these values have to be introduced in multiple languages then the same field to be filled by the supplier is proposed in all the languages (the suppliers will not necessarily know the countries where the model is placed on the market so the languages of those MS's cannot be identified).

³ Supplier organisations are invited to provide lists such as those that e.g. CECED already uses in the PI standard (7 of the 16 product groups).

5. SUPPLIERS ORGANISATION

The internal structure and organisation of Suppliers is unknown to the EC. The EC lets each Supplier create its own internal management structure. The general hierarchical structure is exemplified in Figure 2

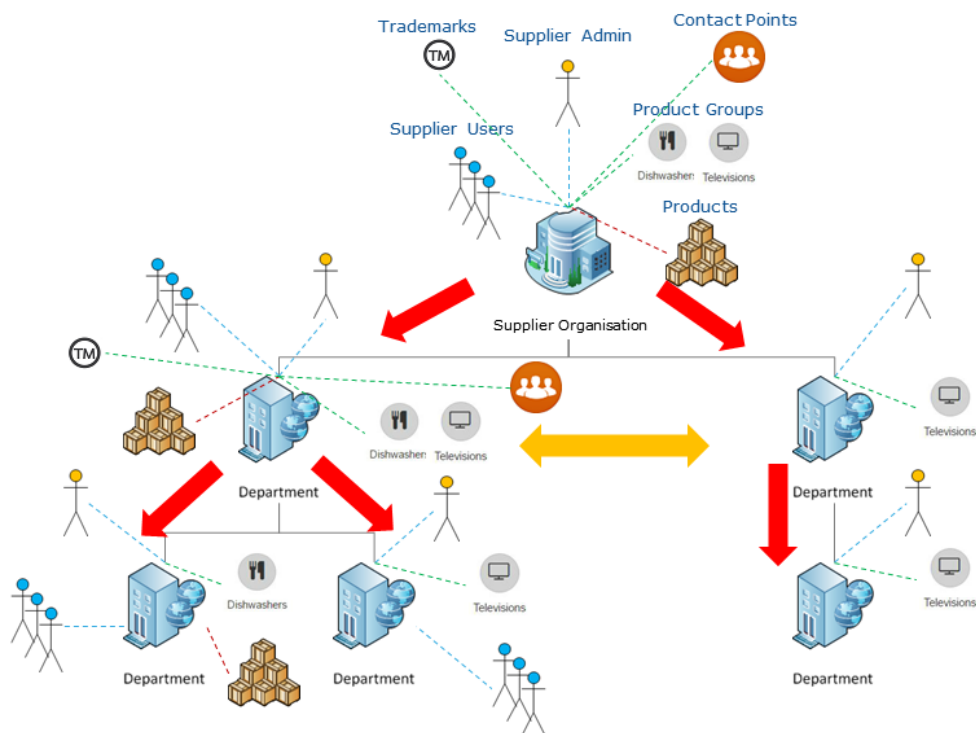


Figure 2 Supplier Organisation

A new self-registered Top Supplier User can create a new Supplier Organisation from a top "admin" user of this new organisation.

A Supplier Organisation is able to create several sublevels of Departments under the top organisation (which can represent real departments, branches/offices in different countries, etc.). Each department can be assigned one or more Product Groups and is able to work with models belonging to those product groups only. If a new sublevel of departments is created, by default the product groups of the parent department is assigned to it; it is up to the administrator to remove, but never to add new ones (unless the product group is added at the top level, then manually added in sublevels). There is no limit in number of departments and sublevels.

Each Supplier Organisation or Department will have at least one Supplier Admin (with possibility of creating "Deputy Admin" accounts) and may have many Supplier Users. Users can work for the mother organisation or for one or many departments. In such a case, the user can:

- be assigned to a parent department which covers all its departments,
- will use the same user assigned to multiple departments with possibly different roles and rights.

After the login, the user is able to see all his departments but is able to do only the actions allowed to the role he is been assigned for that department.

As indicated above, the top level Supplier Organisation has to be created by the Supplier User Administrator, who creates the first level of departments and invites other Supplier Admins and Supplier Users for that Supplier Organisation, and Supplier user Administrators for the first level

departments. The same happens for any level below the top level. It is also possible for a Supplier Admin of one Supplier Organisation or Department to create departments and invite users to lower levels in their department. In any case, users can register in the system only by invitation to reinforce security and privacy, and Admins can give rights and assign users to departments.

Users can have access to all models of their departments as well as models of sub-departments. Users have no access to departments of the same level, only to their own sub-departments; if the user works for two departments of the same level, he is able to see the other department's models. Models must be created by Supplier Users and assigned to the Supplier Organisation or Department chosen by the user limited to where the supplier user works or lower level Departments; Supplier Admins manage supplier users (they can also manage themselves), departments, product groups, contact points and models (not creation). Supplier Admins can delete own supplier users, change roles and rights of users, reassign users to departments and move models between departments.

There is only one type of Supplier User role, but when a new user is assigned this role, the Supplier Admin will assign his rights individually (i.e. create model, edit model public part, edit model compliance part, etc.). This will allow a much higher degree of security at the Supplier because each user will have only rights specific to what he can do.

Usually a Supplier Organisation owns a number of different trademarks. The Supplier Admin of the Supplier Organisation is able to create a list of available trademarks for its Supplier Organisation, and the same happens for the departments (this avoids misspellings and duplicates when creating models). If Supplier Users need a new trademark not already provided for in the list, they will be able to add it.

Annex I:

"1. Information to be entered in the public part of the database by the supplier:

(a) the name or trademark, address, contact details and other legal identification of the supplier;"

The Supplier Organisation and its departments may have many contact points (for contacts by MSAs or citizens) with contact details (address, email, telephone, person of contact, etc.). Whenever a model is created for a Supplier Organisation or department, its contact details have to be added to the model, selecting it from the pre-established organisation/department list of contact points. When creating the model, the supplier will add one contact point visible to everybody.

Annex I:

"4. Functional criteria for the public part of the product database:

(d) an online helpdesk or contact point for the supplier shall be established and maintained, clearly referenced on the portal."

An online Help Desk is setup by the EC that Suppliers can contact when looking for support during registration operations.

Periodic checks on user profile use (e.g. once a month) might be done by the system, triggering user profile elimination/disabling if no login was done for over 6 or 12 months (still to be decided). An alert could be issued and an automatic disabling done after a certain time (e.g. 7 days later) unless a new login is performed. Supplier Admins can also manually remove other users' accounts if they learn that person does not longer need access.

The EC intends to publish specific user manuals providing further details on database operations.

6. MARKET SURVEILLANCE AUTHORITIES ORGANISATION

The structure of an MSA organisation is different from those of Suppliers.

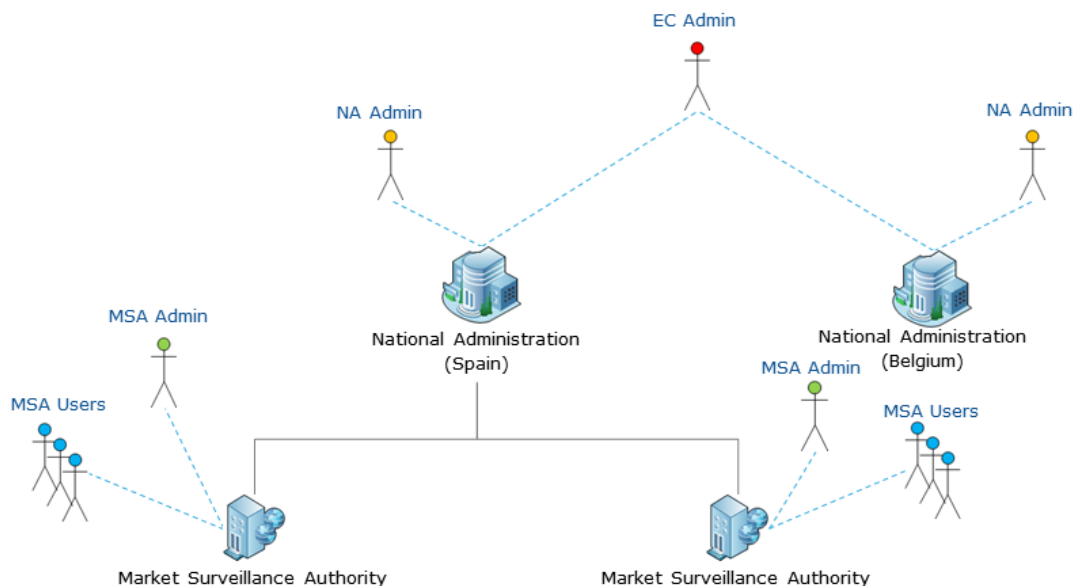


Figure 3 MSA Organization

One National Administration (NA) per Member State is created by the EC Admin. This NA is managed by one or more NA Admins. NA Admins will manage the creation of NA Users.

The first NA Admin is invited by EC Admin to register after receiving of a formal request, which can be a simple email asking for access, and validation by EC Admin; other NA Admins can be invited by the top-level NA Admin itself in case backups are needed. The list of "ICSMS contact points" for each NA is already known by EC, the EC Admin will send invitations to these known contact points to be the first NA Admins of each NA. If any country decides that this is not the right contact point for their NA, they have to send a request for a new one.

The NA Admins will create Market Surveillance Authorities (MSA). There could be many for each country, depending on internal organisation of the MS, but all are at the same level. These MSA's will have at least one MSA Admin, invited by NA Admin, who will manage the organisation users. MSA's may also have several MSA Users assigned and invited by MSA Admin, who will do the surveillance of compliance of the models placed in the market. Registration is by invitation only to enhance security.

The same user can have several roles, like being NA Admin and MSA Admin of one of the MSA's. This is allowed because in some MS's there is only one MSA and a single person may have multiple roles. MSA Admins/Users are able to work for multiple MSA's from their country NA. When logged in the system the users have to choose for which NA or MSA they work in that session so that only activities for that specific role are available by the interactive user interface.

MSA's are able to see models from any product group in the database, from any supplier and irrespective of the countries where the model could be placed on the market.

Periodic checks on user profile use (e.g. once a month) might be done by the system, triggering user profile elimination/disabling if no login was found for over 6 or 12 months. An alert could

be issued and an automatic disabling done after a certain time (e.g. 7 days later) unless a new login is performed. MSA Admins have to remove users' accounts for persons not entitled to have access to the Compliance system anymore.

MSA's use the Information and Communication System on Market Surveillance (ICSMS) to register the compliance control activities for products that have been investigated.

The Regulation foresees a link between EPREL and ICSMS to facilitate compliance control activities by Member States:

Annex I:

"3. [omissis]

The Commission shall provide a link to the Information and Communication System on Market Surveillance (ICSMS), which includes the outcome of compliance checks performed by Member States and provisional measures adopted."

EPREL is the platform where MSAs can find the technical information to support their compliance control activities. EPREL avoids, in principle, the need of contacting the supplier to ask the compliance information. The MSA may have need, anyhow, to contact the supplier to request clarifications, supplement of information or any other need. EPREL is the platform to guide MSAs in the selection of products to control and the user interface and tools provided are designed in this perspective. Searches are possible for any product group with selection criteria including e.g. date of placing on the market⁴, supplier name, main model and all equivalent models, etc.

ICSMS is a platform for reporting the results of compliance control activities for a number of different EU regulations, including safety, radiofrequency, etc. For any product model tested, the content may include documents, the positive/negative result, enforcement actions (e.g. withdrawing the product from the market), etc.

A "link" between a product model in EPREL and the results in ICSMS of compliance control activity performed by one or more authorities, is provided. EPREL may provide a functionality to "create" a new entry in ICSMS and thus automatically generate the link between the product model and a single or multiple entries in ICSMS.

In future, a bi-univocal link between the two systems may be provided for to correctly manage products that should not be present on the market because of compliance control activities resulting in an order to stop placing the product on the market (or even to withdraw or recall products). Products that should not be on the market as result of compliance control activity (with negative result) should be treated in a specific way in EPREL⁵.

The EC intends to publish specific user manuals providing further details on database operations.

⁴ Equal to date, before date, after date.

⁵ E.g. As any product not placed on the market, they should not appear from a generic search but only as result of a search by indicating the specific brand/model or the internal identification number (e.g. from a QR code) and, in this case, an alert should signal that they have been retired from the market (conversely, products not placed anymore on the market but not found non-compliant are displayed differently)

7. MODEL LIFECYCLE

Specific dates trigger events regulating the lifecycle of models created in EPREL.

The following diagram shows a model lifecycle and its milestones.

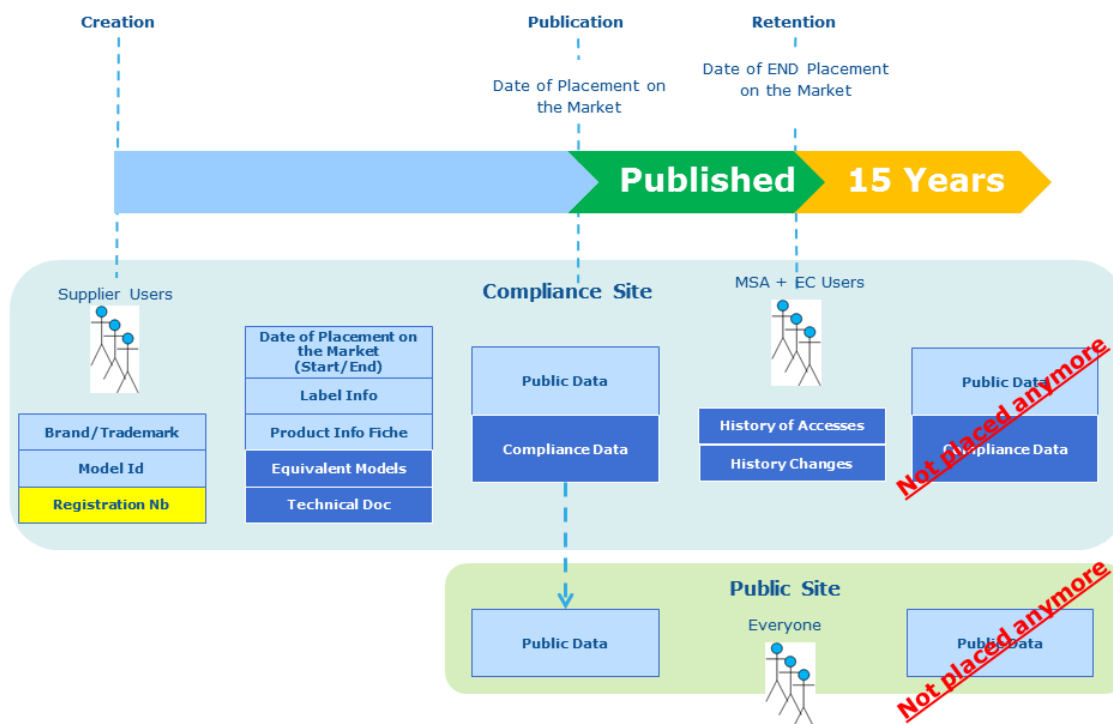


Figure 4 Model Lifecycle

Suppliers, when introducing models in EPREL, must indicate a **"date of placement on the market"** of a product model (as date of placement of the first unit of that product model on the market).

The "date of placement on the market" triggers the "publication of the model": publication triggers the mirroring of public data into the public database.

Market Surveillance Authorities (MSA) and EC users become also able to browse these models from the EPREL Compliance interface from that date onwards.

If the "date of placement on the market" is not filled in within 1 year from the creation of the model in the DB, a reminder is sent to the Supplier user that created it.

A model record can be created long before the "date of placement on the market", e.g. before products are placed in the box at the factory or even before production starts or measurements for compliance are performed. Creation of a model triggers the generation of the product internal unique identifier that is associated to the QR code that appears in the energy label.

No information, whether public or of compliance, is visible to anybody outside the suppliers organisation before "date of placement on the market".

Before the "date of placement on the market" occurs, the supplier is able to edit/complete any other record field, without this activity being logged and visible to MSAs. Only editing performed from the day of the placement on the market is logged⁶. A non-mandatory text field

⁶ I.e. parameter modified, date, identifier of the supplier user.

for "comments" is provided in EPREL where to indicate the reason for the modification, if deemed useful by the supplier user.

The compliance data has to be provided before the date of placement on the market as well.

"Data integrity" checks are done by the system when supplier users upload data, focused on completeness and quality of the input.

The system may also automatically validate the value of some fields using the formulas in the Annex of the Delegated regulations of the product group, alerting users if different values are introduced. The supplier user can force acceptance of a parameter value that the system suggests as non-consistent as the supplier is deemed entirely responsible for the entered data.

In system-to-system communications, incomplete registration is not allowed, but it is possible to create models with the minimal information sufficient for generating the "registration numbers" that are notified in a transmission report; subsequent updates of these models must include the notified "registration number" as reference. If models to be created have a trademark not existing in the list of trademarks of a Supplier Organisation, these trademarks are added to the list automatically.

From the "date of placement on the market", all data becomes fully available (public and compliance). A user-configurable time before that date (by default two weeks), an alert is sent to the Supplier User if not all necessary data has been filled, and the **publication is not performed if all mandatory fields of the model record are not entered.**

"Article 4

6. After the final unit of a model has been placed on the market, the supplier shall keep the information concerning that model in the compliance part of the product database for a period of 15 years. Where appropriate in relation to the average life span of a product, a shorter retention period may be provided for pursuant to point (q) of Article 16(3). The information in the public part of the database shall not be deleted."

Retirement of a product is triggered according to the value of the "date of end placing on the market", (which may be triggered as the result of compliance control activities; see section on MSAs). The Supplier may remove the compliance data 15 years after the **"date of end of placement on the market"** (or date of placement of the last unit of a product model on the market) unless the specific Regulation for product groups states a different duration. A solution has to be found for equivalent models still on the market, which rely on this model for their technical documentation.

The public data is never erased; after the **"date of end of placement on the market"** the model by default will not be listed in searches (only "Models on the market" are listed). A generic user may still see the model through a "Show all models" button (similar functionality is made possible in Compliance and Public sites) or by entering the specific registration number (the system will indicate that the model is declared as not on the market anymore).

"Date of end of placement on the market" may not be known when creating the model record or when placing the model on the market. This date is not mandatory for placing a product on the market and can be added at any time. If entered, the system will notify the supplier 1 month before this date arrives so the necessary action can be taken.

If a model is withdrawn or recalled from the market due to failing a compliance check by a MSA, the "Date of end of placement on the market" should be used to mark this fact (e.g. the MSA may order the Supplier to fix the date in the database) with an additional field indicating non-compliance requiring "end of placing on the market".

In system-to-system, an acknowledgement of a model registration is sent to the supplier to confirm correct transaction termination and registration in EPREL. Formal notification is sent

only for "crucial steps" like identifier generation or scheduling the placement on the market. Record updates before placing on the market do not generate notifications and are not logged.

EPREL changes the status of a model according to the triggers explained above. The following diagram explains the changes in status:

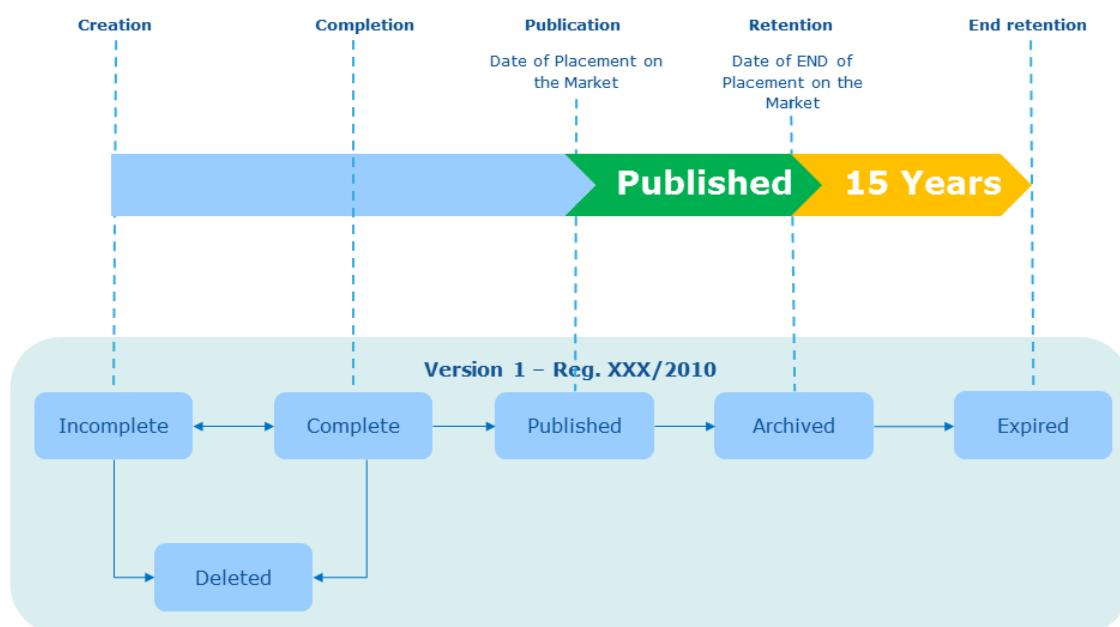


Figure 5 Model status diagram

- **Incomplete:** when a new model is created with minimum (product group, regulation number, trademark, model identifier) or not all the data it will have this status.
- **Complete:** when all the data necessary for publication has been filled, the model will become complete. If user removes any of the mandatory data, the model will become incomplete again.
- **Deleted:** if model is incomplete or complete, but not published, it could be removed at any moment, this could be due to erroneous registration or any other reason that results in the model not being placed on the market anymore.
- **Published:** From the moment a model is complete, once the date of placement on the market arrives, the model is published and its public data is copied to the Public database becoming visible to citizens, and visible to MSA and EC in the Compliance site.
- **Archived:** at date of end of placement on the market, the model does not appear in a normal search in the Public site and retention period starts.
- **Expired:** 15 years after date of end of placement on the market the retention period expires and the supplier is allowed to remove the compliance part of the data from the database, while the public part remains in the database.

"Regulation Recital:

(32) ...When any changes with relevance for the label and the product information sheet are made to a product already on the market, the product should be considered to be a new model and the supplier should register it in the product database..."

Notifications/confirmations for changes before the "date of placing on the market" is sent only to the user who created the model and only for system-to-system interactions.

Any modification after placement on the market may trigger a notification to a higher level account and is logged, together with a non-mandatory field to justify/comment the change (e.g. from a pull-down menu with various options such as "Error data provided", "Errors in description", etc. and a "Other" option to be filled with free text.

Any change to a product already on the market with relevance to one or more of the parameters in the Product Information Sheet or Label data⁷, once the model is already on the market, will trigger an error message, requiring a completely new model to be created.

Changes are allowed for any other modification, such as error correction, adding the date of end of placing on the market, etc. The system asks the user to confirm the change.

EPREL does not store the changes individually; a full new copy of the model is created in the form of a new version of the model. Users are able to compare the versions of the same model to see what has changed. The following diagram explains the changes in status and version:

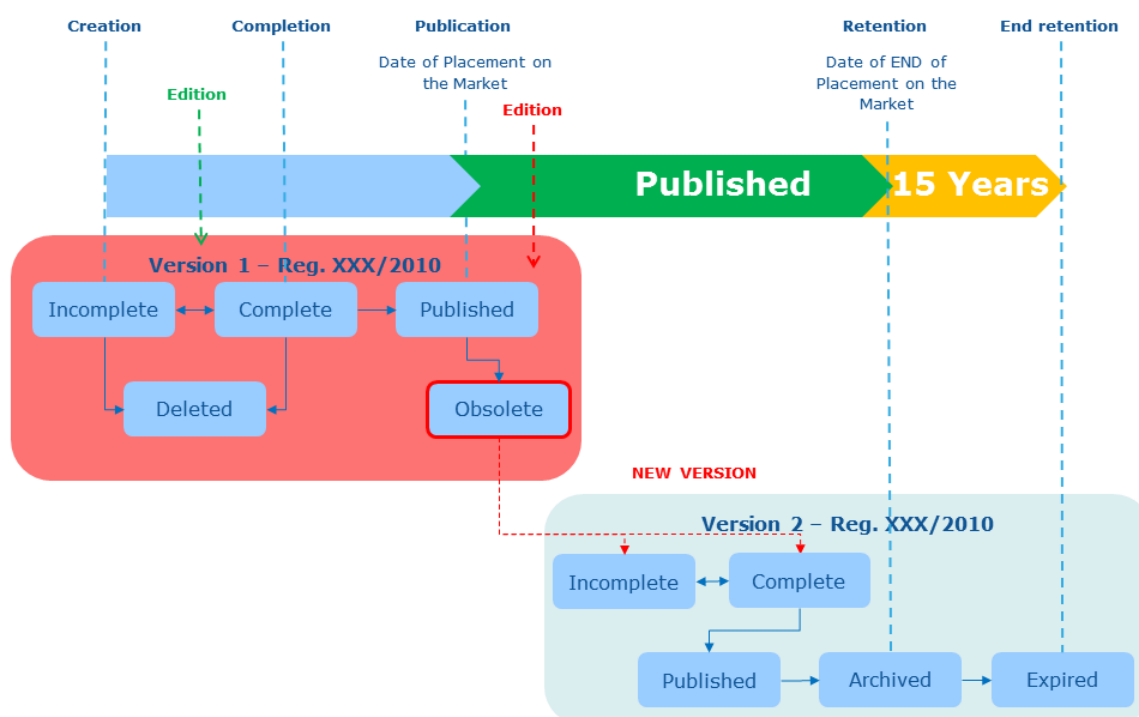


Figure 6 Model versioning

Any editing once the model is "Published" is logged and the log only available to the Supplier Admin user (or the supplier user superior to the user that performed the modification) and to MSAs and ECs. The current version of the model will become "Obsolete" and a new version is created with the new values (and those that remain untouched). This new version is in status "Complete" or "Incomplete" depending on the values edited and has to be published again the next time the process of publication runs (daily process). Obsolete versions will not be visible anymore in the Public site. This new version will follow then the normal lifecycle process.

There is no limit in number of versions, anytime it is edited when Published a new version is created, till the date of end of placement in the market when it will become "Archived" and not editable anymore.

⁷ E.g. change of insulation material in a refrigerator having a consequence on the resistance R and the performance, or a change in the software of firmware of a washing machine with relevance on the performance, etc.

8. EQUIVALENT MODELS

Equivalent models must be listed in the compliance part. The definition of equivalent model in the Regulation Article 2, Definitions:

*"(6) 'equivalent model' means a model which has the **same technical characteristics relevant for the label and the same product information sheet**, but which is placed on the market or put into service by the **same supplier** as another model with a **different model identifier**;"*

Equivalent models have distinct "model identifiers".

The "base model" complete declaration has to be entered first.

Each "Equivalent model" is declared individually in the database by Suppliers as a different model, but sharing the same Product Information Sheet and Label (except for the indication of brand/model identifier), and finally the "base model" has to be linked to its "equivalent models". Equivalent models "may" share (part of) the Technical Documentation. If equivalent models share the technical documentation with the base model, the system impedes the erasing of the Technical Documentation 15 years after the end of placing on the market of the base model, until all equivalent models have reached the date of placing on the market plus 15 years (or what stated in the implementing act, if different)

The list of equivalent models is only visible from the compliance interface and not directly to the public.

Links between equivalent models are bidirectional, i.e. when viewing the "base model", the list of its "equivalent models" is shown and when viewing an "equivalent model" the "base model" is listed as its equivalent.

The system will propose to create links with equivalent models already declared in EPREL and will not accept non-registered equivalent model identifiers as free text.

Changes in the Product Information Sheet or Label data of any of the equivalent models will affect the others, and a warning is shown to let the user know that changes will affect other models. If the user wants this model not to be equivalent anymore he can remove it from the list and the link is broken.

Adding or removing equivalent models from the list when a model is already placed on the market will not be logged as a change and will not trigger the creation of a new version of the model.

9. RESCALING

The rescaling of a model's energy efficiency class results from a full review of the product group's Regulation. This may result in different parameters/fields, different formulas and testing methods and even a different scope⁸.

Which Label/Product Information Sheet/compliance information to display will depend on the date the new label will start to apply for the new Regulation.

In case of rescaling, a product model will have to be re-registered as a new model under a new "Regulation" with a new "Registration Number" but with the same "Model Identifier". Entering a registration for the same model is normally impeded by a control against duplication (the combination of "Product Group + Regulation number + Trademark + Model identifier" would otherwise prevent this). The reuse of a supplier "Model Identifier" is thus allowed for registration of the same product model because of the label rescaling. The "Registration Number", once used in a QR code of the Energy Label (if Regulation requires it), will univocally refer to the relevant model declaration, the original or the rescaled.

For interactive model data entry, an automatic clone creation can be implemented to ease the task when rescaling a model; this wizard can guide the user in selecting the product group new Regulation and creating a link between the same model under the current and the reviewed Regulation. All known data is cloned and Supplier Users have to fill the new fields or modify the existing ones as necessary. Otherwise, the user can completely create the new model himself and then link it manually to the original model.

For system-to-system transactions, a specific data import is available, where for any "rescale" registration, the existent EPREL registration number has to be indicated (to allow the link creation).

The link between the new rescaled model and its ancestor is useful in compliance and public site (e.g. in case a dealer needs to produce both labels), allowing the system to temporarily show the oldest model on screen but signal to the user (included a retailer needing to print a missing rescaled label) that the same model is now labelled differently (only from the date when the new label starts to apply and for a maximum of 9 months).

The field of "End of placement on the market", if void, for "Rescaled" models is automatically set at the date of entry into force of the Reviewed Regulation plus 9 months (unless the field has been filled by the supplier, e.g. with a shorter deadline).

For each product group, the system will have the information to correctly show the right label, Product Information Sheet and, in the compliance part, the Technical Documentation, depending on the date of the query. As models are linked between them, it is possible to access at any moment the one not shown (but in the Public Site only after the date of application of the new label). A filter option could be added to allow showing all models rescaled and not rescaled in a search.

When a Supplier rescales a model, the original model (current label) and the rescaled model (new label) are linked. Retailers will have the possibility of printing both the old and new label. Even if both are already in the market (which also means they are in the Public Site) only the original model is shown in searches before "Rescaling Date", but anyone with access to the compliance site (Suppliers, MSA, EC) can always access the rescaled one to print the rescaled label if necessary as they are linked (e.g. in the 4 months period before date set for rescaled label). After "Rescaling Date" only the rescaled model is shown on searches, but anyone can access the original one in the Public and Compliance Sites (e.g. to print the old label, to compare the classes, etc.).

⁸ For example, the review of the TV Regulation 1062/2010 resulted in a scope extension, i.e. to (computer) monitors. Similarly, washing machines (1061/2010) and washer/dryers (Directive 96/60) will be merged

The following diagram explains the rescaling in EPREL:

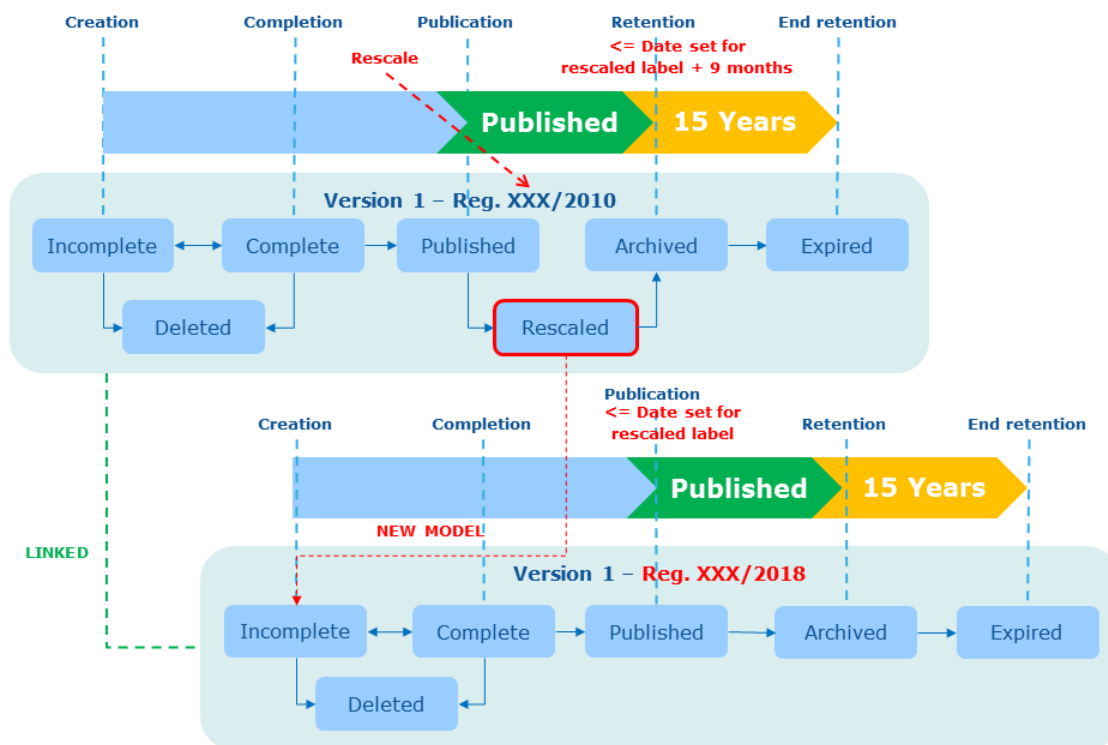


Figure 7 Model rescaling

As explained above, when rescaling a model, a full new model is created but for the new product group and new Regulation. The model is in status Incomplete because it could happen that new fields exist and are empty and user has to complete it. A link is created between both models. Date of end of placement in the market of the old model has to be set (if empty or bigger than) to date set for rescaled label plus 9 months; date of placement on the market of new model has to be set to date set for rescaled label or before. Old model will enter in status Rescaled but it will continue its lifecycle as usual. Status Rescaled will avoid editions and is used by the system to show an alert to warn that a new model exist for the new Regulation.

10. LABELS

"Annex I

1. Information to be entered in the public part of the database by the supplier:

(d) the energy efficiency class(es) and other parameters of the label;

(e) the parameters of the product information sheet in electronic format.

4. Functional criteria for the public part of the product database:

(b) it shall generate a single viewable, downloadable and printable file of the energy label of each model, as well as the linguistic versions of the complete product information sheet, in all official languages of the Union;"

Parameters needed to generate the label (E.g. Energy efficiency classes) must be entered in the database as well as the Product Information Sheet. The system is able to generate labels based on these parameters.

"Annex I

1. Information to be entered in the public part of the database by the supplier:

(c) the label in electronic format;"

Suppliers are given the option of permanently record the label automatically generated from the structured data in previous section or to upload a label independently created. The system will impose limitations on the file format (e.g. PNG, PDF); formats to be decided, as this upload is an obligation the model will only be completed if a file is generated or uploaded.

For washer-dryers under Directive 96/60, the label is not generated by the EPREL system and upload of the label is the only option available.

Some Delegated Regulations allow the EU Ecolabel to be indicated on the Energy Label e.g. for Household Dishwashers [8]:

"Annex I

1. LABEL

(2) The design of the label shall be in accordance with point 2. By way of derogation, where a model has been granted an 'EU Ecolabel' under Regulation (EC) No 66/2010 of the European Parliament and of the Council (1), a copy of the EU Ecolabel may be added."

If a supplier has been granted an EU Ecolabel he will have to enter the reference number and upload a picture of the energy label with the EU Ecolabel logo included.

10.1. Multiple labels

For product groups with more than one label type (i.e. horizontal, vertical, colour, black and white, etc.), the Supplier is able to choose which one to generate.

For different versions of the same label covering models placed on the market from one date to another, the system will generate the label depending on date of placement in the market of the model. See next example for Domestic Ovens and Range Hoods [10]:

| Label | Placement on the market | |
|-------|-------------------------|---------|
| | Date From | Date To |

| Label | Placement on the market | |
|--|--|------------|
| | Date From | Date To |
| 1. LABEL FOR DOMESTIC OVENS | | |
| 1.1. Domestic electric ovens | Before (see COMMISSION DIRECTIVE 2002/40/EC) | 31/12/2014 |
| | 01/01/2015 | Onwards |
| 1.2. Domestic gas ovens | Before (see COMMISSION DIRECTIVE 2002/40/EC) | 31/12/2014 |
| | 01/01/2015 | Onwards |
| 2. LABEL FOR DOMESTIC RANGE HOODS | | |
| 2.1.1. Domestic range hoods in energy efficiency classes A to G (label 1) | 01/01/2015 | 31/12/2015 |
| 2.1.2. Domestic range hoods in energy efficiency classes A+ to F (label 2) | 01/01/2016 (or 01/01/2015 if appropriate) | 31/12/2017 |
| 2.1.3. Domestic range hoods in energy efficiency classes A++ to E (label 3) | 01/01/2018 (or 01/01/2016 if appropriate) | 31/12/2019 |
| 2.1.4. Domestic range hoods in energy efficiency classes A+++ to D (label 4) | 01/01/2020 (or 01/01/2016 if appropriate) | Onwards |

If a model of range hood is placed on the market on 1st June 2015, the system generates the label 1 (2.1.1 from the table above).

If there are multiple labels to choose for the same date (like 2.1.2, 2.1.3 and 2.1.4 from the table above), i.e. on 1st June 2018, supplier is able to choose which one to generate, label 3 (2.1.3 from the table above) or label 2 (2.1.2 from the table above).

Labels from old regulations (like 1.1 and 1.2 from the table above from before 31/12/2014) will not be supported by the system; supplier will have to upload their own label.

Labels from current regulation older than 2015 will not be supported by the system; supplier will have to upload their own label.

There are labels that depend on values introduced in the Product Information Sheet by the supplier (apart from date of placement in the market), see next example for Air Conditioners [9]:

| Label | Placement on the market | | Flow Type | Duct Type |
|--|-------------------------|------------|--------------|-----------|
| | Date From | Date To | | |
| 1,2,3. LABEL OF AIR CONDITIONERS, EXCEPT SINGLE DUCT AND DOUBLE DUCT AIR CONDITIONERS | | | | |
| 1.1. Reversible air conditioners classified in energy efficiency classes A to G | 01/01/2013 | 31/12/2014 | Reversible | None |
| 1.2. Reversible air conditioners classified in energy efficiency classes A+ to F | 01/01/2015 | 31/12/2016 | Reversible | None |
| 1.3. Reversible air conditioners classified in energy efficiency classes A++ to E | 01/01/2017 | 31/12/2018 | Reversible | None |
| 1.4. Reversible air conditioners classified in energy efficiency classes A+++ to D | 01/01/2019 | Onwards | Reversible | None |
| 2.1. Cooling-only air conditioners classified in energy efficiency classes A to G | 01/01/2013 | 31/12/2014 | Cooling-only | None |

| Label | Placement on the market | | Flow Type | Duct Type |
|--|-------------------------|------------|--------------|-------------|
| | Date From | Date To | | |
| 2.2. Cooling-only air conditioners classified in energy efficiency classes A+ to F | 01/01/2015 | 31/12/2016 | Cooling-only | None |
| 2.3. Cooling-only air conditioners classified in energy efficiency classes A++ to E | 01/01/2017 | 31/12/2018 | Cooling-only | None |
| 2.4. Cooling-only air conditioners classified in energy efficiency classes A+++ to D | 01/01/2019 | Onwards | Cooling-only | None |
| 3.1. Heating-only air conditioners classified in energy efficiency classes A to G | 01/01/2013 | 31/12/2014 | Heating-only | None |
| 3.2. Heating-only air conditioners classified in energy efficiency classes A+ to F | 01/01/2015 | 31/12/2016 | Heating-only | None |
| 3.3. Heating-only air conditioners classified in energy efficiency classes A++ to E | 01/01/2017 | 31/12/2018 | Heating-only | None |
| 3.4. Heating-only air conditioners classified in energy efficiency classes A+++ to D | 01/01/2019 | Onwards | Heating-only | None |
| 4. LABEL OF DOUBLE DUCT AIR CONDITIONERS | | | | |
| 4.1. Reversible double duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Reversible | Double duct |
| 4.3. Cooling-only double duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Cooling-only | Double duct |
| 4.5. Heating-only double duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Heating-only | Double duct |
| 5. LABEL OF SINGLE DUCT AIR CONDITIONERS | | | | |
| 5.1. Reversible single duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Reversible | Single duct |
| 5.3. Cooling-only single duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Cooling-only | Single duct |
| 5.5. Heating-only single duct air conditioners classified in energy efficiency classes A+++ to D | 01/01/2013 | Onwards | Heating-only | Single duct |

If we have a model of double duct cooling-only air conditioner from 2018, the system will generate the label in point 4.3 of the table above.

10.2. Rescaling

The rule regarding which labels are publicly visible (in the Public Site) is represented in the following diagram and in the Regulation:

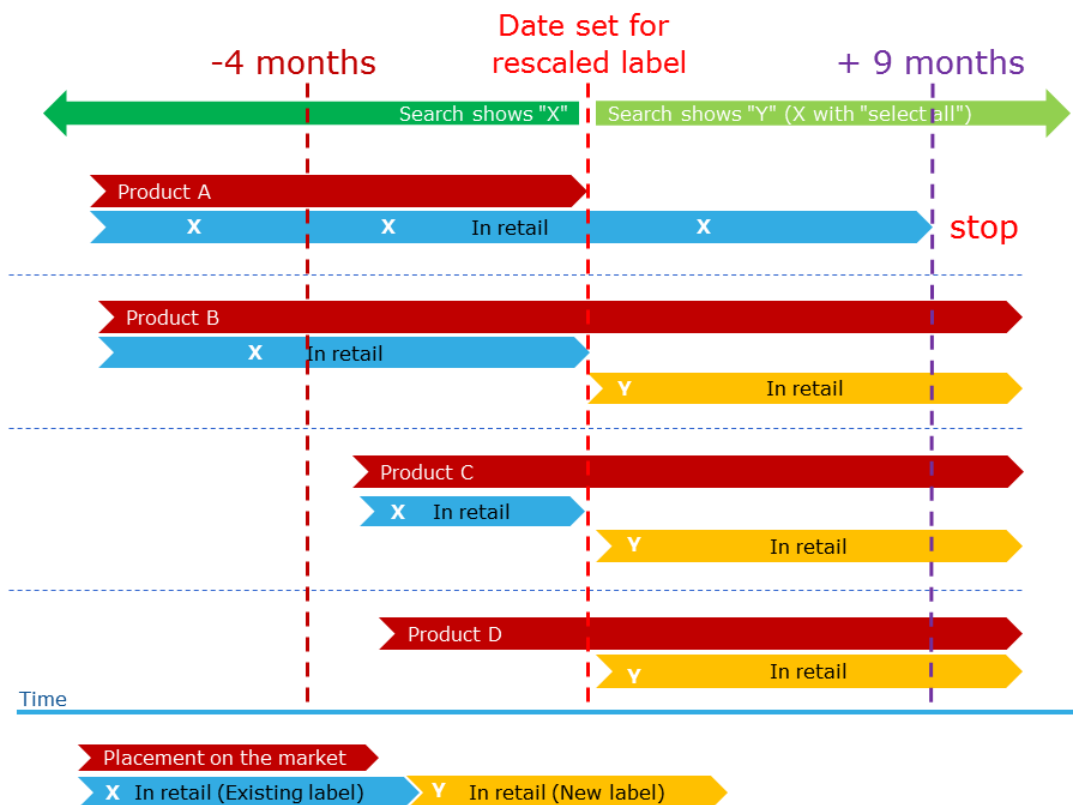


Figure 8 Rescaling (Labels shown in EPREL)

"Article 11

13. Where, pursuant to paragraph 1 or 3, a label is rescaled:

- (a) the supplier shall, when placing a product on the market, provide both the existing and the rescaled labels and the product information sheets to the dealer for a period beginning four months before the date specified in the relevant delegated act for starting the display of the rescaled label.

By way of derogation from the first subparagraph of this point, if the existing and the rescaled label require different testing of the model, the supplier may choose not to supply the existing label with units of models placed on the market or put into service during the four-month period before the date specified in the relevant delegated act for starting the display of the rescaled label if no units belonging to the same model or equivalent models were placed on the market or put into service before the start of the four-month period. In that case, the dealer shall not offer those units for sale before that date. The supplier shall notify the dealer concerned of that consequence as soon as possible, including when it includes such units in its offers to dealers.

- (b) the supplier shall, for products placed on the market or put into service before the four-month period, deliver the rescaled label on request from the dealer in accordance with Article 3(2) as from the start of that period. For such products, the dealer shall obtain a rescaled label in accordance with Article 5(2).

By way of derogation from the first subparagraph of this point:

- (i) a dealer who is unable to obtain a rescaled label in accordance with the first subparagraph of this point for units already in its stock because the supplier has ceased its activities shall be permitted to sell those units exclusively with the non-rescaled label until nine months after the date specified in the relevant delegated act for starting the display of the rescaled label; or
- (ii) if the non-rescaled and the rescaled label require different testing of the model, the supplier is exempt from the obligation to supply a rescaled label for units placed on the

market or put into service before the four month period, if no units belonging to same model or equivalent models are placed on the market or put into service after the start of the four-month period. In that case, the dealer shall be permitted to sell those units exclusively with the non-rescaled label until nine months after the date specified in the relevant delegated act for starting the display of the rescaled label.

- (c) *the dealer shall replace the existing labels on products on display, both in shops and online, with the rescaled labels within 14 working days after the date specified in the relevant delegated act for starting the display of the rescaled label. The dealer shall not display the rescaled labels before that date."*

11. OBLIGATIONS OF SUPPLIERS IN RELATION TO THE PRODUCT DATABASE

"Article 4

Obligations of suppliers in relation to the product database

1. As from 1 January 2019, the supplier shall, before placing on the market a unit of a new model covered by a delegated act, enter in the public and compliance parts of the product database the information for that model, as set out in Annex I.

2. Where units of models covered by a delegated act are placed on the market between 1 August 2017 and 1 January 2019, the supplier shall, by 30 June 2019, enter in the product database the information set out in Annex I in relation to those models.

...

3. The supplier may enter in the product database the information for models, as set out in Annex I, the units of which were exclusively placed on the market before 1 August 2017."

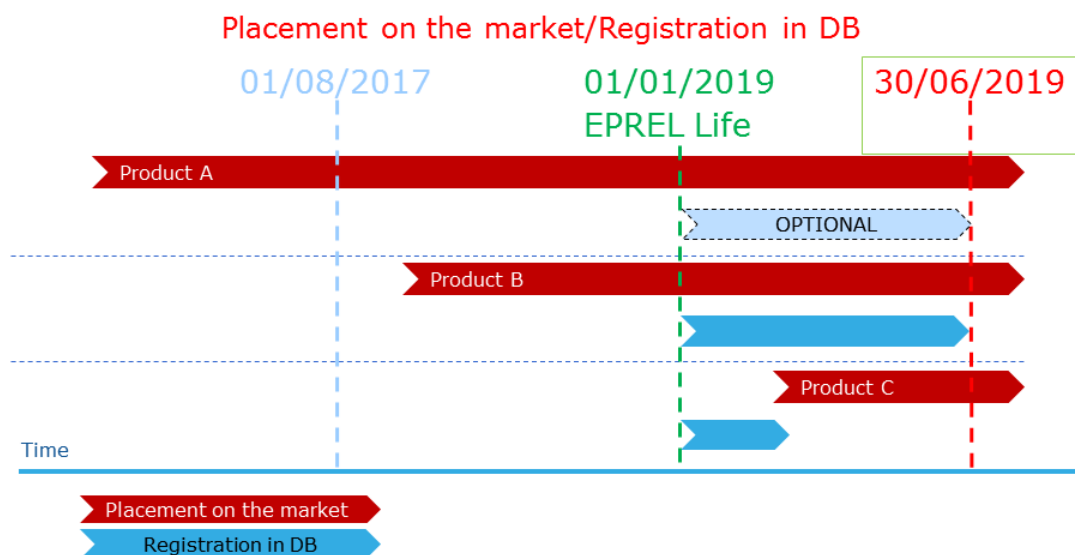


Figure 9 Registration of products in DB

As stated in the Regulation and shown in the figure above; from 1 January 2019 any new model shall be registered in the DB. Until 30 June 2019, all models placed on the market 17 months before the launch of the DB (1 August 2017 to 1 January 2019) shall be registered in the DB. Only models placed on the market before 1 August 2017 may be registered.

12. MODEL REGISTRATION (MOCK-UP)

When creating a new model using the UI of EPREL, user will have to fulfil the following steps:

(MIND: Mock-up is not up to date, some of the things explained are not added to the screens, and they are shown here to give an idea of the final system)

12.1. Supplier

The screenshot shows a web browser window displaying the EPREL Compliance website. The page title is 'Household Dishwasher Edition'. The user is logged in as '(doeje) MOVE.SRD.2.001'. The page shows the 'Supplier' step of the registration process. The 'Supplier' field is selected, and the form displays the following information:

| | | | | |
|----------|------------------------|----------------------|-------------------------------|----------------------|
| Supplier | Applicant details | John Doe Company | Company ABN or Company Number | 654545454-54 |
| | | 221B Baker Street | Contact details | <input type="text"/> |
| | | Westminster city, UK | | |
| | Responsible Department | <input type="text"/> | | |

The form also includes a 'Save and continue' button at the bottom left. The left sidebar contains a navigation menu with the following items: Supplier (checked), Product Identification, Product Life cycle, Product Information, Product Label, Technical documentation, Equivalent models, Attached files, and History.

Figure 10 Mock-up: Supplier

Contact details are the ones from a list of contact points of the Department (if any) or of the top Supplier Organisation selected.

The supplier will have to select one single contact point visible to anyone (for any product model).

12.2. Model Identification

The screenshot shows a web browser window displaying the EPREL Compliance website. The page title is "Household Dishwasher Edition". The header includes the European Commission logo and the text "EPREL Compliance website". The language is set to "English EN". The user is logged in as "(doejo) MOVE.SRD.2.001". The page has a navigation bar with "Product" and "Organization" tabs. The main content area is titled "Product Identification" and contains a form with the following fields:

- Supplier: (checked)
- Product Identification: (checked)
- Supplier Model Identifier: LG 4478UH604V
- Supplier name / trademark: ComboBox
- Create: (button)
- Save and continue: (button)

The left sidebar contains a list of menu items: Supplier, Product Identification, Product Life cycle, Product Information, Product Label, Technical documentation, Equivalent models, Attached files, and History.

Figure 11 Mock-up: Model Identification

Registration Number: The system will generate a unique "Registration Number" per product model registration. The registration number is univocally referring to a specific registration and the QR code that might be displayed in Energy Labels (if Regulation requires it) will point to that univocal record. The registration number will also be needed for updating products models in system-to-system mode.

Model Identifier: Suppliers freely choose the "Model Identifier" of a model. Since this identifier is displayed on both Energy Labels and Product Information Sheets, the model identifier is expected to be unique for the same supplier and the combination "Product Group + Regulation number + Trademark + Model Identifier" has to be unique in the database (for rescaling Regulation number is different, see previous pages). Variants of a model, e.g. differing in the power cable supplied or in colour/finishing, are considered Equivalent Models.

Supplier Name/Trademark: As explained in Suppliers section, trademarks are declared at Supplier Organisation level to avoid inconsistencies. Supplier users are able to choose a trademark from a list of predefined ones or the option to use the Supplier's name.

12.3. Model Lifecycle



Figure 12 Mock-up: Model Lifecycle

On the market from – to: The supplier user will have to set the "Date of placement on the market of the model". The "Date of end of placement on the market" is optional and can be set or modified at any moment, even after data publication (and such a change is logged, as any other change after publication).

12.4. Product Information Sheet

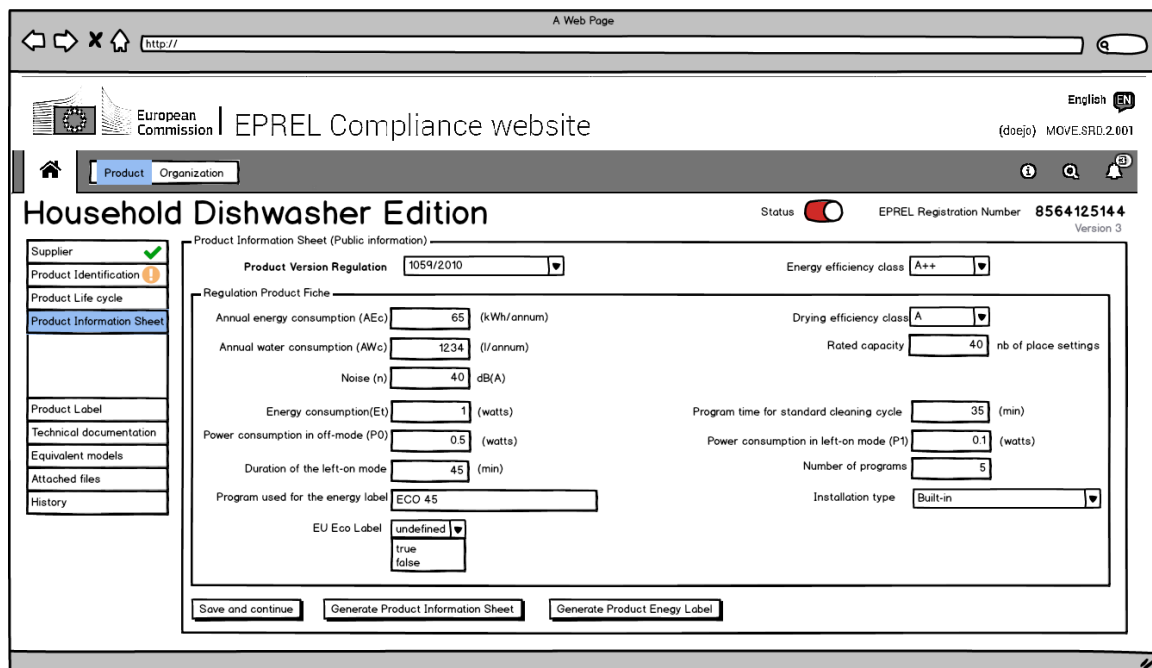


Figure 13 Mock-up: Product Information Sheet

"Article 2

(22) 'product information sheet' means a standard document containing information relating to a product, in printed or electronic form;"

"Annex I

1. Information to be entered in the public part of the database by the supplier:

(e) the parameters of the product information sheet in electronic format."

According to this, parameters of the Product Information Sheet must be provided in electronic format. Our assumption is that we do not expect to receive the Product Information Sheet as an electronic file but as structured data.

"Annex I

4. Functional criteria for the public part of the product database:

(b) it shall generate a single viewable, downloadable and printable file of the energy label of each model, as well as the linguistic versions of the complete product information sheet, in all official languages of the Union;"

Structured data will allow the system to generate all language versions of the Product Information Sheet.

There are buttons to generate the Product Information Sheet and the Label based on the structured data; a dialogue box could ask in which language this information should be produced (by default in the language of the UI, but allowing indicating others).

This screen is specific for each product group and Regulation number. The fields indicated in the Annex of the Delegated Regulation for that product group are shown on screen and they will appear in the generated Product Information Sheet in the same order as in the Annex.

The EC is preparing the list of fields to be shown for each product group and Regulation number and the structure of the XML's for system-to-system [11].

12.5. Product Label

| FileName | Description | Type | Language | Date uploaded | Action |
|----------|-----------------------------|-----------------------------|----------|---------------|---|
| pic-1122 | LG-447 Energy Label picture | Supplier Energy Label image | N/A | 1/1/2017 | VIEW DELETE |
| | | | | | |
| | | | | | |
| | | | | | |

Figure 14 Mock-up: Product Label

"Article 2

(19) 'label' means a graphic diagram, either in printed or electronic form, including a closed scale using only letters from A to G, each letter representing a class and each class corresponding to energy savings, in seven different colours from dark green to red, in order to inform customers about energy efficiency and energy consumption; it includes rescaled labels and labels with fewer classes and colours in accordance with Article 11(10) and (11);"

"Annex I

1. Information to be entered in the public part of the database by the supplier:

(c) the label in electronic format;

4. Functional criteria for the public part of the product database:

(b) it shall generate a single viewable, downloadable and printable file of the energy label of each model, as well as the linguistic versions of the complete product information sheet, in all official languages of the Union;"

As explained in section 10 of this document, the system is able to generate labels based on the parameters of the Product Information Sheets entered in the database in "Product Information Sheet" screen. Suppliers are also given the option of permanently record the label automatically generated from this structured data or to upload a label independently created.

12.6. Technical Documentation

The screenshot shows the EPREL Compliance website interface. The main heading is "Household Dishwasher Edition". The page is divided into several sections:

- Supplier:** A green checkmark indicates the supplier is verified.
- Product Identification:** A yellow warning icon is present.
- Product Life cycle:** A yellow warning icon is present.
- Product Information Sheet:** A yellow warning icon is present.
- Product Label:** A yellow warning icon is present.
- Technical documentation:** The current section, showing a checklist of requirements:
 - (a) A general description of the model, sufficient for it to be unequivocally and easily identified.
 - (b) References to the harmonised standards applied or other measurement standards used.
 - (c) Specific precautions that shall be taken when the model is assembled, installed, maintained or tested.
 - (d) The measured technical parameters of the model. (Warning icon)
 - (e) The calculations performed with the measured parameters. (Warning icon)
 - (f) Testing conditions if not described sufficiently in point (b). (Warning icon)
 - (+) Additional parts of the technical documentation (Optional).
- Attach a new Technical documentation:** A section for uploading new documents, including a "Browse" button (No file selected), a "File description" field, and a "Language" dropdown menu (set to English).
- Table of existing technical documents:**

| FileName | Description | Parts covered | Language | Date uploaded | Action |
|--------------|--------------------------------------|---------------|----------|---------------|---|
| techDoc10_fr | Technical documentation V1 in French | (a)(b) | French | 1/1/2017 | VIEW DELETE |
| techDoc10_en | Technical documentation V1 | (c) | English | 1/1/2017 | VIEW DELETE |
| techDoc11_en | Technical documentation V1.1 | (a)(b) | English | 1/1/2017 | VIEW DELETE |
- Save and Continue:** A button at the bottom of the page.

Figure 15 Mock-up: Technical Documentation

Article 2

"(23) 'Technical documentation' means documentation sufficient to enable market surveillance authorities to assess the accuracy of the label and the product information sheet of a product, including test reports or similar technical evidence;"

The framework Regulation does not specify how Technical Documentation should be stored in the compliance part of EPREL, but typically, the structure of this information is different for each supplier.

The system will store data of the Technical Documentation as files in a limited number of formats (e.g. an Autocad or a LaTeX text file is not accepted as requiring a MSA to use non-commonly available readers), list of file types to be defined. The language of the file to be uploaded is chosen by the Supplier.

The framework Regulation requires suppliers to provide minimum information:

"Article 12

5. The mandatory specific parts of the technical documentation that the supplier shall enter into the database shall cover only:

- (a) a general description of the model, sufficient for it to be unequivocally and easily identified;*
- (b) references to the harmonised standards applied or other measurement standards used;*
- (c) specific precautions that shall be taken when the model is assembled, installed, maintained or tested;*
- (d) the measured technical parameters of the model;*
- (e) the calculations performed with the measured parameters;*
- (f) testing conditions if not described sufficiently in point (b).*

In addition, the supplier may upload additional parts of the technical documentation on a voluntary basis into the database."

As indicated above, Technical Documentation is difficult to structure as each product group is different and suppliers do things differently. For each file uploaded, the user will have to check the checkboxes to say which points of Article 12.5 are covered in that document. MSA will know which information he will find in each attachment and in which language. The "measured technical parameters of the model" is defined in the relevant Delegated Act and if feasible, they could be entered as numerical parameters.

12.7. Equivalent Models

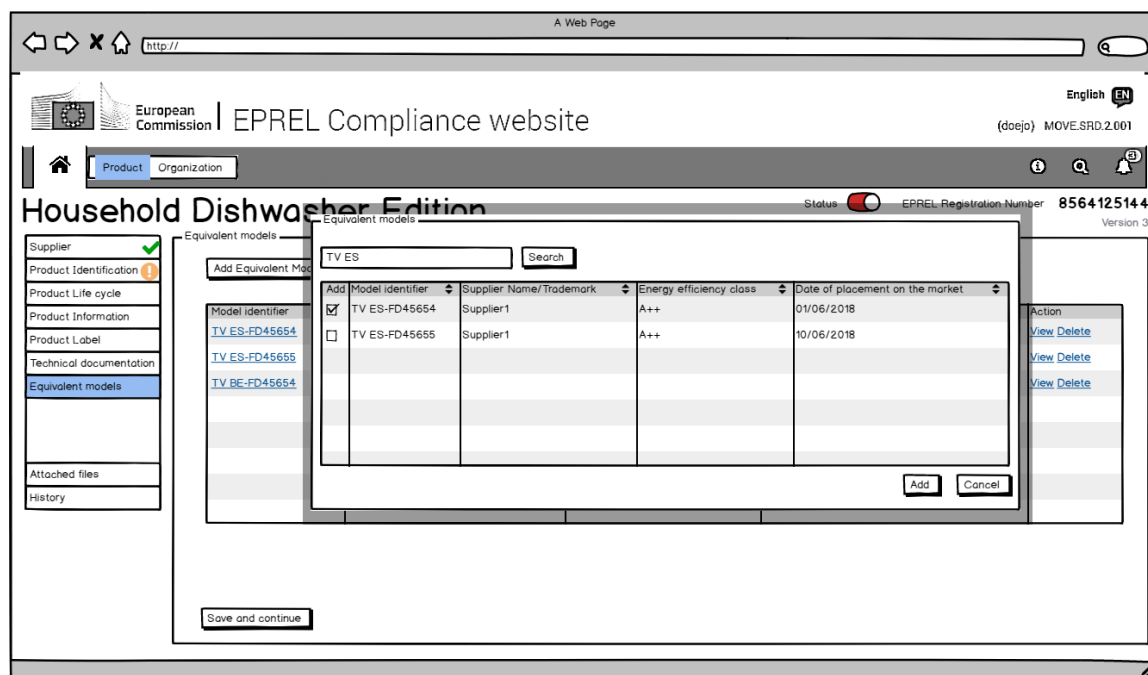


Figure 16 Mock-up: Equivalent Models

"Article 2

(6) 'equivalent model' means a model which has the same technical characteristics relevant for the label and the same product information sheet, but which is placed on the market or put into service by the same supplier as another model with a different model identifier;"

As explained above, equivalent models must be listed in the compliance part.

Each model is declared individually in EPREL by Suppliers as a different model with the same Product Information Sheet and Label and then linked to the other equivalent models.

12.8. History of changes and accesses

The screenshot shows a web browser window displaying the EPREL Compliance website. The page title is "Household Dishwasher Edition". The status is "On" (indicated by a red circle) and the EPREL Registration Number is "8564125144". The page is in English. The main content area is divided into two sections: "Changes" and "Accesses".

Changes

| Version # | Date | User | Reason | Status | Other columns of model... | Action |
|-----------|-----------|-----------|---------------------|-----------|---------------------------|----------------------|
| 1 | 1/9/2014 | giacomogu | | Obsolete | | View |
| 2 | 1/10/2014 | marcobo | Error data provided | Obsolete | | View |
| 3 | 1/10/2014 | marcobo | Error data provided | Published | | View |

Accesses

| Version # | Date | User | Operation | Action |
|-----------|------------|----------|--------------|----------|
| 2 | 25/08/2014 | <MSA ES> | Consultation | Read |
| 3 | 25/10/2014 | <EC> | Consultation | Download |

Figure 17 Mock-up: History

The list of changes and accesses to compliance data are shown in this screen.

12.8.1. History of changes

"Article 12.10

10. The supplier shall have access and editing rights to the information it enters in the product database pursuant to Article 4(1) and (2). A record of changes shall be kept for market surveillance purposes, keeping track of the dates of any editing."

The system will track the history of changes to the data for a specific model in EPREL; this history is composed by history of changes (when a supplier user corrects data of the model) but only after the model has been placed on the market. Changes are tracked by adding new versions of the model. No personal info is shown to MSAs, just the Supplier user profile name.

History of changes is accessible to Suppliers for their own models, and by MSA and EC users for all models.

12.8.2. History of accesses

"Article 12.8(e)

8. The compliance part of the database shall be established in accordance with the following criteria:

(e) traceability of data access for the supplier with regard to its technical documentation."

MSA's and EC users can access compliance data only once the model is placed on the market. All accesses to the compliance documents (download of a document) is logged. Logs will record the authority name (MSA/EC), username of the MSA/EC user who accessed the data and date/time when it was accessed.

The history of accesses to compliance data is accessible by any Supplier user, for its own models only, being able to see the authority name (MSA) who accessed it (different countries have different authorities, each with many user profiles so only the authority name is visible).