



Good Regulatory Principles for Electronic Labelling (e-labelling)

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The following sets forth principles and best practices policymakers should consider when allowing the use of electronic means for the presentation of voluntary and mandatory labelling information to consumers.

These principles and best practices build on two previous sets of FIVS' [“Principles to Enhance Coherence and to Facilitate Trade in Wine”](#) and reflect growing trends in the voluntary or mandatory disclosure of information via electronic means beyond what is included on the physical wine label. For the purposes of this document, “e-labelling”, “digital means” or “digital presentation” refer to the voluntary or mandatory¹ disclosure of information via electronic means such as using a scannable code that creates a bridge from the physical label to the e-label.

Use of technology to provide for the digital presentation of some mandatory information is an emerging area particularly relevant to wine producers. Wine is not a recipe or formula product. In contrast with other food products, the ingredients and related nutritional values in wine can vary from vintage to vintage due to variations in climate and grape growing conditions. In some cases, final ingredients may not be known until just before bottling whereas the physical label is designed and typically printed months in advance of bottling due to the regulatory nature of key information on wine labels and label pre-approvals required in some markets. The use of e-labels for the digital presentation of ingredients and nutrition information permits the flexibility needed while still enabling product accuracy.

However, the use of e-labels should not be restricted only to this specific and narrow use. Consumers want more product information than can reasonably fit on physical labels and a single QR code can serve multiple purposes. In some jurisdictions, QR codes have already replaced barcodes at the retail level² and technology exists for the use of a single QR code to transmit different information depending on the type of scanner used.

Here are just a few examples of the type of information currently accessible via a single QR code as well as potential future uses.

- Consumers - voluntary product details, sustainability information, product recalls, and more.
- Retailers - point of sale pricing, stocking, and inventory information.
- Government Officials - mandatory regulatory information, recycling information, and export documentation.

¹ For the purposes of this document, mandatory refers to disclosures that regulations require.

² [What is GS1 Sunrise 2027? | GS1 US.](#)



QR codes are the most common digital means being used at this time to connect to an e-label. While future advancements in technology may lead to replacements for QR codes, these principles will still apply to the use of such replacements.

1. Use of e-labelling to provide information to wine consumers: Governments should permit the use of e-labelling to provide information to consumers.

Recent work in both Codex Alimentarius³ and the International Organisation of Vine and Wine (OIV)⁴ illustrates the growing trend of the use of e-labels to provide some mandatory information for food products, including wine. The following are just a few of the reasons that support their use:

- Rapidly increasing global penetration of smartphones;
- Widespread and growing consumer use of QR codes to access information;
- Consumer demand for more product transparency;
- Reduced waste consistent with wine industry sustainability goals as the use of e-labels reduces label re-prints;
- Enhanced accessibility via new audio technologies for the visually impaired; and
- Translation of e-label content into the language of the consumer - in real time - which is not possible using physical labels.

2. Presentation of certain mandatory information using digital means: Governments should allow the presentation of certain mandatory information via e-labels.

The European Union (EU) recently took this approach for ingredient and nutrition labelling of wine and aromatized wine products⁵ as did Italy⁶ and Spain⁷ for recycling information⁸ and other countries are assessing the introduction of their use in national legislation.

³[Guidelines for the use of Technology to Provide Food Information in Food Labeling](#) as agreed to at the 47th Session of the Codex Alimentarius Commission (para 132(iii)).

⁴The recently updated “[OIV International Standard for Labelling of Wines-e-label, nutrient declaration, information about ingredients](#)” (amended by resolution ECO DROCON 20-676) incorporates many of the FIVS principles. Note especially the ability to use a language-free modality: “The direct link to the e-label indicated on the label may be clearly identified through language free presentation modalities, a pictogram or a symbol easily visible and clear to understand by consumers.”

⁵ [EU Regulation 1308/2018, article 119\(4\)](#).

⁶ [Italian Ministerial Decree n. 360 from 28 September 2022](#) and [Implementation Guidelines](#).

⁷ [Spanish Royal Decree \(RD\) 1055/2022](#) and [Spanish Ministry for Environment Interpretative Note](#).



The range of possible uses of QR codes to present some information digitally is expected to expand over time. Governments should remain flexible and open to allowing digital presentation of certain mandatory information as appropriate.

The same general principles of food labelling regulation such as legibility, truthfulness, and accuracy should apply whether mandatory information is presented on a physical label or via digital means.

These principles recognize that some mandatory information will always be on the physical label, such as for allergens. A digital label does not replace, but rather supplements, a physical label.

3. Use of QR codes to communicate other, voluntary information: Governments should permit additional, voluntary information to be presented via e-labels.

The same QR code that links to mandatory information should also be permitted to link to voluntary information, provided that it is presented separately and distinctly from the mandatory information.

It may be appropriate to allow producers to include a link on the e-label at the end of the mandatory information inviting consumers to “click here” should they desire access to additional voluntary information.

4. The number of QR codes on a given label should be minimized: Governments should permit a single QR code on a wine label to serve more than one purpose.

A single QR code has nearly unlimited uses.

In some jurisdictions, a single QR code is already being used for product pricing at the point of sale, to convey mandatory EU nutrition and ingredient requirements for wine, and to communicate EU Member State specific recycling requirements.

In the United States, many food and beverage companies use a single QR code on a voluntary basis to provide information about ingredients, nutrition, and how to properly recycle the product based on the consumer’s location⁹.

⁹ [SmartLabel](#): the leading platform for savvy shoppers to find more information than can fit on a package about thousands of food and beverage, personal care, household, pet care, dietary supplements, and OTC products.



Allowing a single QR code for voluntary and mandatory purposes will maximize its benefit and will avoid confusion about which QR code to scan for additional information.

5. Acceptance of standalone QR codes to convey information: Governments should refrain from requiring additional text on the physical label to identify the information accessible via the QR code.

QR Codes provide for a language-free system of conveying important information and consumers are comfortable scanning the codes to access that information.

Using terms next to the QR code to identify the information on the e-label should be avoided because:

- As the use of QR codes expands, the number of possible terms and languages needed to correctly identify the content will proliferate.
- Text, or other design elements, too close or within the QR code can corrupt the code risking its readability¹⁰

If it is deemed essential to identify the mandatory information accessible via the QR code, a globally recognized, language-free symbol or pictogram should be utilized. However, this must not interfere with the ability to successfully scan the code.

6. Expiration of e-labels: When mandatory information is provided via an e-label, governments should not require that the information remain accessible longer than the wine is ordinarily intended for consumption.

Codex Alimentarius recently agreed to “Guidelines on the Use of Technology to Provide Food Information in Food Labelling”¹¹ that address the timeframe for which producers are expected to ensure that information that is accessed via QR codes remains available. The Guidelines apply to pre-packaged foods, including wine.

Governments are requested to refer to the Guidelines rather than implementing new or divergent requirements. However, consideration should be given to adapting them in the

¹⁰ [ISO/IEC 18004:2024\(en\), Information technology — Automatic identification and data capture techniques — QR code bar code symbology specification](#)- See 5.3.8 “Quiet Zone” that designates the clear space needed surrounding the QR code to separate it from nearby design elements or markings to ensure the QR codes readability.

¹¹ [Guidelines for the use of Technology to Provide Food Information in Food Labeling](#) as agreed to at the 47th Session of the Codex Alimentarius Commission (para 132(iii)).



context of long shelf-life products such as wine to focus on the time period for which the product is ordinarily intended for consumption.

The final Guidelines at section 7.5 state, *“Where mandatory food information is solely provided using technology, the food information shall be available for at least the period, established under intended conditions of distribution, storage, retail and use, that the food would remain safe and suitable for sale, consumption or use. For pre-packaged food that is labelled with a use-by date or expiration date, this means for at least the period up to and including this date.”*

7. E-labels should comply with applicable data privacy laws:

In formulating regulations for the e-labelling of food products, governments should take fully into consideration any existing and applicable data privacy laws.

Many countries, including those that allow the use of e-labels, have data privacy laws in place to protect consumer data or prohibit its collection without affirmative consent. Thus, governments should remain mindful of these laws to avoid duplication, contradiction, or overly restrictive rules specific to e-labelling.

8. Harmonized approach: Governments should work towards a harmonized international understanding concerning the types of information that must appear on the physical label of a wine bottle and that which may appear on an e-label.

Wine is traded all around the world and e-labelling technology is already being used in multiple markets.

In order to facilitate international trade, governments are requested to remain flexible in their approach and to consider the best practices already in place in key wine producing markets before developing regulations in this area.