



Technical support for RES policy development and implementation.

Establishing technical requirements & facilitating the standardisation process for guarantees of origin on the basis of Dir (EU) 2018/2001

Task 2

Developing Technical requirements for the extended coverage of GO

Part 1: Explanatory notes to the proposed formulations for a revised EN16325 standard on guarantees of origin:

- Arguments for the text proposals for a revised EN16325
- Identification of topics for a separate agreement between issuing bodies



Authors:

Remco Van Stein Callenfels
Katrien Verwimp
Phil Moody
Adam White
Markus Klimscheffskij



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1. Introduction

1.1. Framework

The FaStGO project has the objective of providing expert advice to the European Commission DG ENER, based on the terms of Reference N° ENER/C1/2019-517: “Technical support for RES policy development & implementation. Establishing technical requirements and facilitating the standardisation process for guarantees of origin on basis of Dir (EU) 2018/2001.”

Task 2 of FaStGO has the aim of 'Developing Technical requirements for the extended coverage of GO'. It builds on the results of Task 1, which mapped the currently existing standardisation frameworks as well as identified major challenges in the current GO system management.

Task 2.1 is aimed at providing documentation structures for a revised EN16325. Under Tasks 2.2 and 2.3, text proposals have been drafted for EN16325, taking into account the requirements of Directive 2018/2001, and the current main challenges for the GO system, respectively.

The report for task 2 will address these three subtasks as one integrated task, however in three parts. Part 2 contains the FaStGO text proposal for a revised EN16325, while this part 1 provides the arguments behind the main directions proposed. Part 3 will add the takeaways from a broad stakeholder consultation on part 1 and 2.

1.2. What and why

This document accompanies the FaStGO draft text for revision of EN16325 and provides arguments in support of the proposed updates. These arguments are based on the topics that are identified in the FaStGO reports on Tasks 1.1, 1.2 and 1.3.

Besides acknowledging the topics that should be included in the formal European standard, this document identifies which topics would benefit from being elaborated in a separate agreement between issuing bodies which would provide them with more flexibility than a formal standard in a dynamic and changing operational environment.

This document shall be read as an explanatory 'memorandum' to the text proposals drafted in the document called Task 2, Part 2 “Draft formulations for a revised EN16325 in order to align EN16325 to the revised Renewable Energy Directive 2018/2001 and to overcome the challenges that currently exist in the management of Guarantee of Origin systems”.

1.3. Glossary

GO	A guarantee of origin in the meaning of article 19 of REDII
REDII	The Renewable Energy Directive 2018/2001/EU
RES	Renewable energy sources



2. General explanation on the text proposals for a revised EN16325

The FaStGO text proposal for a revised EN16325 contains many upgrades for a reliable and efficient pan-European system for guarantees of origin. Many proposals follow from the practical experiences in the management of GO systems by the Association of Issuing Bodies.

The text below explains the reasoning behind the main directions taken for drafting the text proposals for a revised EN16325, for some of the main challenges as identified in the report of FaStGO task 1.3.

2.1. Structure of the document

The document is structured in a way that it addresses the majority of the requirements for the management of a GO system in a section on generic handling of guarantees of origin for all energy carriers. The arguments for a generic GO system for all energy carriers are several:

- Energy carrier conversion requires the technicalities of the GO systems for various energy carriers to be aligned on each other.
- Efficiency in operational handling: the same procedures can be used for the management of GOs for different energy carriers.

Additional energy carrier specific needs are addressed in a separate section per energy carrier.

2.2. Level of detail

The level of detail addressed in the text proposal for a revised EN16325 aims to balance the following concerns against each other:

- Facilitate sufficient level of quality to enable reliable transfer of GOs between issuing bodies, referring to the criteria for import to relate to the accuracy, reliability, and veracity of the GOs,
- Reduce administrative overkill, hence allocate responsibilities, and make explicit the topics and quality level required,
- Standardising those aspects that facilitate international transfer and energy carrier conversion.

More detail is needed for efficient and effective operation of GO systems, but this can be left to a separate agreement between issuing bodies.

2.3. Validity – Expiry

The concepts of expiry and validity in art. 19.3 of Directive 2018/2001 are not clearly set out¹.

¹ By contrast, art. 15.3 of [Dir \(EU\) 2009/28](#) only mentions an expiry deadline of twelve months after the end of the production period. For more details, see art. 19.3 on pages 27 and 28 of [FaStGO document 1.2](#).



It is unclear for what purposes a GO is considered to be valid; nor is it clear for what purposes a GO is ineligible from the moment of its expiry. This is confusing, as the word “expiry” is defined in the dictionary as the end of the period for which something is valid.

Nor is it clear what can be done with a GO in the period between the end of its validity and its expiry, where the two do not occur at the same moment.

- Given this lack of clarity, there is a risk that each Member States will implement this rule in a different way. This could create a market barrier, as market parties may become confused as to the differences between national expiry rules. This confusion could lead to material losses, as market participants may initiate transactions to Domains where their GOs will already have expired due to different timing constraints.

Currently, some Member States refuse to import GOs that would already have expired under their national GO schemes, whereas others do accept such GOs while marking them immediately as having expired.

Either approach is undesirable, as:

- a. Where GOs are expired upon import, they lose all of the value that they could have had for the recipient.
 - b. It would be a cleaner solution to refuse the import of GOs, so that the GOs become available again in the exporting registry, but there are still risks and costs involved. Handling large numbers of refusals of transactions involving GOs near to the end of their validity represents a practical risk of losing the value of such GOs during transfer, leading to increased administrative overheads for the market and issuing bodies, and/or extensive helpdesk efforts for the importing and exporting registry operators.
- The timing of the Residual Mix calculation could be jeopardised depending on the definition of the period during which cancellation is allowed and expiry can be determined. It is not simply the standalone impact of the actions of a country, it is the impact upon other countries: a standard approach is needed in order to incorporate data from all countries to calculate an accurate residual mix. While double-counting must be avoided in the residual mix, it is not recommended to postpone the residual mix calculation timing by six months. That would cause suppliers’ origin disclosures to relate to a period too far in the past: when a supplier’s origin disclosure on their invoice relates to a period almost two years ago, some customers may well question its relevance and even its credibility.
 - Lack of clarity on the difference between the end of the period of validity and expiry, in itself creates market fragmentation for GOs. Due to their rich information content, the market for GOs is already fragmented. A pan-European GO system greatly benefits from harmonising as many of the rules as is feasible. For example, the RE-DISS (1 and 2) projects - funded by Intelligent Energy Europe – created, in the course of 5 years, a set of 44 recommendations which aim to harmonise a reliable operational basis for GOs². More than ten of these recommendations relate to the timelines of

² www.reliabledisclosure.org



GO transactions and disclosure, which evidences the need for harmonisation.

As is apparent from the FaStGO report for Task 1.3 (topic 2), there is broad support from stakeholders for maintaining the current practice of twelve months of validity for GOs, and for their expiry directly thereafter. This would mean that no cancellation or transfer can take place more than twelve months after the end of the production period. This has proven to work effectively for the past two decades. It provides a sensible duration for the period during which GOs are tradeable, enhances market liquidity, and means that use of GOs is close enough to the production period that it maintains credibility for end consumers of the energy.

While tradability time is the most important aspect of GOs which needs to be harmonised, in some Member States the cancellation timelines are slightly different, usually for administrative reasons. The following proposal for the minimal aspects to be standardised meets both of the concerns listed above.

- 1) To meet the first concern (avoid the transfer of GOs which would have expired in the importing registry), it is essential to harmonise the period over which GOs can be transferred. Since there is broad support for keeping the 12-month period, it is proposed that the period during which GOs can be transferred is 12 months.
- 2) To overcome the second concern mentioned above (feed accurate data to the pan-European residual mix calculation), a fixed ultimate deadline for GO cancellation should be harmonised. This is best done in EN16325 as it is important that this applies to all countries. To align with the broadly-implemented Best Practice Recommendations of the RE-DISS project³, it is proposed that the ultimate deadline for GO cancellation be the 31st of March in the year following the year of consumption to which the GO cancellation applies. For those countries who still apply other GO cancellation deadlines, it might be appropriate to provide a period during which MS can align their systems to this deadline.

For now, this last aspect is considered in relation with electricity, while it is advised to consider it for the other energy carriers as well, in order to prepare for a solid framework that avoids double disclosure.

A third aspect may be standardised since it follows from a reading of a part of REDII about which confusion exists:

- 3) While “expiry” relates to the period during which cancellation actions can take place with a GO, “validity” may be understood as the consumption period to which a cancellation relates. This reasoning follows from REDII art. 19.3 which says: “For the purposes of paragraph 1, guarantees of origin shall be valid for 12 months after the production...” while this Paragraph 19.1 which mentions “For the purposes of demonstrating to final

³ <http://www.reliable-disclosure.org/>

The Best Practice Recommendations for reliable disclosure are available [here](#). Page 2 and 3 contain recommendations with regards to the lifetime of the GO and the consumption period to which a cancellation can refer.



customers the share of renewable energy sources in the energy supplied
...”

- ⇒ From this, it can be derived that the 12-month validity refers to the consumption period for which a GO can be cancelled. In essence this means that a GO may be used for disclosure of energy consumption which takes place a) during the year of production of the associated energy or b) during the following year.

2.4. Cancellation of GOs by other parties than suppliers

2.4.1 Extend the definition of Disclosure beyond suppliers

According to the definition of a Guarantee of Origin, the purpose of a GO is the Disclosure of the source of supplied energy. In line with the challenge set out in the report for Task 1.3 section 14, and referring to article 19.1 of REDII, the definition of Disclosure is now extended to acknowledge that the origin of supplied energy can be claimed, and correspondingly GOs can be cancelled by parties other than energy suppliers.

Enabling self-claiming of energy attributes by energy consumers is essential for the GO market, as it represents a significant proportion of the market demand for GOs. Thus, in order to support a vigorous and growing market, the GO system can best to support this in a reliable way by taking such operations into account in the rules of the system.

Therefore, the definition of Disclosure was amended, as were the provisions on the cancellation statement relating to the beneficiary of the cancellation.

2.4.2 Geographical boundaries for import, export, and cancellation

Multinational companies with a global presence sometimes cancel European GOs for consumption that takes place outside Europe, causing leakage of attributes from the European Attribute Mix.

In line with article 19.11 of REDII, GOs produced in a third country may only be recognised in an EU Member State if the EU has made an agreement with this Third Country on the mutual recognition of GOs, and only where there is a direct import of energy.

Limitations for import and for cancellation are proposed to align with the geographical limitations for recognition in article 19.11 of REDII.

In order to avoid a leakage of attributes that jeopardises the calculation of the Residual Mix, it is also proposed that there should be limits placed on the alternative possibility: GOs may only be exported to and cancelled for use in a third country where the EU has made an agreement with this Third Country on the mutual recognition of GOs.

The geographical limitations for cancellation are updated accordingly. For consistency, limitations for export are proposed to reciprocate the import limitations.

2.5. Verification of disclosure statements

The value of the system for GOs is not only dependent on the quality of the processes that lead up to the issuance and subsequent cancellation of a GO. Of



equal relevance is the way that such GOs are used. After all, if a GO cannot be counted upon to uniquely represent the Attributes of the energy to which it relates, it loses its credibility.

Therefore, it is of utmost importance that claims made with regard to the Attributes of energy supplied or marketed as having specific Attributes be supported by cancellation of GOs, and that such cancellation is verified independently.

To that effect, the draft document for a revised EN16325 incorporates:

- a section on (the compilation of) Disclosure Statements; and
- a section on verification of Disclosure Statements by a Disclosure Authority.

Supervision of Disclosure Statements by an independent Authority secures that were a GO is issued, only its Cancellation constitutes proof of its Attributes. Thus, it helps each Member State in its assessment of the accuracy, reliability and veracity of a GO issued in another Member State, which is a prerequisite for its recognition.

2.6. Avoid double disclosure from the interplay of GOs with certificates that serve other purposes? => Purpose of the electronic document

How far should EN16325 go with regards to facilitating multipurpose certificates?

Elements to take into account, when considering this question:

- The purpose of GOs is limited to Disclosure (= demonstrating to a final customer the origin of the energy supplied to him). This follows from REDII preamble 55, art.2 (12) and art. 19.1.
- Art. 19.2: No more than one guarantee of origin shall be issued in respect of each unit of energy produced.
- In the spirit of REDII art.19.8 §2: The only document that can be used for demonstrating to a final customer the renewable origin of the energy supplied to him is a GO or the residual mix.
- Challenge and options described in [FaStGO Task 1.3](#) topic 10: Avoiding double counting from the interplay of guarantees of origin and sustainability certificates. Options for overcoming the double disclosure challenge:
 - a) Forbidding the issuance of a GO when a sustainability certificate is granted. This implies that the rules and regulations of national issuing bodies contain the provision that no GOs are issued to a producer for those volumes which are supplied to transport. This is done to avoid double disclosure for renewable gas volumes which are placed on the market as a biofuel for transport. It also means that the sustainability certificate would carry in itself the right to claim the energy as renewable for the consumer (disclosure linked with the sustainability certificate); or
 - b) Communicating that the sustainability certificate does not encompass any claim of the origin of the consumed batch. However, it is difficult to control what claims suppliers and consumers are making, especially when there are no harmonised prescriptions for disclosure of the origin of supplied gases; or



- c) Bringing the two purposes together on a single certificate so that both stay together for the whole of their lifetime.

While option c) seems to be the preferred solution, it has yet to be decided to what extent the standard EN16325 should facilitate such additional purposes, as that could also be done outside EN16325, either if so desired or if too time-consuming for the current standard revision phase. In any case, the abovementioned concern of avoiding double disclosure should be covered.

Fundamentally the question is this: although sustainability certificates are not destined for disclosure, can such function be reliably stripped from them, given that they are typically used to demonstrate a share of renewable origin in a fuel mix. And although the purpose of this demonstration is not for consumer disclosure, but rather renewable quota obligation, does consumer disclosure happen as an automatic side-effect⁴?

Option for consideration on **what to include in EN16325**:

- 1) Option 1: EN16325 allows the use of the same electronic document that comprises the GO to be used for other purposes. An electronic document can be issued for either one or several purposes. At issuance, it should be clear what are the eligible final uses of the document.
 - a. If the electronic document that comprises the GO can be used for other purposes than Disclosure, it should indicate the purposes for which it can be used. These categories of purpose can be described in a way that allows any necessary flexibility in the later life of the GO but avoids double-counting per category of purpose. A good option might be to indicate the categories of purpose as 'Disclosure', 'Support' or 'Target counting'. Other options for categorising purposes can be considered if proposals are received.
 - b. In the interests of conciseness, any additional processes related to other purposes than disclosure do not need to be described in detail in the EN16325.

In case option 1 is selected, the following is proposed:

- A) A data field on the electronic document shall be added that indicates the purpose(s) for which it can be used. The cancellation process shall then mention that the document can only be cancelled for use in line with the purpose mentioned in this data field.
 - B) The cancellation rules shall have purpose related limitations: A GO shall only be cancelled for the purpose of Disclosure. If a GO is part of an electronic document that is eligible for multiple purposes, this document shall only be cancelled once for use under an eligible purpose that is recorded on it encompassing the right to use the information on the electronic document for disclosure.
- 2) Option 2: The alternative is that EN16325 explicitly restricts itself to the standardisation of GOs – i.e. that the standard only covers the use of GOs for

⁴ Lessons could be learnt from renewable quota obligation systems in the electricity sector (such as elcertificates in Sweden and Norway), where typically a producer would receive an elcertificate and a GO, but can such practices be extended to renewable quota obligation for biofuels, after setting appropriate preconditions? Similar experiences of operation of GOs together with quota obligation certificates for renewable electricity and for high efficiency cogeneration exist in each of the three Belgian regions.



disclosure. Also, under this option, it is proposed to record the purpose for which the electronic document, being a GO, can be used. This will avoid confusion that could lead to mis-usage and double disclosure by using other certificates for the purpose of disclosure. Further it allows for future developments regarding embedding the GO in a bigger electronic document that serves multiple purposes.

Given the limited time available to revise this standard, which is due to be finalised before the REDII implantation deadline of 30/6/2021, option 2 is selected for now. It is, nevertheless, recommended to investigate option 1 for implementation in practice.

2.7. Facilitate label

To facilitate an EU wide green label in accordance with REDII art.19.13, or any other label related to the same quantity of energy for which a GO is issued, it is proposed to add a data field on the GO that can convey the name of such a Label.

2.8. Energy eligible for issuing tradeable GOs

Text is added to indicate when tradeable GOs can be issued, being that the Output itself must be traded, and this issuing of GOs cannot cause double disclosure. This means, if the physical energy is not traded, the GO should not be tradeable, and the self-consumer of the produced energy should be automatically considered as the only possible owner of the production attributes.

The solution aims to balance out two concerns:

1. In some countries, the system is set so that GOs can be issued for all net production (being gross production without auxiliaries), enabling the consumer on the site of the production device to use these GOs for claiming the origin of its energy to be renewable. Usually, such GOs are cancelled immediately upon issuing.
2. A significant group of stakeholders in the GO system and policy makers consider that GOs for onsite consumption should not be traded, since they believe that this would harm consumer credibility of the whole GO system. Such loss of GO credibility would harm the market value of GOs.

The concept of splitting the energy eligible for GOs between tradeable and non-tradeable GOs was the resulting compromise, on the principle that tradeable GOs can be issued only for tradeable energy production. A national GO scheme is free to determine whether GOs should be issued for onsite consumption.

In addition to this principle in the generic section, text is added in the energy carrier-specific sections of the standard, because the description of these conditions differs from energy carrier to energy carrier.

For energy, which is not traded, but consumed onsite (onsite consumption), GOs may be issued (if necessary) and cancelled immediately upon issuance. A preferable option would be not to issue for onsite consumption as automatic cancellation upon issuance is typically an unnecessary administrative burden and interferes with GO statistics. Topic 13 "Double disclosure related to onsite consumption and non-interconnected grids" of the report of Task 1.3 describes the challenge that the here proposed texts aim to overcome.



2.9. Financial Fraud prevention

Text is added to ensure record-keeping by Competent Bodies of all transactions that have taken place with a GO while it resided in their Registry. To allow Competent Bodies to arrange for an infrastructure of such record-keeping, should they not have it already, a transition time is foreseen.

Text is also added to make sure that all owners are registered as Account Holders. The purpose is to avoid fraud in transactions that take place while the GOs reside on the account of a single Account Holder. The only exception is where a party acts on behalf of a producer (through a power of attorney or similar) to manage GOs issued to their Production Device, to simplify administration for (small) producers.

2.10. Allocating the Attributes of Inputs to Outputs

The text on the Consumption Declaration is made more generic to establish that combustibles are not the only Inputs taken into account (e.g. input of electricity when producing hydrogen). Input energy sources are allocated to the issued GOs based on the share of the energy content of each of the Inputs in the total energy content of all Inputs.

2.11. Energy Carrier Conversion

Rules have been added for Energy Carrier Conversion, in line with the topics 7 and 25 elaborated in [FaStGO Task 1.3](#) report. Two extra definitions: Energy Carrier Conversion and Conversion Issuance support this. An additional section on Energy Carrier Conversion clarifies how the very same principles apply as for normal GO Issuance. GOs are cancelled for the measured Input energy fed into the Production Device capable of performing Energy Carrier Conversions. GOs are issued for the measured Output of this Conversion Production Device.

The energy source of the newly issued GOs, is the same energy source as the one recorded on the cancelled GOs. This shall be reflected in the Source Type which is mentioned as an attribute on the GO and is a value from Annex A of the proposed text. The list of energy sources is set up in a way that it can be used for all energy carriers. It is based on Fact Sheet 5 Technology and Fuel codes of the EECS[®] Rules, in which the FaStGO project team made further refinements.

2.12. Energy Storage

Rules have been added to explain that Energy Storage, where the Input Energy Carrier is the same as the Output Energy Carrier, does not need the substantial administrative process of cancellation of GOs for the Input Carrier and Issuance of GOs for the Output Energy Carrier. Adopting this proposal would mean that no GO Issuance would be needed for storage, but that GOs may - at the discretion of the storage operator - be cancelled for storage energy losses. More in-depth elaboration is in [FaStGO Task 1.3 topic 5](#).



2.13. Keep a single data field on the GO to refer to the energy source of the Input

While acknowledging that there are several production technologies that will have more than one input, it is proposed to keep the current practice of recording a single data item on the GO referring to the energy source category, meaning one GO has one energy source, even though the production may have been derived from multiple sources. Annex A has been complemented with more energy sources and technologies. The principle is that the amounts of each of the different inputs will be allocated to separate GOs (in proportion of their energy content to the total energy content of all the inputs). Hence no changes are proposed in this respect. The reasoning for this is as follows.

Although recording the total input energy mix might, in some cases, add value to the information content of the GO, the alternative (maintaining multiple records with the energy sources on the generic GO) makes system management too complex and the market too untransparent.

1. After energy carrier conversion, it would become too complicated to maintain the split between multiple energy sources.
2. Getting an overview of all GOs issued for a specific energy source would become difficult to manage. For statistical purposes, it is inappropriate to record the total amount of GOs issued for each renewable energy source, if GOs record only the mixture of inputs.
3. For a GO trader, it may become complex to identify the financial value of each GO, when each GO reflects a mixture of inputs. This would mean that the market value for GOs for different inputs would differ. When trading big volumes of GOs, this becomes a significant administrative challenge (e.g. a buyer wanting to buy 100.000 GOs from organic waste would have real difficulty in singling out the energy input they want to trade, when each GO records a mix of wind energy + waste + plant oil).

An option to accommodate those who are interested in maintaining the input mixture in the Production Device, could be to add an additional data field on the gas and hydrogen GOs that refers to the mixture of inputs, but to allocate to only 1 category of Annex A per MWh.

For that single data field for the Energy Source on the generic GO, the input may be recorded in either of the following ways:

- there may be allocation of e.g. 60% of the biomethane comes from energy crop>maize, and 40% of the biomethane GOs records to source from pig manure. (e.g. Energinet does this for electricity from biogas)
- There is the option to select a more generic fuel category 'agricultural products and by-products'. (most issuing bodies do this for biogas)

2.14. Categorising gases

With a view to overcome challenge 6 set-out in the report of FaStGO Task 1.3, gaseous energy carriers are categorised as follows:

1. Hydrocarbon gas, with subcategorisation of
 - a. Network-Compatible Gas and
 - b. Other Gas



2. Hydrogen.

Gases are categorised to provide transparency for consumers. Categorizing between hydrocarbon gas and hydrogen also enables avoidance of using a hydrocarbon gas GO for disclosure of hydrogen consumption. The subcategorizing of Network-Compatible Gas and Other Gas would allow a consumer to decide that disclosure of the energy consumed must be based on the same “quality” of gas, i.e. if consumption is derived from the gas grid, that only GOs issued for Network-Compatible Gas would be eligible.

Reasons for providing this information and the ability to select for consumers include:

- A GO system is there to provide transparent information to consumers. Failing consumer trust, the GO system falls without subject. And without market value. Consumer trust dynamics are observed to be influenced by various factors, but besides reliable procedures, transparency through information on the GO being the most important one.
- A GO system, supported by consumer trust, strengthens consumers position in the driver’s seat of the energy transition.

Other reasons for this categorisation are of technical nature and relate to energy carrier conversion. Methane being reformed into hydrogen is an actual “conversion process”. Energy is being lost, with conversion efficiencies to be taken into account. Such modifications of a gas require GOs to be cancelled for input and then issued for the output (which represents a smaller amount of energy than that which was input), failing such would simply damage the level of consumer trust.

Categorisation of gases requires specific attention where hydrogen is injected into the gas grid.

1. Reducing administrative overhead for distinguishing the gas category:
Where hydrogen is injected into the natural gas grid, this is easy to design as one of the least administrative conversion processes:
 - Hydrogen produced at the site of grid injection, can immediately be categorised as hydrocarbon gas
 - Hydrogen produced elsewhere than the point of grid injection, for which GOs may be issued, and has been transported to the point of injection into the natural gas grid: administrative overhead can be minimised in efficient allocation of roles and design of procedures. The measurements and administration following commercial contracts and grid security, can simply be adopted for the related GO issuance.
2. Data on the hydrocarbon gas GO after injection of hydrogen into the gas grid:
Where for other conversion issuance, the production device specific attributes on the GOs issued after conversion refer to the data of the conversion device, this is proposed to deviate in case of hydrogen injection in the natural gas grid. Since in this case the conversion device consists a valve releasing the hydrogen into the gas grid, it is proposed that at conversion issuance the production device specific attributes of the cancelled Hydrogen GO shall be mentioned rather than those of the valve.

Note on categorising gases based on their energy source:

- A call was observed to provide a separate category for renewable gases. In line with the general structure of the text proposal, the energy source is mentioned on the GOs for all energy carriers on the data field on the GO called Source Type. This categorisation is hence intrinsic from how the GOs are designed.



- Based on this categorisation, further procedures can be elaborated to set specific additional requirements on audits for those, and more specific on Renewable Hydrocarbon gas GOs of biological origin.

2.15. Technology Codes updated

Technology codes, which are used to identify the Attribute on the GO of the Technology Type, were added to Annex B in order to reflect the different energy carriers. A different technology identifier is allocated to the different energy carriers, and also to the different types of gases, as the first letter of the code. The updated coding system was based on Fact Sheet 5 Technology and Fuel Codes of the EECS[®] Rules, which incorporated input from the CertifHy⁵ project. This coding system has long been operational for electricity guarantees of origin and was in 2019 adjusted to provide a basis for codes for gases (network-compatible gas, other gas, hydrogen) and heating and cooling. FaStGO further refined these codes.

2.16. Identification of various types of GOs based on their attributes

The attributes on the GO have no hierarchical relationship. The different data fields hence withhold the possibility to identify the GO characteristics on the attributes as applicable to the situation and desirable for the user. For example, GOs can be differentiated based on the energy carrier, energy source, technology type, country of origin, and type of support being given etc. This in itself has not changed in comparison with the previous version of the standard, it is simply an extra dimension to support other energy carriers and other technology types.

2.17. Optional data field on the GO reflecting the carbon footprint

Given the broad demand amongst stakeholders, an optional data field is proposed to be added to GOs in order to reflect the carbon footprint of the output for which a GO was issued. The data field is proposed to be optional since there is no requirement in REDII to add this. An informative Annex E has been added, with a proposal for a methodology for calculating this carbon footprint based on the methodology set out in ISO 14067, incorporating the annexes V and VI of REDII.

This annex is proposed to be informative rather than normative, as this enables:

- 1) A joint orientation for the methodology to be used; and
- 2) The European legislative framework to overwrite the methodology, once a clear multidisciplinary policy framework permits it to do so.

⁵ www.certifhy.eu



3. Explanation per article

This section contains an explanation per article as to why it is proposed to change/add to/delete it. Rather than repeat our considerations, we have included references to relevant sections of the reports published by the FaStGO project in [Task 1.1](#), [Task 1.2](#) and [Task 1.3](#). This section explains why *specific phrasings* are brought forward. The explanations may also contain any acceptable alternative solutions for phrasings (insofar as those were identified in the process). The draft for the revised EN16325 contains only the *proposed* solution.

EN16325 section Topic	Explanation								
0. Introduction									
	Rather than describe the European Energy Certificate System maintained by the Association of Issuing Bodies (which, as an operational agreement between Issuing Bodies, is subject to constant change), the Introduction has been re-written in its entirety to give a more generic introduction to GOs and GO Schemes.								
1. Scope									
	The scope has been expanded to include gas (including hydrogen), heating and cooling.								
2. Normative references									
	<p>The reference to EN 16247-1, Energy audits has been removed, as it mostly describes the audit process, as opposed to <i>what</i> should be audited. The latter is of vital importance to the Standard for GOs and has been incorporated into the document.</p> <p>A new reference has been included, i.e. to ISO14067_2018 Greenhouse gases — Carbon footprint of products, in order to enable Member States who so choose to implement a system for including Attributes on a GO regarding the emission of Greenhouse gases.</p>								
3. Terms and definitions									
	<p>Terms and definitions have been included, amended, and deleted in accordance with the recommendations made in the comparison document for EN16325 and the EECS[®] Rules. Some definitions have received new terms to describe them. For reference, the following table maps the new definitions with the old. Where a term and definition have remained effectively unchanged, they were omitted from the table.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">New section no.</th> <th style="width: 25%;">Term</th> <th style="width: 25%;">Old section no.</th> <th style="width: 25%;">Term</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	New section no.	Term	Old section no.	Term				
New section no.	Term	Old section no.	Term						



3.1.1	Account	3.1	Account Holder
3.1.2	Account Holder	3.1	Account Holder
3.1.5	Auxiliary	3.4	Auxiliaries
3.1.6	Authorised Measurement Body	3.5	Approved Measurement Body
3.1.7	Attribute	n/a	new term/definition
3.1.8	Biomass	n/a	new term/definition
3.1.9	Cancel	3.6	Cancel
n/a	deleted term/definition	3.7	Cancellation Account
3.1.10	Cancellation Statement	3.8	Cancellation Statement
n/a	deleted term/definition	3.9	Cancelling Body
3.1.12	Competent Body	3.11	Competent Body
3.1.13	Competent Body's Agent	3.12	Competent Body's Agent
3.1.15	Conversion Issuance	n/a	new term/definition
3.1.16	Cooling	n/a	new term/definition
3.1.17	Disclosure	3.14	Disclosure
3.1.18	Disclosure Authority	n/a	new term/definition
3.1.19	Disclosure Statement	n/a	new term/definition
3.1.22	Energy Carrier	n/a	new term/definition
3.1.23	Energy Carrier Conversion	n/a	new term/definition
3.1.25	Energy Input Factor	3.19	Energy Input Factor
3.1.26	Energy Storage	n/a	new term/definition
3.1.27	Expiry	3.20	Expiry
3.1.28	Export Meter	3.21	Export Meter
3.1.29	GO Issuing Request	3.22	GO Issuing Request
3.1.31	Guarantee of Origin	3.24	Guarantee of Origin
3.1.32	Heating	n/a	new term/definition
3.1.34	Hydrocarbon Gas	n/a	new term/definition
3.1.35	Hydrogen	n/a	new term/definition
3.1.36	IEM Directive	3.26	IEM Directive
3.1.37	Import Meter	3.27	Import Meter
3.1.38	Input	3.28	Input
3.1.39	Issue	3.29	Issue
3.1.40	Issuing Body	n/a	new term/definition
3.1.41	Label	3.30	Labelling
3.1.42	Label Scheme		



3.1.43	Label Scheme Operator		
3.1.44	National GO Scheme	3.31	National GO Scheme
3.1.45	National GO Scheme Participant	3.32	National GO Scheme Participant
n/a	deleted term/definition	3.33	Natural Flow
3.1.46	Nett Energy Production	3.34	Nett Electrical Energy Generation
n/a	deleted term/definition	3.35	On-Site Demand
3.1.47	Network-compatible Gas	n/a	new term/definition
3.1.48	Originating Production Device	3.36	Originating EGI
3.1.49	Output	3.37	Output
3.1.51	Production Auditor	3.39	Production Auditor
3.1.52	Production Declaration	n/a	new term/definition
3.1.53	Production Device	3.17	EGI
3.1.55	Public Support	3.41	Public Support
3.1.57	Registration Database	3.43	Registration Database
3.1.59	RES Directive	3.45	RES Directive
3.1.60	Renewable Energy Source (RES)	n/a	new term/definition
3.1.61	Renewable Hydrocarbon Gas	n/a	new term/definition
3.1.62	Renewable Hydrocarbon Gas of Biological Origin	n/a	new term/definition
3.1.63	Renewable Hydrocarbon Gas of Non-biological Origin	n/a	new term/definition
3.1.64	Source Type	n/a	new term/definition
3.1.65	Tradeable GO	n/a	new term/definition
3.1.66	Transfer Request	3.46	Transfer Request
n/a	deleted term/definition	3.47	Transferables Account
3.1.67	Transferee	3.48	Transferee
3.1.68	Transferor	3.49	Transferor
3.1.69	Technology Type	3.50	Type of Installation
n/a	deleted term/definition	3.52	Virtual Natural Flow
3.1.71	Withdrawal	3.53	Withdrawal



4. Generic Rules for guarantees of origin (for all Energy Carriers)	
<p>4.1 Main Objectives</p> <p>4.2 Principles</p>	<p>The objectives of the Standard have been amended to take into account the observations of the comparison document of EN16325 and the EECS[®] Rules. Specifically, this means that:</p> <ul style="list-style-type: none"> • the Standard provides guidance not only to competent bodies for managing GO schemes but also to national authorities for <i>designing</i> their GO schemes; • where a GO is issued, only the cancellation of that GO shall constitute proof of the origin of the associated energy for the purpose of Disclosure • a GO shall not be altered once issued; • systems for GOs shall be (cyber)secure; and • Competent Bodies shall be subject to regulation and supervision. <p>Also, one textual change has been made with regard to the protection of Account Holders. The corresponding objective used to read "<i>Competent Bodies and Account Holders should co-operate in seeking to minimise the risk of an unauthorised instruction with respect to a GO being acted upon.</i>" This phrasing is not sufficiently prescriptive as to the obligation for co-operation to mitigate the risk described: "<i>should co-operate</i>" and "<i>seeking to minimise</i>" are both aspirational in nature, whereas risk management by its nature <i>always</i> leaves a residual risk. Co-operation of the parties involved may and should be presumed a given, especially of Account Holders: after all, it is their interest that is being protected. As such, the phrase should read "<i>shall co-operate to minimise</i>".</p>
<p>4.3 Registration of Competent Bodies and their agents</p>	<p>The conditions under which a Competent Body may hold a GO have been amended in accordance with the observations of the comparison document of EN16325 and the EECS[®] Rules. It seems the EECS[®] Rules were misinterpreted in the first draft of EN16325, as the latter interpreted the functions performed by a Competent Body as a condition under which it might hold GOs, whereas what was meant is that those are functions that a Competent Body may perform with regard to markets associated with GOs without such being considered as a distortion of those markets. This has now been rectified.</p> <p>Moreover, the AIB has recently introduced another provision to the EECS[®] Rules that allows Competent Bodies to hold GOs, i.e. for the purpose of auctioning. Such practices are employed in several Member States for GOs issued to generators who receive financial support from support schemes. The Competent Body temporarily holds such GOs and offers them for sale in an Auction. Typically, the proceeds of such auctions are used to fund the corresponding support scheme. It makes sense that this practise should be permitted (as it among other things supports the provisions of Article 19(2) of the RED II, which requires the exclusion of double support), and the provisions for holding GOs have been amended, accordingly.</p> <p>The responsibilities on Competent Bodies have been re-written to reflect that:</p> <ul style="list-style-type: none"> • they can be allocated to more than one Competent Body; • supervision of Disclosure is an integral part of the GO system;



	<ul style="list-style-type: none"> the provisions of a National GO Scheme must be made publicly available in a commonly shared language, so that each Member State can accurately assess the reliability, accuracy and veracity of GOs issued in another Member State. <p>The possibility of allocating responsibilities to more than one Competent Body also correctly identifies the fact that each Competent Body may appoint Agents, but that an Agent does not itself become a Competent Body.</p> <p>The provisions for confidentiality have remained unchanged. Apparently, the indefinite nature of confidentiality proposed by the original Standard was not deemed to be an issue, and so it was not considered worth the effort to challenge this statement. Insofar as a limitation is desirable for practical reasons, it can be left to a separate agreement to determine one.</p> <p>The appointment criteria for Issuing Bodies have been expanded to include an agreement with the Label Scheme Operator, where relevant. For example, if an Issuing Body intends to issue GOs with an FSC label, it should have permission from the Forest Stewardship Council to do so.</p> <p>The provisions for the appointment of agents and the criteria for doing so were merged to be more concise. Further, the relevant text has been amended to clarify that an Agent does not itself become a Competent Body.</p> <p>The structure of verification of applications with regard to Production Devices has been amended: under the main body of the Standard, the Issuing Body shall verify the application for registration of a Production Device. The information to be provided in the application itself has been expanded to facilitate both conversion and labels. As the inspections may differ based on the energy carrier, the corresponding provisions for such have been moved to the energy carrier-specific chapters of the Standard.</p> <p>Provisions on supervision of Disclosure strengthen a GO scheme in its measures to avoid that the same amount of attributes are claimed to be consumed more than once. If the proposed text would be considered as too anticipative of legislative initiatives, the phrasing on the requirement for supervision of Disclosure could be replaced by: 'In addition to the responsibilities of the Issuing Body, in order for a GO scheme to function properly, it must be ensured that the origin of each MWh of Energy shall be Disclosed to a final customer not more than once.'</p>
<p>4.4 Registration of Production Devices and Account Holders</p>	<p>The process for registration of Production Devices has been clarified to reflect the fact that only the owner of a Production Device can apply for its registration, or authorise someone else to do so on their behalf.</p> <p>In addition, the list of information to be provided in an application has been expanded to facilitate conversion and labels.</p>
<p>4.5 Issuing and content of a GO</p>	<p>In order to facilitate an EU wide green label in accordance with REDII art.19.13, or another label, to relate to the same quantity of energy for which a GO is issued, it is proposed to add a data field on the GO that can convey the name of this Label. Such a label might represent extra value to a consumer.</p>



	<p>In order to avoid confusion related to the purpose of the electronic document, the purpose of the GO, being Disclosure, shall be indicated on it. If, in the future, the GO is embedded on an electronic document that facilitates multiple purposes, the eligible purposes for which it may be used, shall be indicated on this document.</p> <p>Further, since Directive 2018/2001 allows for GOs to carry simplified information for Production Devices with a nominal capacity of less than 50 kW, a proposal has been included for which Attributes might be simplified and to what extent. Harmonising this secures that GOs carrying simplified information may be transferred unhindered between registries.</p> <p>The methodology for calculating the contribution of each energy source to the production of energy by a production device has been updated to take into account the energy content of each contributing energy source, in a way that works for all energy carriers. This way, the methodology treats each energy source consistently, whether it is expressed in mass, volumes or otherwise. Moreover, the methodology incorporates conversion of one energy carrier (which may have already received GOs) into another. Cancelling GOs for the input of a converting production device is essential:</p> <ul style="list-style-type: none"> • to determine the source of an Input that is not a primary energy source; and • to prevent double-counting.
<p>4.6 Ownership of GOs</p>	<p>The owner of a GO shall always be the Account Holder. This improves the likelihood of financial fraud being detected. The only exception is for aggregators who assist owners of a production device in the administration of their GOs, until the first transaction with such GOs has taken place.</p>
<p>4.7 Transferring of GOs</p>	<p>As was explained in the comparison of EN16325 and the EECS[®] Rules, the number of GO transfers that occurs is so great that manual controls alone cannot realistically be counted upon to prevent errors, and double-counting. However, the level of automation required to secure the accuracy of transfers may vary per Issuing Body. As such, process automation is now tied to the goal that it intends to facilitate.</p> <p>Export restrictions are suggested to mirror import restrictions from outside EU+Third Countries. this omits leakage of Attributes and provides a more reliable Disclosure system. Should this not be retained, then measures must be taken to ensure that the residual mix calculation is not negatively impacted, e.g. by requiring that if export should be allowed to countries outside the EU with whom the EU has not concluded an agreement on GO recognition:</p> <ul style="list-style-type: none"> • the transaction shall record country of consumption; • the quantities per country of consumption shall be reported for the residual mix calculation.
<p>4.8 Correction of Errors</p>	<p>The objective of immutability has been amended to enable correction of errors in GOs. It must be mentioned that a GO shall not be altered under any other circumstance than error correction, save with regard to:</p> <ul style="list-style-type: none"> • the Account in which it is held, which may change following a transfer; and • its status, as its life may end following Cancellation, Expiry or Withdrawal.

	<p>Also for non-electrical energy carriers minimum arrangements on disclosure statements contribute to the reliability of claims of consumption of energy from RES. Here however it is acknowledged that further legislative measures are needed to fully ensure the avoidance of double claims of the same MWh of energy from RES.</p>
<p>4.11 Monitoring and Auditing</p>	<p>The provisions on auditing production devices were amended so that it is prescribed <i>what</i> is to be verified in relation to the production device, the Input and Output, rather than <i>how</i>. These provisions also specifically include allowing auditors' access to the production device.</p> <p>The majority of topics for inspection have been considered to be generic for all energy carriers, though some complementary elements are added in the energy carrier specific sections.</p> <p>The provisions for auditing have been expanded to include supervision of disclosure statements published by suppliers. This secures that such statements are properly corroborated by cancelled GOs where appropriate.</p> <p>The provisions on assessments of National GO Schemes have been further elaborated, in order to ensure qualitative operation. This enables issuing bodies to fall back on a verification mechanism when asked to import a guarantee of origin in their registration database from a Domain of which they haven't yet earlier checked to comply with the reliability, veracity and accuracy requirements for import.</p>
<p>5. Rules specific to individual energy carriers</p>	
<p>5.1 Electricity</p>	<p>The provisions for GO Schemes specific to Electricity have been moved from the generic part of the Standard to this energy carrier-specific chapter. This includes the provisions relating to Electricity from High-Efficiency Cogeneration.</p>



	<p>To prevent double-counting, a paragraph has been introduced that identifies that the perimeters for the trading of Electricity, and for issuing tradeable GOs, shall be one and the same. It is essential that:</p> <ul style="list-style-type: none"> • where GOs are issued for Electricity which may not be traded, such GOs may only be used to Disclose the energy consumed onsite; • where GOs are issued for Electricity which is physically consumed onsite, but considered tradeable, such onsite consumption: <ul style="list-style-type: none"> ○ is taken into account in the residual mix calculation; ○ is subject to legal requirement on the supplier to Disclose the origin of the electricity so consumed. <p>In accordance with best practice, a deadline has been included for cancelling GOs for consumption during a calendar year. Such deadline should ideally be harmonised to enable consistent calculation of residual mix across Member States. The provision to that effect in section 5.1.10 may be supplemented with a statement that national law may provide another deadline, provided that the corresponding loss of consistency is deemed acceptable.</p> <p>And finally, this chapter contains additional data sources which may be used for disclosure of electricity, consistent with Dir (EU) 2019/944 and common practice.</p>
<p>5.2 Hydrocarbon Gas</p>	<p>Two types of gases: Given the categorisation of gases, a subcategorization is made between 'Network-compatible gas' and 'other gas'. For a consumer of hydrocarbon gas, the detailed chemical composition is not the essential asset, what matters is the energy content.</p> <p>Hydrogen into the natural gas grid: However there is a separate category for hydrogen GOs, once hydrogen is injected into the natural gas grid, it is considered to fall under the category 'network-compatible gas', since the product the end-consumer receives is no longer the pure hydrogen. Where hydrogen is injected into the natural gas grid at the site of hydrogen production, and no hydrogen GOs have been issued for it yet, GOs for hydrocarbon gas can be issued. If the hydrogen is produced elsewhere and it cannot be excluded that hydrogen GOs have been issued for this quantity of hydrogen, the process of energy carrier conversion and conversion issuance shall take place. This means that GOs for hydrocarbon gas can be issued if an amount of hydrogen GO has been cancelled, corresponding the measured input of hydrogen. The administrative load can be kept low, since meters and responsibilities are already in place and can easily be extended to fit into the process of measurement data registration for GO issuing. In such case, as an exception, the attributes on the issued hydrocarbon gas GOs relating to the production device, shall refer to the production device mentioned on the cancelled hydrogen GOs (and not to the injection point in the natural gas grid, which could be considered the energy carrier conversion point).</p> <p>Data to be recorded on Hydrocarbon Gas GOs</p>



	<p>A data record 'means of supply' shall indicate whether the gas was initially injected into the natural gas grid or whether it was transported by vehicle. Together with the production location on the GO, this aims to inform consumers who want to check the possibility of a physical supply link to their point of consumption.</p> <p>A data record 'type of gas' shall indicate whether at the time of production the physical gas fulfilled the national/local criteria for injection into the natural gas grid.</p> <p>An optional data record on the GO may mention the total mixture of inputs fed into the production device, while the Source Type mentioned on the GO shall be only one, following the arguments set out above in 2.13.</p> <p>Inspections: Given the relative ease for fraud in reporting, especially on the energy source, a mandatory inspection of the production device at the time of its registration in the registry of the GO issuing body is added. For the same reason, additional inspection requirements were set for consumption and production declarations and the corresponding feedstocks in case of renewable hydrocarbon gas of biological origin.</p> <p>For calculating the energy content of Hydrocarbon gas, the upper calorific is used, in line with common practice in the natural gas sector.</p>
<p>5.3 Hydrogen</p>	<p>Other than for hydrocarbon gas, there is an industry for pure hydrogen, where the chemical composition of the product has an essential value. The CertifHy project, which developed a voluntary GO scheme in dialogue with the hydrogen industry, agreed that GOs shall only be issued for a pure hydrogen product. Under CertifHy, the industry agreed that such product would be defined as hydrogen with a purity level of 99,9%vol. This results in the applicability of the concept of Hydrogen GOs for this product only.</p> <p>Data to be recorded on Hydrogen GOs: An optional data record on the GO may mention the total mixture of inputs fed into the production device, while the Source Type mentioned on the GO shall be only one, following the arguments set out above in 2.13.</p> <p>Inspections In line with the CertifHy recommendations, the text installs a mandatory inspection at the time of registration of a production device, and a mandatory annual inspection of production and consumption declarations.</p> <p>For calculating the energy content of Hydrogen, the lower calorific is used, in line with common practice in the hydrogen industry and recommendation from CertifHy.</p>
<p>5.4 Heating and cooling</p>	<p>This chapter introduces additional information to be supplied in the application for registration of a Production Device:</p>



	<ul style="list-style-type: none"> • An energy flow diagram is necessary for the relevant Issuing Body to be able to determine the amount of Output eligible to receive GOs. • Additional information with regard to the heating or cooling medium used, and with regard to the identity of the supply network, so that such can be included on the resulting GOs. <p>Given the complexity of Production Devices for Heating or Cooling, this chapter determines that an inspection shall be necessary to verify the information provided in such application. For the same reason, regular provision of consumption declarations (and verification thereof in accordance with the generic requirements for GOs as identified in section 4.11.4) is to be made mandatory.</p> <p>Determining the share of output of a Production Device for Heating or Cooling that is eligible to receive GOs is slightly different than for other Energy Carriers: it is to be determined as the amount of Heating or Cooling <i>added</i> in the process. Where, for example, the input of a Production Device is 25 °C, and the output is 70 °C, then the issuing process should reflect that 'only' 45 °C was added. I.e. not the full 70 °C should be eligible to receive GOs.</p> <p>The inclusion of additional information on GOs is important for Disclosure based on such GOs to make sense. For example, district heating is not normally supplied at ≥ 450 °C, so it would be confusing if for Disclosure of such, GOs bearing that temperature range could be Cancelled. Such confusion withholds the risk of jeopardising the credibility of the GO system for Heating and Cooling, and by extension, public trust in the GO system for all energy carriers. An explanatory note has been included in section 5.4.6 of the text proposal for EN16325 to that effect. If it is deemed redundant, (only) the note may be removed.</p> <p>Further, the proposed text leaves it to Member States' discretion to require that GOs may only be used to disclose the origin of energy supplied through the same network as is identified on those GOs.</p> <p>These specific arrangements aim to overcome challenges 9, 13 and 17 as identified in the report of FaStGO task 1.3.</p>
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4. Topics that should be included in a separate agreement between issuing bodies

This document acknowledges that the standard must cover aspects that are essential to a reliable system for guarantees of origin. It also acknowledges that for the efficiency of operation and deeper quality assurance, harmonisation of detailed processes is recommended, although such details may require frequent updates e.g. to keep pace with developments in the market and changes to national policy.

There is a need for a trade-off between the stability of a formalised standard and the more flexible additional agreements that can be made between issuing bodies. Ideally, this should be done in a single platform where issuing bodies share experiences and concerns, and jointly make decisions on the updates. A process is recommended for such decision-making between GO issuing bodies, to enable an agile response to changing circumstances.

The non-profit Association of Issuing Bodies (AIB), which developed and operates EECS[®], is an example of proven experience for organising such collective decisions by issuing bodies for detailed operational procedures. EECS[®] stands for European Energy Certificate System⁶. The European standard for guarantees of origin EN16325 was based on the EECS[®] Rules of the time when EN16325 was initially drafted and adopted in 2013. Updates to the EECS[®] Rules were introduced during the process of considering and amending EN16325. Where EN16325 provides a standard for guarantees of origin (GOs), EECS[®] provides a wider institutional framework for organising the cooperation between Issuing Bodies and technically enables the cross-border transfer of GOs.

This section contains those topics that could best be included in a separate agreement (whether this is EECS[®], or something similar in nature to EECS[®]), which on a general level should include:

- topics for which the solution may be subject to frequent change (i.e. more than once every three years):
 - operational details like codes and procedures;
 - an institutional framework for decision-making and organising cooperation between Issuing Bodies;
 - publication of statistics;
 - evaluation of assessments of national GO schemes;
 - further development of the GO system, either or not in relation with a multipurpose certificate system;
 - etcetera.
- technical operation of an international GO transfer system;
- topics for which the solutions cannot be made publicly available (e.g. details relating to fraud prevention measures);
- other topics which the CEN standard might leave open, but which (as later discovered) require harmonization for reliable and efficient operation of the GO system.

More specific (now foreseen) topics to be covered in separate agreements:

⁶ The EECS[®] Rules form a voluntary agreement between issuing bodies for guarantees of origin and are available on <https://www.aib-net.org/eecs/eecsr-rules>.



- The standardisation of statistical reporting by issuing bodies is essential, to have a harmonised understanding from each data provider on the data they provide. Specification of the type of data and the procedure under which it is to be provided.
- EN16325 requires Competent Bodies and their Agents to maintain the confidential nature of information but does not include a limitation with regard to the time during which such confidentiality shall be kept. Insofar as it is deemed desirable, for practical reasons, to limit such confidentiality to a particular number of years, such can be achieved through a separate agreement.
- Limitation of the timeframe during which GOs may be cancelled for use in another Domain as a result of technical difficulties. It must be assumed that the sending and receiving Issuing Body shall cooperate to remove any obstacles for the GOs to be transferred electronically.
- Contracts to be drafted between issuing bodies to prevent each other from claims.
- Fraud prevention and detection measures. While essential, they should ideally not be publicly available, as potential fraudsters may use the information to circumvent those measures. As such, they are best left for a separate agreement.
- Template for provisions of the National GO Scheme (also being called a Domain Protocol) as to be made public to all participants in that scheme. National energy systems entail differences and therefore any amount of standardization related to GO will never achieve identical national GO systems, which always have to be fitted to the national (energy) context. Therefore, it is beneficial to standardise the way the characteristics of a GO scheme are being structured, for international market participants and other Issuing Bodies to find a comprehensible overview and to easily identify the location in a text to arrange for a specific aspect of it. Such template will be subject to changes following the evolving legislative framework and market needs.
- Multipurpose certificates, embedding the GO in an electronic document that serves purposes beyond only disclosure.

5. Text proposal for a revised EN16325

The text proposal by the FaStGO Project Team for a revised EN16325 is available as a separate document that forms part 2 of Task 2 of the FaStGO project: "Draft formulations for a revised EN16325 in order to align EN16325 to the revised Renewable Energy Directive 2018/2001 and to overcome the challenges that currently exist in the management of Guarantee of Origin systems".