Best Practice Recommendations

For the implementation of Guarantees of Origin and other tracking systems for disclosure in the electricity sector in Europe

Version 2.4, 30th September 2015

1 Introduction

This document is meant to provide guidance to competent bodies and legislators which are implementing and managing systems of Guarantees of Origin (GO) for electricity and other tracking systems for purposes of electricity disclosure in Europe. The Best Practice Recommendation builds upon the findings and recommendations of the project "A European Tracking System for Electricity (E-TRACK)".[1] These have been developed further in the RE-DISS project[2] and were discussed in six workshops which involved representatives of competent bodies from 19 European countries. Comments received during and in between the workshops were taken up in version 2.1 of the recommendation, which concluded the work of phase I of the RE-DISS project. It was not intended to ask the workshop participants for a formal approval of the Best Practice Recommendation. However the broad majority of participants supported the proposals and only very few reservations on single elements of the recommendation were made by some workshop participants. The RE-DISS project carried out a second phase and further developed the Best Practice Recommendations based on continued discussions with competent bodies. The RE-DISS team took up comments and suggestions made in the 7th, the 8th and the 9th RE-DISS Domain Workshops for competent bodies that were respectively held on the 26th September 2013, the 24th and 25th June 2014 and the 28th May 2015 in Brussels and that were received from various stakeholders. Other changes to version 2.1 of the BPR were made to integrate the project's findings or new developments coming from e.g. the AIB's work, like the publication of v7.7 of the EECS Rules[3].

The members of the RE-DISS project team recommend that competent bodies and legislators in Europe follow the proposals as specified in this document when implementing the details of GOs and disclosure systems in their countries. This will facilitate an advanced implementation of these instruments, which satisfies the requirements for GOs to be accurate, reliable and fraud-resistant (as set out in Directives 2009/28/EC and 2004/8/EC[4]) and for disclosure information to be reliable (as set out in

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1 See the website of the E-TRACK project, which ran until 2009 (http://www.e-track-project.org). The E-TRACK final report contains a lot of background information which might help in understanding this document, including a glossary.

2 For more information on the RE-DISS project, which ran until October 2012, please see in the project website, the pages dedicated to phase1: http://phase1.reliable-disclosure.org/, which contain useful information regarding GOs and disclosure.

3 Two further versions of the BPR were thus developed under RE-DISS II, v2.2 and v2.3 and published on the project website. Version 2.4 is identical in contents to v2.3 but includes formal changes that acknowledge the end of the project.

4 Note that this Directive was replaced by the new Energy Efficiency Directive 2012/27/EC, which had to be implemented by member states by June 2014.

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Directive 2009/72/EC). Most of the Best Practice Recommendations are for immediate application. However, in some cases, when the project ambition was too far away from the current GO and Disclosure frameworks observed in most countries, the RE-DISS team felt it necessary to sketch what the long term goal was and to provide for intermediary steps that could lead to the ideal vision. Typical examples are BPR [11b] and [11c]. The Best Practice Recommendations cannot be binding for any party, but we hope that it serves as a point for orientation for many countries and that it supports a truly reliable implementation of GOs and disclosure across Europe.

The term "Europe" used throughout this document refers to the EU member states and all other European countries which have implemented systems for Guarantees of Origin and electricity disclosure which are comparable to those stipulated by the EU Directives mentioned above. We speak about "countries" and their competent bodies, but it should be noted here that in Belgium the competent bodies are working on a regional rather than a national level and that disclosure in Ireland comprises the Republic of Ireland as well as Northern Ireland.[5]

After the end of the project on the 30th September 2015, the Best Practice Recommendations may be developed further by a decision supported by a clear majority of competent bodies for GOs and/or disclosure. The new versions should be published on the RE-DISS website."

The following chapters address the most relevant items which have been identified for the Best Practice Recommendation by the project team and workshop participants. After a short introduction to each subject the actual recommendations are given in numbered paragraphs, which makes references easier. Details of the recommended methodology for residual mix calculations can be found on the RE-DISS website as "D7.2 The Residual Mix and European Attribute Mix Calculation".

2 How to implement the "12 month lifetime rule" for GOs

Article 15 (3) of the Directive 2009/28/EC specifies:

> *"Any use of a guarantee of origin shall take place within 12 months of production of the corresponding energy unit. A guarantee of origin shall be cancelled once it has been used."*

The production of an energy unit can only be accounted for over a period of time (production period). Thus the term "production" in the text of the Directive needs interpretation. The term "use" could be interpreted as the act of cancelling a GO or as the act of using the information contained in a GO for disclosure.

If the approach to the GO lifetime is not harmonised across Europe, then this could create an incentive to transfer GOs from domains with stricter lifetime rules to those which allow for a longer lifetime.

The following regulations are thus recommended not only for RES-GOs but for any type of GOs.

[5] In order to make the text easier to read we have left out the term "domain" in this paper and are simply referring to "countries", but this is meant to include the regions in those cases in which this is applicable.

Best Practice Recommendation:

[1]

a) *The metered production periods for purposes of issuing GOs should not be longer than a calendar month and where possible should not run across the start and end dates of the disclosure periods (see item [33]). If metered production periods are longer, then the allocation of GOs to production periods should be done according to what the EECS rules[6] recommend (C.3.4.1.c).*

b) *Longer intervals up to one year are acceptable for very small plants, for example.*

[2]

a) If possible, the issuing of GOs should be done without delay after the end of each production period.

b) Wherever possible, the issuing of GOs for energy produced in year X should be done at the latest by 31st March X+1.

[3]

a) The lifetime of GOs should be limited to a maximum of 12 months after the end of the production period.

b) GOs which have reached this lifetime should be considered as being "expired" and be collected into the Residual Mix (see chapter 5).

[4] An extension to this lifetime can be granted if a GO could not be issued for more than six months after the end of the production period for reasons which were not fully under the control of the plant operator. In this case, the lifetime of the GO might be extended to six months after issuing of the GO.

[5]

a) *Cancellations of GOs which take place until a given deadline in year X+1 should be counted in disclosure for year X. Later cancellations should be counted in disclosure for year X+1. (If disclosure periods differ from the calendar year (see item [33]), the deadline should be defined accordingly.)*

b) *Deadline is set on 31st March X+1.*

[6] The disclosure information from expired GOs (see item 3) can be allocated either to the production year of the corresponding energy unit or to the year when the GOs have expired, depending on the methodology used for Residual Mix calculation in the respective domain. (Note that in the RE-DISS calculation of Residual Mixes, the production year of the expired GOs determines the year for which the disclosure information is allocated.)

6 All references to the EECS Rules refer to Release 7 v7 from 06th March 2015

3 Further Recommendations on GOs

Usage of the European Energy Certificate System

The European Energy Certificate System (EECS) is a ready-to-use standard for the implementation of electronic GO systems in Europe which reflects the requirements of European Directives and coordinates the details of GO systems, including the electronic interfaces for transferring GOs between registries in different countries. The Association of Issuing Bodies (AIB) which governs EECS is a membership-based non-profit organisation with high expertise and currently has members from 15 EU member states plus Norway, Switzerland and Iceland.

Further guidance for implementing GOs was given by a CEN standard for Guarantees of Origin for electricity, which was published in summer 2013, and which reflects the achievements of EECS.

Best Practice Recommendation:

[7]

a) *The implementation of GOs in all countries in Europe should be based on the European Energy Certificate System (EECS) operated by the Association of Issuing Bodies (AIB).*

b) *If national GO systems are established outside of EECS, then EECS should at least be used for transfers between registries.*

[8] If not all European countries are members of the AIB, appropriate connections between the EECS system and non-AIB members as well as in between different non-AIB members will need to be established. These include inter alia procedures for assessing the reliability and accuracy of the GOs issued in a certain country and interfaces for the electronic transfer of GOs. To support this, the AIB has developed fallback procedures for allowing non-members to connect their GO registries to the EECS Hub. This option should be used by all countries which have decided not to become members of the AIB.

[9]

a) Market participants of the respective domain should be provided the possibility to export their GOs and thus participate in the European internal market for electricity.

b) So-called ex-domain cancellations of GOs, where a GO is cancelled in one registry and a proof of cancellation is then transferred to another country in order to be used there for disclosure purposes, should only be used if a secure electronic transfer is not possible and if there is an agreement on such ex-domain cancellations between the competent bodies involved. Statistical information on all ex-domain cancellations relating to a disclosure year should be made available differentiated by energy source[7] in order to support Residual Mix calculations.

The implications of a coexistence of electronic GO transfers within EECS and outside of EECS are not fully clear yet and require further assessments.

7 This information should be provided using a structure for energy sources which corresponds to the highest hierarchy level of fuel codes in the EECS Fact Sheet 5 (see http://www.aib-net.org/portal/page/portal/AIB_HOME/EECS/Fact_Sheets)

Issuing of Guarantees of Origin

Best Practice Recommendation:

[10]

1) GOs should generally be issued only for the net generation of a power plant, i.e. gross generation minus the consumption of all auxiliaries related to the process of power production. For hydro power plants involving pumped storage this means that GOs should be issued only for the net generation which can be attributed to natural inflow into the reservoir. This should be consistent with the EECS Rules which for the time being means: net generation may include losses associated with pumping, where the efficiency of the pump is known and can be verified.

*Issuing = Generation – AuxiliaryConsumption – Pumping*PumpingEfficiency*

If Pumping Efficiency is unknown, 100% must be assumed.

2) Verification mechanisms should be implemented for ongoing control of registered data (e.g.re-audits, random checks, etc.).

3) Correct accounting of RES share of combustion plants should be assured by adequate measures such as those recommended by the EECS Rules (cf part N6.3.2 and N6.4.1).

4) The competent body can correct errors in GOs it has issued before they are exported, and is the only one with this competence.

European Directives require the establishment of GOs for electricity from renewable energy sources and from high-efficiency cogeneration. However, in order to support differentiation also between other forms of electricity generation it is recommended to extend the system of GOs to other forms of electricity generation. Moreover, in order to diminish the share of Residual Mix in the different domains, it is recommended to encourage use of GOs by issuing them automatically for all generation.

[11]

a) *The GO system should be extended beyond RES & cogeneration to all types of electricity generation.*

b) *GOs should be issued for all electricity production, unless an RTS applies for that production, e.g. for the disclosure of supported electricity.*

c) *Competent bodies should consider to make the use of GOs mandatory for all electricity supplied to final consumers.*

[12]

1) All types of GOs should be handled in one comprehensive electronic registry system per country, which is automated and auditable (For an exception from this recommendation see the coexistence of national GO systems and EECS in item [7]).

2) Technical changes to plants need to be registered as soon as is reasonably practicable.

[13]

1) GOs shall have no function in terms of target compliance and should not be used as support instrument. The only purpose of GOs should be disclosure.

2) A GO should be considered as having been used only once it has been electronically cancelled.

3) After cancellation, no further cancellation, transfer or export of the given GO should be possible.

4) After expiry, no further cancellation, transfer or export of the given GO should be possible.

5) An exported GO should be marked as removed from the exporting registry.

6) Processes in the registry should exclude duplication of GOs.

7) Registries should be audited on a regular basis.

[14]

a) There should be no issuing of more than one GO for the same unit of electricity.

b) If multiple certificates are to be issued, for example, a GO for disclosure and a support certificate for management of a support system, then these should be legally separated.

[15]

a) This also applies to cogeneration plants which are using RES as the energy source: only one GO should be issued per unit of electricity.

b) This GO should combine the functionalities of a RES-GO and a High Efficiency cogeneration GO.

Note that linking cogeneration GOs to disclosure means that there should be a use of the information content of cogeneration GOs in disclosure statements. For example, suppliers might be encouraged or even required to disclose the share of electricity from high-efficiency cogeneration in their company or product mix.

The GO as the unique "tracking certificate"

Currently, other tracking mechanisms are also being used which are very similar to GOs, but do not have the same status. This includes RECS certificates[8] and some "green power" quality labels.

In some domains, GOs may not only be used by suppliers of final consumers, but also by (typically large) consumers or service providers who purchase energy and GOs separately and cancel the GOs for their own purpose. In this case, the related energy might be associated with generation attributes two times (once by the supplier of the energy and once by the consumer itself through the cancellation of GOs).

[8] It is to be noted that AIB has decided to phase out RECS certificates, which have no longer been issued since 31st December 2014 and will not be allowed to be transfered by the AIB Hub after 31st December 2015 (N 9.1.2).

Best Practice Recommendation:

[16] GOs should be the only "tracking certificate" used. Any other tracking systems of a similar purpose and function as GOs should be converted to GOs.

[17] Besides GOs, only Reliable Tracking Systems (which may include contract-based tracking, see chapter 6) and the Residual Mix should be available for usage for disclosure. No other tracking mechanisms should be accepted.

[18] Green power quality labels should use GOs as the unique tracking mechanism.

[19] European countries should clarify whether and under which conditions the use of GOs by end consumers is allowed independently from the disclosure provided by their electricity suppliers [9]. Such use of GOs should not be based on ex-domain cancellations performed in other countries. If consumers are allowed to use GOs independently, a correction should be implemented in the disclosure scheme which compensates for any "double disclosure" of energy consumed.

Note that item [18] requires a cooperation between competent bodies and the operators of "green power" quality labels. For example, the GO systems need to become capable to convey label information as part of their data content. EECS provides this through the Independent Criteria Scheme label.

Recognition of GOs imported from other countries

Directive 2009/28/EC allows member states to reject the recognition of a RES-GO for disclosure only if they have "well-founded doubts about its accuracy, reliability or veracity". Similar rules apply for cogeneration GOs under Directive 2004/8/EC, which has now been replaced by the new Energy Efficiency Directive 2012/27/EC, which had to be implemented by member states by June 2014.

Best Practice Recommendation:

[20]

a) European countries should choose one of the two followings options and apply it consistently for all foreign GOs:

- *Rejection of GOs only relates to the cancellation of GOs and subsequent use for disclosure purposes in the respective countries and should not restrict the transfers of GOs between the registry of the considered country and the registries of their countries. This means that the decision about the recognition of a GO by a country should not hinder its import into the considered country.*
- *Rejection of GOs implies blocking their import to the national registry.*

b) The choice of one or the other option should be transparent for all market parties and clearly communicated.

9 For more information on the impacts of independent GO consumption, refer to the RE-DISS II working paper "Independent GO consumers".

[21] Within the rules set by the respective Directives, European countries should consider their criteria for the acceptance of imported GOs for purposes of disclosure.

- *These criteria should address imports at least from all EU member states, other members of the European Economic Area (EEA) and Switzerland. The parties to the Energy Community Treaty should be considered as well, as soon as GO imports from these countries become relevant.*
- *The criteria should specify the electronic interfaces, specifying data format and contents of GOs to be imported, which the respective country accepts for imports of GOs (such as the EECS Hub and any other interfaces accepted).*
- *Conditions for the recognition of GOs from other countries should be that they were issued based on Art. 15 of Directive 2009/28/EC or compatible national legislation, and that they meet the explicit requirements set in Art. 15, for example, regarding the information content of the GOs.*
- *The recognition of GOs from other countries should be rejected if these countries have not implemented an electricity disclosure system.*
- *The recognition of GOs from other countries should be rejected if the country which has issued the GOs or the country which is exporting the GOs have not implemented appropriate measures which effectively avoid double counting of the attributes represented by the GOs. Such appropriate measures should ensure the exclusivity of the GOs for representing the attributes of the underlying electricity generation, implement clear rules for disclosure, establish a proper Residual Mix (see chapter 5) or equivalent measures, and ensure their actual use. Furthermore, the appropriate measures should ensure that attributes of exported GOs are subtracted from the Residual Mix of the exporting country and cannot be used for disclosure at any time in the issuing or the exporting country by explicit mechanisms, unless the GOs are re-imported and cancelled there.*

A separate document has been drafted by RE-DISS II with proposals for recognition criteria (See document titled “Report on potential relevant criteria for acceptance of GO and on different possible approaches for acceptance procedures”).

European countries should establish a register of their decisions taken regarding the acceptance of imported GOs, which gives guidance to other competent bodies and also provides transparency for market actors.

4 Disclosure Schemes and other Reliable Tracking Systems

European Directives require EU and EEA member states to implement full disclosure systems. However, the analysis undertaken in the course of the E-TRACK project showed that as of 2009 not all countries had fully implemented these requirements yet. As of 2015 there are still some hints of incomplete compliance regarding disclosure schemes.

In order to set up a full disclosure system, GOs and a Residual Mix should be implemented (see the following chapter 5 on the Residual Mix). As a third element, other Reliable Tracking Systems may be implemented where appropriate, but these should fulfil certain criteria.

Best Practice Recommendation:

[22] Full disclosure schemes should be implemented, including the disclosure of CO_2 emissions and radioactive waste.

[23] (Other) Reliable Tracking Systems (RTS) should be defined where appropriate based on criteria of added value, reliability and transparency.[10]

[24] RTS can comprise, where applicable:

- *Homogenous disclosure mixes for non-competitive market segments where no choice of supplier or different products exists,*
- *Support systems whose interaction with disclosure requires a certain allocation of the attributes of supported generation (for example, a pro-rata allocation to all consumers in a country in which RES electricity is supported by a feed-in tariff),*
- *Contract-based tracking (see chapter 6 below).*

5 Calculations of residual mixes

The use of uncorrected generation statistics for purposes of disclosure should be avoided, because this leads to double counting in relation to GOs (and other Reliable Tracking Systems, if applicable).[11] A Residual Mix should be provided for disclosure of electricity of unknown origin, based on the methodology developed in the RE-DISS project. For details of the recommended methodology for residual mix calculations see document "D7.2 The Residual Mix and European Attribute Mix Calculation", which is available on the RE-DISS website.

Best Practice Recommendation:

[25] All countries should provide a Residual Mix as a default set of data for disclosure of energy volumes for which no attributes are available based on cancelled GOs or based on other Reliable Tracking Systems (RTS, see item [23]). The use of uncorrected generation statistics (for example on national or ENTSO-E, Nordel etc. levels) should not be possible.

[26]

a) *The calculation of the Residual Mix should follow the methodology developed in the RE-DISS project.*

b) *As part of this methodology, competent bodies should ensure that double counting between GOs they have issued, other Reliable Tracking Systems in use in their country and the Residual Mix is excluded.*

[27] Competent bodies from all countries in Europe should cooperate in order to adjust their Residual Mixes in reflection of cross border transfers of physical energy, GOs and RTS. For this purpose, com-

10 For more details on the criteria for Reliable Tracking Systems please see the final report of the E-TRACK project.

11 For more details on this issue please see the final report of the E-TRACK project.

petent bodies should use data provided by the AIB.[12] They should also support the collection of input data for the related calculations by the AIB.

[28] As a default, the Residual Mix should be calculated on a national level.[13] However, if the electricity markets of several countries are closely integrated (for example in the Nordic region), a regional approach to the Residual Mix may be taken. This should only be done after an agreement has been concluded between all countries in this region which ensures a coordinated usage of the regional Residual Mix.

6 Contract-based tracking

At the time this version is being drafted, although some progress have been made since when the project started, there are still many countries in which producers and suppliers are using an implicit allocation method for disclosure attributes which follows the bilateral contracts which are concluded in the electricity market. In most cases, market participants simply assume that they are receiving a certain set of attributes from their contractual counterparts in the electricity market. In most of these countries, this tracking mechanism is not clearly regulated, its relation to GO systems and RTS is not clarified and there are no reliable statistics about the volumes and types of electricity attributes which are tracked through this mechanism. This makes it impossible to generate a reliable Residual Mix and inevitably leads to double counting of generation attributes, including those represented by GOs. In order to establish reliable tracking systems, contract-based tracking should either be banned or the related practices need to be improved significantly by clear regulation and statistics.

Best Practice Recommendation:

[29] If contract-based tracking is allowed in a country, it should be regulated clearly.

[30] Such regulations should ensure that

- *The rules of the tracking system are transparent and comprehensive and are clearly understood by all participants in the system.*
- *Double counting of attributes and loss of disclosure information is minimised within the contract-based tracking scheme and also in the interaction of the contract-based tracking scheme to GOs and other RTS (if applicable). As a precondition for this, the contract-based tracking scheme should be able to provide comprehensive statistics about the volumes and types of electricity attributes which are tracked through it.*
- *The relevant information for disclosure purposes should be available in time to meet the timing requirements set out in chapter 7.*

[31] If suppliers of electricity intend to use contract-based tracking in order to fulfil claims made towards consumers regarding the origin of a certain electricity product (for example a "green" energy product), GOs should be used in addition to the contract (see also item [38]).

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12 The Association of Issuing Bodies has taken over from RE-DISS the calculation of Residual Mixes for consumption year 2015 and after.

13 Exceptions may apply when the domestic market is separated into two or more regions. In this case, regional mixes can be determined. See also the introduction of this document on the usage of the term "country".

[32] If a country implements a system in which generation attributes are allocated to suppliers and consumers of electricity "ex post" based on the contracts concluded in the electricity market, then such a system should fulfil the requirements mentioned above in order to qualify as a Reliable Tracking System (see item [23]). This includes the need to produce reliable statistics about the attributes allocated by this system.

7 Timing of Disclosure

It is necessary to coordinate the timing of the most relevant steps for calculating disclosure data across Europe. This helps to avoid market distortions and possibilities for arbitrage deals between different countries with different deadlines and is a precondition for the recommended cooperation of European competent bodies regarding the calculation of their Residual Mixes (see item [26]).

Best Practice Recommendation:

[33] Electricity disclosure should be based on calendar years.

[34] The deadline for cancelling GOs for purposes of disclosure in a given year X should be 31 March of year X+1 (see item [5]).

[35] The timing of the calculation of the Residual Mix should be coordinated across Europe:[14]

- *By 30 April X+1 all countries should determine their preliminary domestic Residual Mix and whether they have a surplus or deficit of attributes.*
- *By 15 May X+1, the European Attribute Mix should be determined.*
- *By 31 May X+1, the final national Residual Mixes should be published.*
- *As of 1 July X+1 the disclosure figures relating to year X can be published by suppliers.*

It must be noted here that some countries are using diverging disclosure periods: Austria, the United Kingdom and Estonia are using financial years which are different from calendar years. In Portugal suppliers are disclosing based on rolling 12 month invoicing periods[15] and therefore disclosure figures are determined on a monthly basis. In order to avoid market distortions and possibilities for arbitrage deals between countries with different deadlines and in order to support the cooperation of competent bodies regarding the calculation of their Residual Mixes, these countries should move to a calendar year disclosure period whenever possible.

8 Further Recommendations on Disclosure

The following additional items have been identified as recommendations for disclosure systems. For details on the background of these items please refer to the E-TRACK final report.

[14] For details of the recommended methodology for residual mix calculations see document "D7.2 The Residual Mix and European Attribute Mix Calculation" on the project website. See also item [28] on the regional scope of the Residual Mixes.

[15] This is now true only for the disclosure that is done on the internet, the disclosure on invoices covers the calendar year.

Best Practice Recommendation:

[36] All countries should clarify the relation between their support schemes for RES & cogeneration on the one side and GOs and disclosure schemes on the other side. Where necessary, the support schemes should be defined as RTS (see item [23]).

[37] If support schemes in a country are using transferable certificates, then these certificates should be separated from GOs and should not be used for disclosure (see also item [14]).

[38] All electricity products offered by suppliers with claims regarding the origin of the energy (for example "green" or low-carbon power) should be based exclusively on cancelled GOs. No other tracking systems should be allowed, with the exception of mechanisms required by law, e.g. a pro-rata allocation of generation attributes to all consumers which is related to a support scheme (see item [24]).

[39]

a) As required by Art. 3 (9) of the IEM Directive 2009/72/EC annual disclosure of the supplier mix on or with the bill should be mandatory. This should also include information on environmental impacts.

b) Additionally, suppliers offering two or more products which differ in terms of the origin of the energy should be required to give product-related disclosure information, including environmental impacts, to all their customers including those who are buying the default "remaining" product of the supplier.

[40] There should be clear rules for the claims which suppliers of, for example, "green" power can make towards their consumers. There should be rules how the "additionality" of such products can be measured (the effect which the product has on actually reducing the environmental impact of power generation), and suppliers should be required to provide to consumers the rating of each product based on these rules.

[41] Claims made by suppliers and consumers of "green" or other low-carbon energy relating to carbon emissions or carbon reductions should also be regulated clearly. These regulations should avoid double counting of low-carbon energy in such claims. A decision needs to be taken whether such claims should adequately reflect whether the energy purchased was "additional" or not.

[42] If suppliers are serving final consumers in several countries rules must be developed and consistently implemented in the countries involved on whether the company disclosure mix of these suppliers should relate to all consumers or only to those in a single country.[16]

[43] The following recommendations should be followed with respect to the relation of disclosure to the cooperation mechanisms (Art. 6 – 11 of Directive 2009/28/EC):

- *If EU member states or member states and other countries agree on Joint Projects, such agreements should also clarify the allocation of attributes (via GOs, RTS or Residual Mix) issued from the respective power plants.*

16 This is also relevant in Belgium, in which disclosure is governed on the regional level.

- *If EU member states agree on Joint Support Schemes, such agreements should also clarify the allocation of attributes (via GOs, RTS or Residual Mix) issued from the power plants supported under these schemes.*

The RE-DISS team has produced a separate document, "RE-DISS Guidelines for the Regulation of the Front-side Disclosure of Electricity", which gives some suggestions regarding the implementation of nationally harmonised disclosure rules. The document is available at http://www.reliable-disclosure.org/documents/.

9 Steps for determining the disclosure figures of a supplier

In order to clarify how the recommendations in this document could be applied by market participants, the following process description is given.

[44] Suppliers should apply the following steps in order to determine their disclosure figures:

- *During the disclosure period, suppliers which aim at a certain disclosure mix should use the "explicit" tracking mechanisms which are available in the respective countries in order to acquire the desired generation attributes. In all countries this comprises GOs, but contract-based tracking and certain other Reliable Tracking Systems might also be available.*
- *If suppliers are offering electricity products with claims regarding the origin of the energy (for example "green" or low-carbon power) then they should acquire the related generation attributes during the disclosure period exclusively based on GOs. Besides such products, GOs can also be used for shaping the overall disclosure mix of a supplier.*
- *All GOs which are meant to be used for the disclosure period of calendar year X should be cancelled before the deadline of 31 March X+1.*
- *After this deadline, the total volume of electricity sold to final consumers and all generation attributes which have been acquired based on cancelled GOs and other Reliable Tracking Systems including contract-based tracking (if applicable) should be accounted for. This may include a pro-rata allocation of attributes of electricity supported, for example, under a feed-in tariff to all suppliers, which might have been implemented in the respective country as a Reliable Tracking System.*
- *Any use of contract-based tracking should strictly follow the regulations issued for the respective country. Any attributes assumed for or notified by the contractual counterpart in the electricity market may only be used if explicitly allowed by such regulations. National generation statistics and other data which is not corrected by the different tracking systems in use should not be used at all. Instead, the Residual Mix should be used (see below).*
- *Suppliers should respond in time to requests by the Competent Body on statistical reporting of volumes of electricity sold to final consumers and of any "explicit" tracking mechanisms used.*
- *Typically the volume of electricity sold to final consumers is larger than that of the generation attributes acquired through "explicit" tracking mechanisms. In this case the missing generation attributes should be "filled up" from the Residual Mix for the respective country, which will be determined and published by the Competent Body according to the schedule set out in chapter 7.*

- *The overall supplier disclosure mix consists of the attributes of all electricity sold to final consumers, including all products which might be differentiated.*
- *If electricity products which differ in terms of the origin of the energy have been offered to part of the consumers then these consumers will receive product-related disclosure information based on the GOs cancelled for this purpose. However, in this case such product-related disclosure information should also be given to those consumers who have not purchased a specific product. This means that a "remaining" product should be defined which consists of the disclosure mix of the supplier minus the attributes of all separated products. This information should be disclosed as product-specific disclosure data to the consumers who are receiving the "remaining" product.*[17]
- *CO_2 emissions and radioactive waste should be disclosed on the supplier and product levels in direct relation to the fuel mix which is being disclosed.*[18]

The RE-DISS team has produced as a separate document "Disclosure Guidelines for Electricity Suppliers", which shall support electricity suppliers in optimising with regards to contents and format the information they give to their end consumers. The document is available at *http://www.reliable-disclosure.org/documents/.*

17 This recommendation avoids the implicit double counting of attributes which might be part of, for example, a "green" power product and which also appears in the overall disclosure mix of the supplier. See the E-TRACK final report for more details.

18 For this purpose, generic technology-specific emission factors could be applied, which are defined by the domain in which the GO is used.

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