

# Ecodesign Self-Regulation: a Price Too High?

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## Abstract

Self-regulation has priority in the Ecodesign Directive, subject to meeting certain criteria intended to impose higher obligations than an Implementing Measure (IM) on industry. Only 4 self-regulatory approaches have been proposed to date. This paper explores the criteria set by the Commission, taking the Voluntary Agreement for Complex Set Top Boxes (VA for CSTBs) as a case study. Using the findings from the 1<sup>st</sup> Independent Inspector report and experience of the operation of the VA the paper demonstrates that the VA meets those criteria, particularly in terms of environmental ambition, transparency and accountability, but that certain aspects of the status of the VA could mean that the benefits of self-regulation are diminished. Ways to improve the effectiveness of the VA, such as publicity to extend market coverage and exchanging experience between VAs, are presented.

## 1 Setting the scene for Voluntary Agreements (VAs) in the EU

### *Published Criteria: Ecodesign and Guidelines*

The Ecodesign Directive (2009/125/EC) [1] establishes a framework for the setting of eco-design requirements for energy-related products. Under this framework, eco-design requirements can be set by either Implementing Measures (IMs), applicable horizontally or to specific products or product groups, or self-regulation specific to products.

The provisions of the Directive relevant to self-regulatory initiatives are: recitals 18-21, Articles 15 and 17, and Annex VIII. In recital 18 the Directive specifies that “Priority should be given to alternative courses of action such as self-regulation by the industry where such action is likely to deliver the policy objectives faster or in a less costly manner than mandatory requirements”. The concept is further elaborated in recital 19 where it affirms that “Self-regulation, including voluntary agreements offered as unilateral commitments by industry, can enable quick progress due to rapid and cost-effective implementation, and allows for flexible and appropriate adaptations to technological options and market sensitivities.” In addition, Article 17 establishes the minimum criteria (described in Annex VIII) in which self-regulatory measures will be assessed against.

The Commission also provides Guidelines [2] for VAs under the Ecodesign Directive. It establishes that as a basic requirement a VA needs a high level of environmental ambition, reiterates recital 18 and elaborates how the 9 criteria in Annex VIII could be met.

Unlike Implementing Measures, voluntary agreements are not legally binding.

### *Proposed Ecodesign VAs*

There are currently 4 VAs proposed by the industry [3]. These are:

- Complex set top boxes (CSTBs)
- Imaging equipment
- Machine tools
- Medical imaging equipment

The VA for CSTBs is ahead in the process. The draft Commission Recommendation [4] and explanatory notes [5] have been prepared and, once published in the Official Journal of the EU, the VA for CSTBs will be the first self-regulatory measure under the Ecodesign Directive to be formally recommended by the Commission.

## 2 The Voluntary Agreement for CSTBs: initial process

The Lot 18 preparatory study on CSTBs [6] was completed by BIO in December 2008. Prior to that the pay TV industry, led by the Digital Interoperability Forum, had initiated work on a VA. A final industry proposal [7], prepared by a group representing all elements in the CSTBs design, specification, production and deployment chain, was delivered in June 2009 to DG Energy<sup>1</sup>. This was discussed in October of the same year in the Consultation Forum (CF). The first VA Steering Committee meeting was held in January 2010

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<sup>1</sup> Then DG Transport and Energy

and the first Independent Inspector Report delivered in May 2012.

### ***Criteria for a VA and the VA for CSTBs***

The Commission explanatory notes [8] to the CF meeting explained how the CSTBs VA met the criteria in Annex VIII of the Directive (these provide a useful basis on which to assess the “price” of a VA):

#### 1. Openness of participation

The agreement development is open to all interested parties. Its drafting followed a transparent process and timetable that was agreed with all members. On 8 September 2009 the Digital Interoperability Forum organised a workshop in Brussels in order to raise the awareness about this initiative among industry and other stakeholders.

#### 2. Added value

The draft VA aims at improving the energy efficiency of CSTBs beyond business as usual. Broadly speaking and with some exceptions the VA's Tier 1 levels correspond to the recommendations of the preparatory study, but are introduced one year earlier. The VA's Tier 2 levels are less ambitious in terms of timing and levels than the recommendations of the study. It is worth noting however that Tier 2 and 3 as recommended by the preparatory study are partly based on best not available technology (low-power standby mode for CSTBs). A more detailed comparison of the timing and levels of the base-case, the VA and preparatory study suggestions is provided in Annex I.

#### 3. Representativeness

Annex VIII of the Directive stipulates that Industry and their associations taking part in a self-regulatory action shall represent a large majority of the relevant economic sector. An estimation of the covered market share will be provided by the possible signatories of the VA and assessed by the Consultation Forum. Early indications provided by a market research company on the request of the companies supporting the VA indicate that this market share is in “in excess of 70% to date”. Should there be a lack of evidence on the representativeness of the VA by November 23 (six weeks from the meeting of the Consultation Forum); the COM services would pursue the legislative process [...].

#### 4. Quantified and staged objectives

The draft VA provides quantified objectives to be introduced in two stages [...]. These objectives are to be met by the indicated deadlines by 90% of the signatories' products placed on the market (in the case of manufacturers) or put into service (by the service providers). In addition to quantified objectives the draft

VA includes commitments on the provision of information to the consumer and guidelines on power management.

#### 5. Involvement of civil society

The draft VA stipulates that the meetings of the Steering Committee will be opened to any "person who wishes to attend and who the Steering Committee believes represents a legitimate stakeholder".

#### 6. Monitoring and reporting

The draft VA provides the modalities for monitoring and reporting. The monitoring will be performed by the Steering Committee composed of signatories and of the European Commission and its meetings will be opened for the participation of Member States, EFTA, and any other person who wishes to attend and who the Steering Committee believes represents a legitimate stakeholder. This monitoring will be performed on the basis of reports submitted by an Independent Inspector (the Joint Research Centre expressed willingness to perform this role subject to an agreement on the precise modalities of this involvement) based on data collected from the signatories provided in accordance with Annex G of the draft VA.

#### 7. Cost-effectiveness of administering a self-regulatory initiative

It is expected that the administrative burden as compared to other available policy instruments will remain limited.

#### 8. Sustainability

The draft VA responds to the policy objectives of the Ecodesign Directive by aiming at reducing the environmental impact of CSTBs.

#### 9. Incentive compatibility

The first element is Regulation 1275/2008 with regard to Ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment. CSTBs fall under the scope of that Regulation nevertheless the operational modes included in the draft VA do not include 'off' and standby modes as defined in the Regulation. The preparatory study indicated that although in principle CSTBs can operate in five different modes- on, standby active, standby passive, off and disconnected, most CSTBs do not have a standby mode passive and off is not used either since complex STBs need to be constantly in on mode or networked standby to be able to operate properly. The assessment whether off mode and/or standby mode as defined in Regulation 1275/2009 are appropriate for the intended use of CSTBs has to be performed on a case-by-case basis by their manufacturers and specified accordingly in

the technical documentation. The second element related to this initiative is the European Code of Conduct for Digital TV Services orchestrated by the JRC. It is suggested to find synergies between these two initiatives both in terms of administration and areas of focus. [...]

### 3 Benefits of a VA

#### Environmental ambition

The VA for CSTBs offered a number of clear benefits. First, subject to meeting the requirements, it provided a higher level of environmental ambition for Tier 1 when compared with the preparatory study (Figure 1).



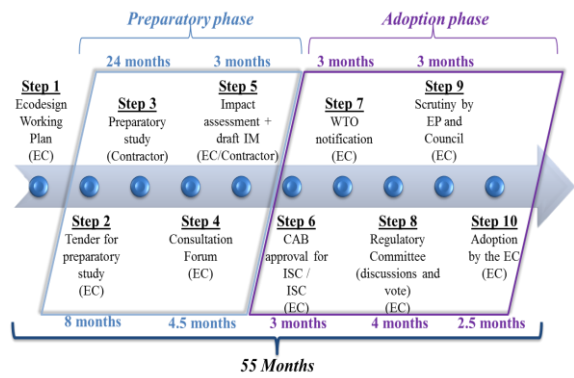
**Figure 1: Energy consumption limits – comparison between the VA for CSTBs and Lot 18 preparatory study**

#### Holistic approach

Secondly, the VA adopted a holistic approach, involving all players in the pay TV CSTBs value-chain (service providers, equipment and component manufacturers, software and conditional access providers, and silicon vendors) whose activity impacts energy efficiency. An Implementing Measure would only apply to manufacturers and/ or service providers<sup>2</sup>.

#### Speed of implementation

Thirdly, the VA provided faster implementation. Tier 1 of the VA came into force about 1 year from delivery of the industry proposal to the Commission or 1.5 years from the final draft of the Preparatory Study, despite the lack of certainty about its status. In contrast, an Implementing Measure is likely to take more than 2.5 years before coming into force (Figure 2).



**Figure 2: Ecodesign preparatory and adoption procedure timelines**

However, the Commission approval/recommendation process for the VA for CSTBs has been lengthy<sup>3</sup>, taking almost 3 years from the CF discussion.

#### Flexibility and Innovation

VAs accommodate flexible and rapid adaptation for technological developments. Where new technologies are introduced and which were not envisaged when the requirements are set, the VA allows for the energy consumption of the new functionality not to be taken into account during the measurements until the next revision and the Steering Committee decides what energy allowances should be permitted in future measurements and reporting. For example, ultra high definition has been added as a new functionality in the latest iteration of the VA (version 3.0) but was not included in version 2.0.

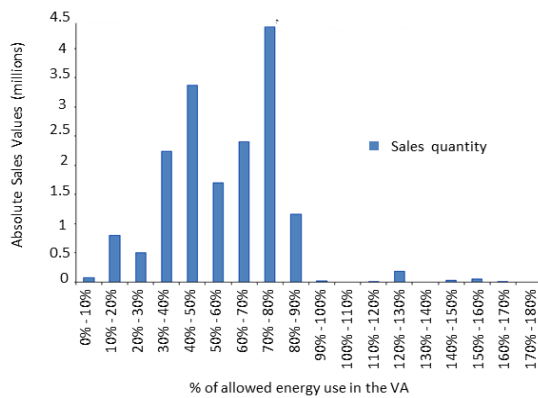
#### Level of ambition of the VA for CSTBs

The Independent Inspector Report [9] for the 1<sup>st</sup> reporting period was published in May 23<sup>rd</sup> 2012.

Figure 3 shows the distribution of sales with energy consumption of the CSTBs reported to the Independent Inspector.

<sup>2</sup> The criteria for responsibility is who places the product on the market and/or or puts it into service.

<sup>3</sup> Due to the fact that this was the first VA and the process had to be established.



**Figure 3: CSTBs put on the market distributed according to % of allowed Total Energy Consumption**

The VA requires that “each Signatory shall ensure that 90% of its CSTBs comply with the applicable energy consumption targets of the Voluntary Agreement Concerns that signatories to a VA may gravitate towards the highest permissible energy consumption and may be less environmentally ambitious due to the self-regulatory approach of a VA can be dispelled also. Figure 3 shows that the vast majority of CSTBs consume 80% or less of the energy allowed. Note also that this level of information is not available for an IM and a special survey or study to review the effectiveness of an IM would be required to obtain it.

#### **Market coverage of VA compared with IM**

An independent report [10], prepared in January 2012, showed that signatories to the VA accounted for 77% of the total market for CSTBs forecast to be shipped in the EU in 2012. This exceeds the coverage stipulated in the Commission Guidelines [2], which is over 70%. Since January, 2 major CSTBs manufacturers have signed the VA, potentially taking the market coverage to about 80%.

According to the Ecodesign Evaluation Report [3] undertaken for the Commission, “the level of non-compliance [for an IM] is in the range of 10 – 20%”, refuting the common misconception that the existence of a legal instrument infers 100% compliance. Thus, the VA for CSTBs is at least as effective in compliance terms as an IM, despite concerns which are expressed to the contrary.

#### **Effectiveness of market surveillance authorities versus effectiveness of Independent Inspector; Accountability, Reporting and transparency**

The Evaluation Report [3] and many Member States themselves acknowledge that market surveillance of IMs and any enforcement action is hampered by lack of resources, with priority being given to other product

issues such as safety. Thus, it would be possible for a manufacturer to assess the risk in avoiding the requirements of an IM<sup>4</sup>. This contrasts with the VA where signing means reporting of information and, therefore, surveillance and transparency of compliance.

The 1<sup>st</sup> Independent Inspector Report for the CSTBs VA reveals that two companies failed to meet the reporting requirements of the VA. With the report being publicly available and made available to the Consultation Forum non-compliance creates immediate potential damage to corporate reputation. Furthermore, the fact that the names of the signatories, together with information on compliant models of CSTBs, are made public means that non-signing companies can be identified readily. Thus, it can be argued that a VA gives a greater, and more accessible, level of transparency about compliance.

#### **Harmonisation and single market issues**

The Directive is, of course, a single market instrument intended to facilitate the free movement of goods through the harmonisation of ecodesign obligations. In that respect it has an advantage over a VA which, since it is not deemed to be a legal instrument, can afford no guarantee that a Member State will not impose its own ecodesign regulatory requirements on a product covered by a VA. Any Member State action would, however, have to be justified as necessary and proportionate and it would be reasonable to conclude that signatories, having regard also to the Commission’s forthcoming Recommendation of the VA, have taken the view that this possibility is unlikely.

On the other hand the Directive does not provide for harmonisation of enforcement, including sanctions, and while the requirements of an IM may be the same across all 27 Member States, the penalty for non-compliance may differ. In this respect a VA offers industry a distinct advantage in that it has one harmonised enforcement and sanctions process

#### **The costs of setting up and maintaining a VA versus cost of an IM**

According to the Commission’s explanatory notes submitted to the CF [8] the administrative burden of the VA for CSTBs was expected to “remain limited” compared to other policy instruments. The Evaluation Report states that the Commission saw little difference in the requirements placed on their resources. Given

<sup>4</sup> The fact that compliance is put at 80-90% only suggests that either some manufacturers are unaware of the legislation or are failing to take account of it in their CE marking.

the limited experience to date with VAs and the path finding nature of the VA for CSTBs it is probably too early to judge whether there is any cost advantage in VAs.

However, two points are clear. First, for industry a VA costs more; not only is there the annual fee (albeit modest per signatory but sufficient to deter two service providers from signing) for maintaining the VA legal entity and contributing to the Independent Inspector fee but signatories must also provide data to the Independent Inspector which can involve more internal resource than a CE marking.

Secondly, a VA does not involve the costs associated with the review of an IM as it is structured as an evolutionary self-regulatory mechanism. Thus, the resource demands now being placed on the Commission as it embarks upon the review of IMs can be avoided.

#### ***Juxtaposition of the VA and Regulation 1275/2008***

In addition to the potential risk of regulatory intervention by individual Member States the Commission's view of the non-legal status of a VA gives rise to a tangible disadvantage. Regulation 1275/2008 [10] is a horizontal IM which sets in two tiers standby and power management requirements for all products within scope. The Commission's view [8] is that CSTBs are in scope and, hence, must comply with the requirements of Regulation 1275, which could include stating that the standby and power management provisions are „inappropriate for the intended use“ of the product.

A number of issues arise. First, if a manufacturer or service provider decides to meet with the standby energy level of Regulation 1275/2008 then this significantly constrains the flexibility available in the total energy consumption (TEC approach) used in the VA.

Secondly, although the Directive places the onus for compliance on the entity placing the product on the market and/or putting it into service, Regulation 1275 states that it is the manufacturer who is responsible for claiming „inappropriate for intended use“ with the CE marking. The Independent Inspector Report shows that there are differences – sometimes significant – between the energy consumption of the same CSTB made available by a manufacturer and by a service provider. This reflects the fact that, in deploying a CSTB, service providers include functionality to enhance their products and compete for customers. While manufacturers are expected to carry out due diligence prior to claiming „inappropriate for intended use“, making the statement involves reliance on a third party (service provider) with associated risks. Given also that a manufacturer may supply the same CSTB

to more than one third party who may have different service offers, the need to comply with Regulation 1275/2008 creates risk and uncertainty which would be avoided by disapplying the Regulation where a VA is in place.

## **4 Ways to improve the efficacy of VAs**

Experience with VAs is so far limited. However, it is possible to draw some lessons from the VA for CSTBs to date. First, although a few large manufacturers and service providers represent a significant proportion of the market there are many other players who had to be attracted to the VA for its market coverage to reach the level specified by the Commission. The Digital Interoperability Forum and signatories to the VA utilised various connections and fora to publicise the VA with some success. The task of extending market coverage could be supported by the Commission and Member States through publicity on websites, local contacts, etc.

Secondly, the existence of the JRC Code of Conduct has resulted in confusion about the primary ecodesign instrument. Notwithstanding the fact that the Code of Conduct could not meet the criteria of Annex VIII of the Directive, some stakeholders claim that they prefer to meet the more ambitious targets of the Code (ignoring the fact that it is possible to use less energy than the levels set in the VA). Despite the Commission's desire for “synergies to be found” [8] between the VA and CoC only recently has it been agreed that any company claiming to be compliant to the Code must also be a signatory to the VA<sup>5</sup>.

Thirdly, it is clear from the Independent Inspector Report that some clarification of reporting requirements, including timescales for reporting, is required. In part this reflects the drafting in the VA but also the novelty of the requirements and communication thereof within signatories.

Fourthly, the path finding nature of the VA for CSTBs and the participation of many companies from different countries with different approaches to regulatory and environmental matters has required a more flexible, ad hoc approach to the management of the VA for CSTBs than may be desirable. More project management techniques are being introduced. However, it could be helpful for stakeholders in other VAs or potential VAs to be able to avail themselves of the CSTBs VA experiences. Similarly the VA for CSTBs may benefit from insight into other VAs. It would be interesting to explore whether the Commission (or in-

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<sup>5</sup> At this stage further synergies are being discussed.

dustry) could facilitate some exchange between the different VAs, which may also alleviate resource demands on all parties.

Fifthly, the Commission, some Member States and some NGOs have attended Steering Committee meetings. This is an essential element in ensuring the transparency and accountability of the VA for CSTBs, as is reporting to the Consultation Forum. However, it should be recalled that a VA is a unilateral industry self-commitment and thus the role of non-industry stakeholders is formally limited to observation. The extent to which non-industry requests can be accommodated has to be decided by the Steering Committee who is ultimately responsible for the success of the VA.

## 5 Conclusions

The question posed in the title of this paper is whether the price of eco-design self-regulation is too high. This raises a further question of too high for whom: the policy objective, the regulatory process (in particular, the priority to be given to self-regulation), industry or civil society? On the basis of the above analysis it can be argued that the policy objective of delivering environmental improvements has been met and that these have been delivered faster than would be the case with an IM. Furthermore the VA for CSTBs provides greater transparency and accountability.

The benefits of the flexibility of a VA remain to be tested and ultimately it is this flexibility, together with the degree of self-regulation which is in practice available to industry which will determine the price for industry. In this context, if VAs are to be a viable alternative to IMs more consideration has to be given to the juxtaposition of IMs (such as Regulation 1275) with VAs and to the expectations for the role of non-industry stakeholders. At this juncture the price for industry is finely balanced. Overall, however, based on the example of the VA CSTBs, there seems to be advantages of self-regulatory measures over Implementing Measures and thus the former should be incentivised and better conditions, such as an exchange of information, enhanced publicity, etc. should be put in place to increase the adoption and success of self-regulatory initiatives such as voluntary agreements.

## 6 References

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- [4] Commission Recommendation of XXX on the voluntary agreement on complex set top boxes, Draft Commission Staff Working Document.
- [5] Explanatory document 07/05/2012, Annex – Summary of main points.
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- [7] Voluntary Industry Agreement CSTBs – V2 (12 06 09).
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