

ACEA Comments to NL EFV guidance paper (April 6, 2009)

ACEA acknowledges the guidance paper by The Netherlands as helpful input. Consequently the ACEA input to the feasibility statement was extended.

Based on the NL EFV guidance paper ACEA has some comments regarding the applied criteria and the proposed concepts.

Following the decision of GRPE ACEA evaluate the proposed EFV concepts on the basis of the SWOT analysis.

1. Comments regarding the Criteria proposed by The Netherlands

“Criteria

Important aspects of a possible EFV concept are:

Time horizon: long term guidance for R&D budgets would be useful, but risk is that a sense of urgency is missing. Only a shorter time horizon would stimulate competition.”

ACEA comments:

- The criterion time horizon is already included in the current draft of the EFV feasibility statement from an environmental perspective (“Application – current vehicle technology, future vehicle technology”).
- ACEA Proposal: add in the evaluation table of chapter 4 the suggested criterion “time horizon” and take the above mentioned existing line items as sub-criteria (ie basically introducing a new sub-header for those two items).
- However, it is unclear from the NL EFV guidance paper what R&D budgets are meant (private / public?).
- Before looking at this criterion an agreement about applications is necessary. At least for R&D of automotive manufacturers guidance is already in place based on corporate strategies, consumer trend forecasts, competitive assessment, legislative trends, technology developments etc. EFV would add just another input. This would make only sense if EFV would be more comprehensive by looking at least at all dimensions of sustainability (not only environment) as well as customer acceptance.
- For public R&D guidance tools should be more comprehensive, too.
- Sense of urgency for certain aspects as e.g. CO2 is already in place. It is more a question of time finding clever solutions affordable for consumers.
- The R&D application is no priority for EFV concepts

“Regional differences (e.g. test-cycle, limit values, environmental priorities) need to be accommodated to some extent. Ultimately, world-wide harmonization should be sought after”

ACEA comments:

- We fully agree that the regional differences are a crucial criterion. The current EFV paper reflects this in chapter 5 as this is not a specific criterion for the different evaluated EFV concepts but a fundamental open issue for future discussions.

“Accuracy refers to in how much details the criteria and information need to be available for proper judgment of vehicles. The higher the accuracy needed, the more effort from (and burden on) manufacturers is required.”

ACEA comments:

- We fully agree but prefer the current term “Effort for application”. It should be noted that there is not only the effort for manufacturers but also for those applying the EFV concept.

ACEA Proposal: Amend in table of chapter 4 to “Effort for application / Accuracy”

“Consumer involvement: an EFV concept could be used to inform consumers. It also could serve as a basis for incentives.”

ACEA comments:

- We fully agree that this is one of the agreed applications. In the criterion table of chapter 4 we tried to cover this under “Effort for Application – User expertise respectively communication”.
→ Proposal: Add an additional line “Suitable for private and public consumer information” in the table of chapter 4.

“Flexibility refers to whether it is possible to update, upgrade and/or adjust the criteria or levels/parameter values”

ACEA comments:

- We fully agree that this is an important criterion. This is covered under “Data - Frequency of data updating...” in the chapter 4.
→ Proposal: Rename to “Flexibility / Frequency of data updating”

“Applicability refers to whether the concept can be used only in developed countries (if the EFV level is too strict?) or also in developing countries.”

ACEA comments:

We fully agree that this is an important criterion and it is included in the SWOT discussion.

2. SWOT analysis of the EFV concepts discussed by The Netherlands

In the following all evaluation criteria listed in chapter 4.2 of the EFV feasibility statement are applied to the three concepts proposed by The Netherlands. As the concepts are not fully described (unclear what and how environmental dimensions are considered and thus unclear the data requirement, system boundaries, etc.) there are several field linked with a question mark.

Data from chapter 4.2.1	EFV concepts		
	Ultimate EFV concept	Threshold EFV concept	EFV - Label concept
Environmental aspects covered: no - partly - yes			
Air emissions:CO2	?	?	?
Air emissions: regulated pollutants	?	?	?
Air emissions: other GHG	?	?	?
other pollutants: water (yes/no)	?	?	?
other pollutants (e.g. waste streams): land (yes/no)	?	?	?
Use of materials/resources (recycled, renewable, non-renewable)	?	?	?
Use of energy resources (e.g. fossil fuels)	?	?	?
Use of water	?	?	?
Use of land	?	?	?
Recyclability	?	?	?
Toxics (health effects)	?	?	?
Noise	?	?	?
EMC	?	?	?
Effects on biodiversity and sustainability	?	?	?

Data from chapter 4.2.2	EFV concepts		
	Ultimate EFV concept	Threshold EFV concept	EFV - Label concept
Data: low/regional - partly - high/worldwide			
Availability of data regional	?	?	?
Quality of data regional	?	?	?
Flexibility/Frequency of data updating regional			
Availability of data worldwide/applicability			
Quality of data worldwide/applicability	?	?	?
Frequency of data updating worldwide/applicability			
System boundaries: no - partly - yes			
Tailpipe	?	?	?
Usage of vehicle (incl. evap emission etc.)	?	?	?
Production (vehicle, spare parts, fuel, other materials)	?	?	?
Recycling	?	?	?
Holistic (lifecycle & integrated approach)	?	?	?
Time horizon: not applied - partly - applied			
current vehicle technology			
future vehicle technology			
Application: not applied - partly - applied			
For specific vehicles			
A generic vehicle application			
Vehicle model			
other parts/systems (e.g. MAC's, tyres, GSI, TPMS, ...)			
interface: surface, infrastructure			
Evaluation context: no - partly - yes			
global environmentally impacts	?	?	?
local environmentally impacts	?	?	?
short term environmental impacts	?	?	?
mid term impacts	?	?	?
long term environmental impacts	?	?	?
Segment-based			
Effort for application/Accuracy: very high (--) high (-) neutral (o) low (+) very low (++)			
Time/cost	?	?	?
Self declaration, independent 3rd party review	?	?	?
User expertise	?	?	?
Communication			

However, certain differences follow the SWOT analysis:

1) The ultimate EFV concept

Strength

- Includes a long-term perspective as a uniform, harmonized scaling.
- Minor data inaccuracies do not matter if the distance to target is much bigger than potential data ranges.
- Regional differences are for some targets no problem (e.g. if a target would be zero xyz it does not matter if the test cycle is different)

Weakness

- Still regional differences remain: There is no world-wide or regional agreement on the long-term targets (e.g. for CO₂) nor an agreed comprehensive list of environmental dimensions.
- Not suitable for differentiation of current vehicles thus not suitable as an information system for governments or customers if the general distance to a long-term target is too big (all existing cars are in a close cloud around the current state of the technology – see figure).
- More suitable for developed countries

Opportunity

- Long-term guidance
- Puts every improvement into an ultimate perspective – so no risk of green washing

Threat

- If distance to long-term target is too big there is no incentive for improvements as anyway not visible vis-à-vis a too challenging target that is anyway only feasible in far future.

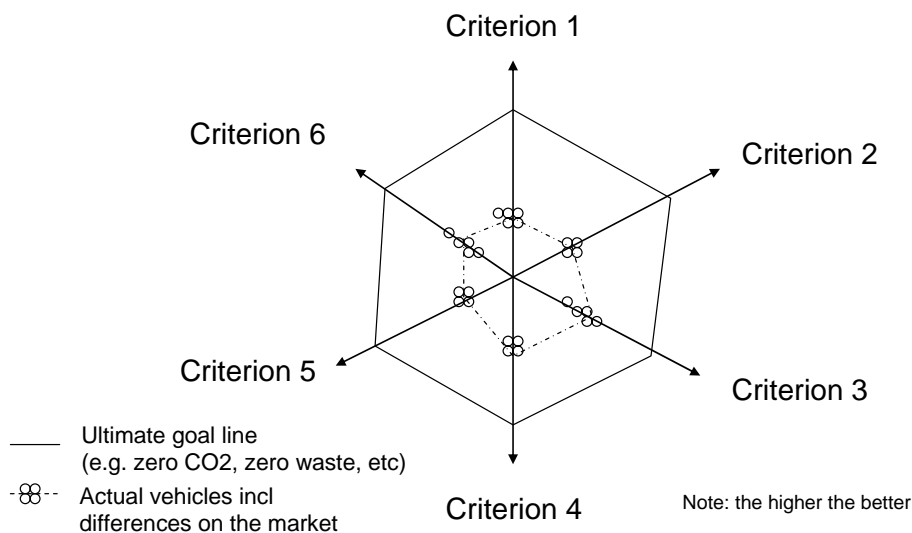


Figure 1: Issue of “ultimate” scaling in EFV concepts: no sufficient differentiation between existing vehicles

2) The Threshold EFV concept

Strength

- Depending on thresholds it can provide a reasonable mid-term guidance
- Allows a step-by-step approach for developed and other countries with regionally adopted thresholds that may merge in future in a world-wide harmonized threshold system.

Weakness

- Less suitable as information system if not offering for all vehicle segments sufficient EFV alternatives on the market.
- Requires either an extremely accurate long-term forecast of reasonable future threshold steps or provides no mid-term to long-term guidance at all. Note: if the forecasted steps are too challenging they become irrelevant (see ultimate concept) and/or technology prescriptive/not affordable, if forecasted steps are not challenging enough they provide no guidance
- Regional differences remain

Opportunity

- Possibility to up-date and up-grade with technological progress
- Accuracy and regional differences can be overcome e.g. by equivalence tables

Threat

- Not technology neutral if only looking at current niche performer (1%)
- No long-term guidance if threshold steps (future levels and timing) are not clear early enough
- Ignored as R&D guidance as not comprehensive enough (see remarks under 'time horizon')
- Customer confusion if an EFV becomes a non-EFV due to an up-date

3) The EFV label concept

Strength

- Information tool allowing reasonable selection of EFVs based on current market for each segment → relevance for customers is given.
- Allows for a harmonized approach for developed and other countries based on regional markets (thus different target levels but same approach).

Weakness

- Data accuracy needs to allow for a sufficient differentiation of existing vehicles → feasibility only given if based on anyway available data (e.g. from existing legislation).
- Regional differences remain

Opportunity

- Can be directly linked to incentives.
- Can be up-dated with evolving market

Threat

- Customer confusion if an EFV becomes a non-EFV due to an up-date

3. Conclusion

- The general issues mentioned in chapter 5 of the current draft of the EFV feasibility statement remain (regional differences in priorities etc.)
- If any, the labeling concept is the most realistic approach because
 - It is aligned to the targeted applications and target groups
 - Drives immediate improvement as impacting currently available vehicles (urgency)
 - Has less disadvantages and mainly needs to solve the items discussed in chapter 5