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# Fuel compatibility labelling

Work of TC 441 / DG MOVE



Fuel compatibility labelling proposal

## 1. Background of the Fuel Compatibility Labelling proposal.

Article 7 of Directive 2014/94/EC on the deployment of alternative fuels infrastructure.

1. Without prejudice to directive 2009/30/EC member states shall ensure that relevant, consistent and clear information is made available as regards those motor vehicles which can be regularly fuelled with individual fuels placed on the market or recharges by recharging points. Such information shall be made available in motor vehicle manuals, at refuelling and recharging points, on motor vehicles and in motor vehicle dealerships in their territory. This requirement shall apply to all motor vehicles, and their motor vehicle manuals, placed on the market after 18 November 2016.
2. The supply of information referred to in §1 shall be based on the labelling provisions regarding fuel compliance under the standards of the ESO's setting the technical specifications of fuels. Where such standards refer to a graphical expression, including a color coding scheme, the graphical expression shall be simple and easy to understand, and it shall be placed in a clearly visible manner:
  1. On corresponding pumps and their nozzles at all refuelling points, as from the date on which fuels are placed on the market
  2. On or in the immediate proximity of all fuel tanks' filling caps of motor vehicles recommended and compatible with that fuel and
  3. In motor vehicle manuals when such vehicles are placed on the market after 18 November 2016.
3. .... The Commission may ... mandate ESO's to develop compatibility labelling specifications, or may adopt implementing acts ( with the examination procedure ) determining the graphical expression, including a color coding scheme, of compatibility for fuels introduced in the Union market which reach the level of 1% of the total volume of sales,.....
5. If labelling provisions of the respective ESO standards are updated, if implemented acts regarding the labelling are adopted or if new ESO standards for alternative fuels are necessary, the corresponding labelling requirements shall apply to all refuelling and recharging points and motor vehicles registered on the territory of the Member States as of 24 months after their respective updating or adoption..



## 2. History of TC 441 activities

- December 2014
  - The Commission requests CEN to develop a fuel labelling proposal
- March 2015
  - Creation of CEN/TC 441 under the chairmanship of NEN
- June 2015
  - Kick-off meeting of TC 441
- September 2015 : Second meeting
  - First proposal of the Taskforce discussed in the TC 441 meeting. This proposal contained several possible options which were narrowed down in the meeting
- November 2015 : Third meeting
  - New proposal of the Taskforce discussed in the TC meeting.
  - Understanding on a possible fuel compatibility labelling seems to emerge.
  - Pending issues
    - Size of the label on the fuel pump
    - Adequacy to use 'XTL' as identifier for BTL, CTL or HVO type fuels
  - Draft proposal of the fuel compatibility labelling specification circulated
- December 18<sup>th</sup>, 2015 : audio call taskforce of CEN TC441
  - Try to resolve pending issues of November 2015 TC441 meeting

## 3. TC 441 view after 3th meeting of November 2015

- Supported graphic features of central identifier
  - Shape: Simple shapes per base fuel, only cut-out shapes with a thick outline ( instead of requiring it to be place on a square background
  - No use of language or EN number
  - Fuel codes used
  - Black identification on a white or silver background
- Location (4 places) and size
  - In the proximity of the fuel pump, the nozzle and the vehicle fuel cap. In the vehicle manual. Proximity of nozzle defined as 'part of the dispenser comprising, meter, housing, hose and pistol.
  - Size : 15 mm by 15 mm for all locations. Still a discussion on the need for a larger size on the fuel pump ( 40 mm by 40 mm – Commission request)
- Other fuel codes
  - Gaseous fuels: triple letters and 'H2' for hydrogen
  - HVO, GTL , BTL identified as 'XTL' ( not decided yet)
  - Emission reduction agents (e.g. urea ) are not in the scope

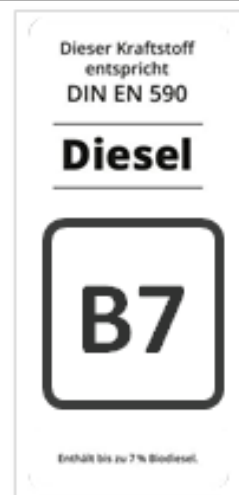
### Typical fuel identifier



### 3. TC 441 view after 3th meeting of November 2015

- Provide individual graphic for each compatible fuel.
  - This means: if for example a vehicle would be compatible with E5 and E10, both E5 and E10 will be put on the vehicle filler cap and in the vehicle manual
- Optional national information can be given. (a possible format could be )
  - Harmonization of the additional national information is addressed.

#### Typical national information



### 3. TC 441 view after 3th meeting of November 2015

- Other fuel codes :
  - *Ex*: Oxygenate containing light distillates, with x defining the maximum ethanol content in volume percentage equivalent to the total oxygen content of the fuel [EN 228, CEN/TS 15293]
  - *Bx*: FAME containing middle distillates, with x defining the equivalent ethanol content in volume percentage [EN 590, prEN 16734, EN 16709],
  - *Mx*: Methanol containing light distillates, with x defining the maximum methanol containing content in volume percentage
  - *XTL*: 100% pure paraffinic diesel fuel [EN 15940]
  - *.....*: Two-stroke gasoline containing mixed lubricating oil
  - *LPG*: Liquid petroleum gas [EN 589]
  - *CNG*: Compressed natural gas [EN 16723-2<sup>1</sup>]
  - *LNG*: Liquefied natural gas [EN 16723-2<sup>1</sup>]
  - *H2*: Hydrogen gas [ISO 14687-2]

## 4. Next steps of TC 441/ Commission activities

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- January 26<sup>th</sup>, 2016 : 4<sup>th</sup> TC 441 meeting
  - prEN16942 ‘ Fuels – identification of vehicle compatibility – graphical expression for consumer information’
    - *Draft of prEN16942 : 01.02.2016*
    - *Submission for enquiry : 31.03.2016 (shortened procedure used)*
    - *End of enquiry : 01.07.2016 ( approval needs 71% of CEN member states votes)*
- October 2016 : publication of the standard
- November 18<sup>th</sup>, 2016
  - **Deadline** for the publication of the Commissions’ fuel compatibility labelling proposal

## 5. FuelsEurope view on Fuel compatibility Labelling

Status : September 2015 view

We find the proposal of the taskforce of TC441 of June 2015 a good proposal to which we would like to add following elements

- The location of the labels : we support the proposed locations, provided that the concept ‘in the proximity of’ is maintained. We think that as long as the consumer can easily verify the compatibility of the fuel and his vehicle, we should not be too prescriptive with respect to the location (e.g. in particular with respect to ‘in the nozzle’).
- We support the use of simple shapes in black and white (no color schemes are supported ) per fuel type.
- We have noticed still some divergence of views on the use of fuel codes but in general the combination of a fuel code and the EN specification number seems to be a good compromise. In particular for EN228 and E5/E10 , the combination appears to be needed to verify the compatibility fuel/vehicle.
- We prefer to have a vehicle filler cap label which indicates clearly all the fuels with which the vehicle is compatible (this is layout option 2 of part 2 of the proposal) .
- We would like to express some concerns about the additional information on the fuel labels. The current proposals could lead to consumer confusion (part 3 of the proposal). A possible way forward could be to
  - leave the option to add additional information but
  - in case additional information is added, ensure it is added in a EU harmonized way and that there is always a clear distinction between the fuel label and the additional information label to avoid consumer confusion

## 5. FuelsEurope view on Fuel compatibility Labelling

Status : Revised view January 2016 based on received input

Group	Detail	FuelsEurope Sept-Dec 2015	FuelsEurope Jan-16	Belgium Jan-16	Portugal Dec-15
Graphic & central identifier	Simple cut-out shapes per base fuel	Yes	Yes		
	Colour scheme	Black on white	Black on white. Silver background is acceptable	Black on white	Black on white
	Fuel codes	To be used	To be used		
	EN identifier	To be used	Not to be used		Not to be used
	Text and language	No text	No text		
Location and size	Proximity of nozzle, on fuel pump and on vehicle fuel cap	Support	Support		
	In vehicle manual	Support	Support		
	Size ( except on fuel pump)	25 mm by 25 mm	25 mm by 25 mm	OK	
	Size on fuel pump 40 by 40 mm	Keep 25 mm by 25 mm	No preference	OK bigger size (1)	
Others	National information	Support harmonisation	Provide flexibility at member states level	No mandatory prescription. MS to use freely	No mandatory prescription. MS to use freely
	Fuel codes for gases	-	-	-	LPG, CNG, LNG, H2 preferred
	All compatible fuel codes indicated individually	-	Yes		



THANK YOU  
FOR YOUR  
ATTENTION

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