

FRENCH “LOI GRENELLE II” ON CO₂ INFORMATION DISCLOSURE

Background

In 2007, the French Government initiated an environmental policy process called the *Grenelle Environnement*. The *Grenelle Environnement*, which gathered a wide range of stakeholders, led to the adoption of several voluntary agreements and pieces of legislation.

The second *Loi Grenelle* introduced a requirement to communicate the CO₂ emissions related to transport services to the beneficiaries of the services, which also applies to air transport services. The requirement will apply from 1st October 2013.

The requirement is implemented through four legal instruments:

- The French Transport Code (Art L1431-3);
- The *Décret n° 2011-1336* of 24 October 2011 (“Décret”);
- Two *Arrêtés* dated 10 April 2012:
 - Arrêté for the application of articles 5, 6 and 8 of the Décret (“Arrêté 1”);
 - Arrêté for the application of article 14 (“Arrêté 2”).

The French authorities have also published guidance material in October 2012 to help transport service providers implement the legal requirements.¹

Scope

The information requirement applies to all transport services which originate from or terminate at a French airport (Décret, art 2). It does not apply to passengers or goods in transit or transfer through a French airport (Guidance, p. 18). All legs of the transport service are included, including those between two airports located outside of French territory (Décret, art 3 para II). For example, if an airline sells a flight from Miami to Paris, via New York, the CO₂ emissions associated with the flight from Miami to New York must be included in the information provided to the passenger.

All persons organizing or commercializing transport services, irrespective of their nationality or principal place of business, have to comply with the information requirement. Therefore, not only airlines, but also travel agents or freight forwarders have to inform their customers of the CO₂ emissions associated with the transport services they organize or commercialize (Arrêté, art 2).

¹ MEDDE, *Information CO₂ des prestations de transport – Guide méthodologique*, Octobre 2012, <http://www.developpement-durable.gouv.fr/Information-CO2-des-prestations-de.html>.

Methodology to calculate emissions

Emissions are calculated by multiplying the fuel consumption per unit by an emission factor.

➤ Fuel consumption

Four different 'levels' of accuracy are allowed for the calculation of the fuel consumption (Arrêté, art 8):

- "Level 1": values calculated with the carbon calculator provided by the French authorities² (see below);
- "Level 2": values based on the average fuel use per unit on all the operator's fleet;
- "Level 3": values based on the average fuel use per unit on a specific category of services (for example on short haul/long haul flights; scheduled/charter flights; geographical markets);
- "Level 4": actual values for a flight.

In the case of passenger-only services, the unit is the passenger. In the case of freight-only services, the reference unit may be the mass, the volume, the surface, the length or even the parcel (Décret, Art 6, para III). In cases where both passengers and goods are transported, the unit is the mass and the weight of each passenger is deemed to be 100 kg (Décret, art 6, para III and Arrêté 1, art 2).

Level 1 can only be used by companies with more than 50 employees until 1 July 2016 (Décret, art 8, para IV). As for level 4, it is only relevant for the transport of goods since in the case of the transport of passengers the information has to be provided at the time of booking before the actual values can be determined (see below). The average fuel use for levels 2 and 3 has to be calculated over a period of maximum 3 years and must be updated on a regular basis (Décret, art 8, para IV). For example, if an airline calculates its average fuel use on a 2-year basis, the values must be updated every 2 years as well.

The regulation requires providers to take account of the fuel used for positioning flights and on the ground, but it does not prescribe a specific formula to calculate fuel consumption (Décret, art 3, para II).

➤ Emission factor

The French regulation requires both use and upstream emissions to be accounted for. Upstream emissions include those associated with the production and delivery of the fuel (Décret, art 5).

The emission factors set in the *Arrêtés* of 10 April 2012 have to be used (Arrêté 1, Annex I). For Jet A fuel, the total emission factor is 3.00 kg of CO₂ per liter (0.48 for upstream emissions and 2.52 for use emissions).

In cases where an airline uses a fuel for which no emission factor has been defined by the French authorities, the airline should determine a specific emission factor and inform the beneficiary of the information of the specific nature of the emission factor used (Décret, art 5).

² <http://www.developpement-durable.gouv.fr/aviation/eco-calculateur/index.php>

“Level 1” values - Online carbon calculator

Airlines which choose to determine fuel consumption according to “Level 1” must use the carbon calculator published by the French authorities.

Two different versions of the calculator are available. The main version calculates emissions based on routes:

<http://www.developpement-durable.gouv.fr/aviation/eco-calculateur/>

A second version estimates fuel consumption based on a flight’s distance and aircraft type:

<http://www.developpement-durable.gouv.fr/aviation/eco-calculateur/decret.php>

The second version provides values for fuel consumption per 100 km and for the average number of passengers. The CO₂ emissions are then calculated by multiplying the flight’s distance by the fuel consumption estimate and the emission factor, divided by the average number of passengers.

The figures calculated using the French calculator can diverge significantly from the ICAO carbon calculator or the values obtained with Eurocontrol’s small emitters tool. “Level 1” values can also differ significantly depending on whether they are calculated by inputting the route or the distance and aircraft category.

| | “Level 1” Input: route | “Level 1” Input: dist., aircr. | ICAO | Eurocontrol |
|------------------------------------|-------------------------------------|-------------------------------------|--------|-------------|
| CDG-ZRH (A320, 476 km) | 87 kg (use) + 16 kg (upstream) | 67 kg (use) + 13 kg (upstream) | 74 kg | 54 kg |
| CDG-SVO (B763, 2451 km) | 288 kg (use) + 55 kg (upstream) | 229 kg (use) + 43 kg (upstream) | 183 kg | 253 kg |
| CDG-DXB (B772, 5232 km) | 390 kg (use) + 75 kg (upstream) | 535 kg (use) + 102 kg (upstream) | 374 kg | 369 kg |
| CDG-SFO (B744, 8956 km) | 726 kg (use) + 140 kg (upstream) | 944 kg (use) + 180 kg (upstream) | 609 kg | 968 kg |

Communication of the information to the beneficiary

➤ Passengers

Passengers must be informed of the CO₂ emissions associated with a transport service before the purchase is made (Décret, art. 12).

The means to communicate the information is however left to the discretion of each airline, provided that the information is clear, unambiguous, and personalized (Guidance, p. 29). An airline may for example provide the information on its website during the booking process, either directly or through a link. It may also be provided orally, for example in the case of bookings over the phone.

An airline is free to decide whether it wants to communicate an aggregated emission figure for the complete itinerary booked or whether it wants to indicate emissions associated with each part of the itinerary (Guidance, p. 29). In addition to the total CO₂ emissions, an airline may also provide information distinguishing between use and upstream emissions (Décret, art 11).

In some cases, the beneficiary of the information provided by airlines may not be a passenger but an intermediary. In such cases, the intermediary, for example a travel agent, is under the obligation to inform the passenger (Guidance, p. 30).

↗ Cargo

In cases where the service concerns the transport of goods, the information has to be provided at the date and through the means agreed upon between the airline and the party with whom the airline has a contract, for example the freight forwarder (Décret, art 12).

Where the contract concerns the provision of more than one transport service, the information can be provided in an aggregated form for all transport services (Guidance, p. 29). Both parties may however agree that the airline should provide detailed information.

Other initiatives related to CO₂ information

No other legislations similar to the French legislation are known at this date. In its 2011 White Paper on Transport, the European Commission however foresaw the development of common EU standards in order to estimate the carbon footprint of each passenger and freight journey.

In France, a private standardization organism, CEN, adopted a standard for the calculation of greenhouse gas emissions from transport (EN 16258). EN 16258 and the *Loi Grenelle II* are not compatible (Guidance, p. 176). Furthermore, although some CEN standards have been made binding by the EU through a formal EU legal instrument, this is not the case for EN 16258. Also, no national legislation which would require airlines to calculate and report their CO₂ emissions in accordance with EN 16258 is known.

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