

2.8. NOISE CHARGES

2.8.1. General

Calculation of the Noise charge is based on objective individual values of the respective aircraft.

For the determination of the basis for assessment as mentioned under section 2.8.2., the aircraft operator / aircraft holder / airline / aircraft owner, respectively, is required to submit the necessary documentation to the civil aerodrome operator.

If the necessary documentation is not submitted prior to or at the time of landing in VIE to the civil aerodrome operator by the aircraft operator / aircraft holder / airline / aircraft owner, respectively, the aircraft will be classified according to the ICAO maximum noise values.

2.8.2. Basis for Assessment and Values

The basis for assessment and the resulting **noise charge per movement** are divided as follows:

The individual noise values of the aircraft according to the noise certificate (noted in EPNdB) as well as the ICAO-noise limit for the according aircraft type are the initial values for the calculation of the noise charges. The individual noise values of an aircraft consist of

Take Off / Fly Over (K)

Approach (L)

Sideline / Full Power / Lateral (M)

First Step | Calculation Noise Values

Both the individual **Noise Values of the Aircraft (A)** and the **ICAO Maximum Noise Values (B)** are averaged logarithmically according to the following formula:

$$A = 10 * \text{LOG} \left(\frac{10^{(K/10)} + 10^{(L/10)} + 10^{(M/10)}}{3} \right)$$
$$B = 10 * \text{LOG} \left(\frac{10^{(K/10)} + 10^{(L/10)} + 10^{(M/10)}}{3} \right)$$

Second Step | Calculation Noise Charge BEFORE Compensation

The logarithmically averaged individual **Noise Value of the Aircraft (A)** is subtracted by the specified **Target Value Noise (X)**. The resulting value is now multiplied with the respective

Noise Charge per dB (U). This results in the individual **Noise Charge of the Aircraft BEFORE Compensation and WITHOUT Consideration of the Noise Quality (F).**

$$F = (A - X) * U$$

Noise Charge (U):	€ 2,--
Target Value Noise (X):	80

Third Step | Consideration of Noise Quality

If the individual aircraft undercuts or exceeds the maximum noise levels of ICAO, a **Reduction / an Increase of the Noise Charge (C)**, respectively, is applied according to noise performance.

$$C = B - A \quad \text{expressed in percent}$$

In combination with the **Factor Noise Quality (Y)**, the noise charge BEFORE compensation is reduced or increased.

$$Y = 8$$

This results in the following **Noise Charge BEFORE Compensation and WITH Consideration of the Noise Quality (G)** for an aircraft:

$$G = F - (F * C * Y)$$

Fourth Step | Calculation Noise Charge AFTER Compensation

Vienna International Airport will calculate the Noise Charges BEFORE Compensation for all considered aircraft movements according to the described model. The average Noise Charge per movement is calculated from the sum of all noise charges and forms the **Compensation Value (W)**.

$$W = (\sum G \text{ of all movements in the given period}) / \sum \text{ of all movements in the given period}$$

The resulting and payable **Noise Charge after Compensation (H)** is calculated as follows:

$$H = G - W$$

The given period under consideration of the compensation is at least 6 months. The currently applicable **Compensation Value (W)** as of February 2019 is € 16.30.

2.8.3 Noise Category II

If the aircraft is part of Noise Category II, the noise charge BEFORE compensation (G), as calculated in the third step, will be multiplied with the factor V. The remaining calculations continue as in the fourth step.

Factor Noise Charge for Aircraft in Noise Category II (V): 5

The following aircraft types are included in Noise Category II:

An-26, An-124, An-225, 707, 727, 737-100/-200, 747-100/-200/-300/SP, BAC 1-11, Il-62, Il-76, Il-86, L1011/-15, DC-8, DC-9, DC-10, MD-81/82/83, Tu-134, Tu-154, Yak-40, Yak-42