

## Guidance for Financial Analysts to Model the Impact of Aircraft Noise on Flughafen Zürich AG's Financial Statements

*Zurich Airport, March 2020*

Flughafen Zürich AG refinances all costs related to aircraft noise according to the cost-by-cause principle via noise charges. Levied noise charges are dedicated to the Airport of Zurich Noise Fund.

In the long term, noise-related items are income and cash flow neutral, whereas in a single financial year, the consolidated financial statements of Flughafen Zürich AG include noise charges, noise-related expenses and noise-related items on the balance sheet.

The objective of this document is to explain the impact of aircraft noise on the accounts of Flughafen Zürich AG going forward.

### **Treatment of noise-related matters in the consolidated financial statements according to the International Financial Reporting Standards (IFRS)**

#### **i. Sound Insulation and Resident Protection Measures**

The costs for sound insulation and resident protection measures for which Flughafen Zürich AG has entered into a constructive obligation are recognized as a provision.

#### **ii. Formal Expropriations**

With the award of the operating license, Flughafen Zürich AG was also granted a right of formal expropriation of property owners exposed to aircraft noise. This right is capitalized as an intangible asset. At the same time an equal amount is recognized as a provision. Any future adjustments of the probable total costs will be reflected on both sides of the balance sheet. The intangible asset is amortized using the straight-line method over the remaining duration of the operating license (i.e. until May 2051).

## History

The rulings on fundamental issues with respect to formal expropriations by the Swiss Federal Court in the first half of 2008 enabled Flughafen Zürich AG to reliably estimate the total cost (including costs for formal expropriations, costs for sound insulation and resident protection and all related operating costs) for the first time, in spite of remaining uncertainties regarding the accuracy of this estimate.

### Formal Expropriations

In the area of *formal expropriations*, the related cost estimate was adopted as a result of different court decisions, increasing the accuracy of the estimates.

In the first half of 2018, the Swiss Federal Supreme Court handed down two rulings in test cases regarding cooperative ownership. These Swiss Federal Supreme Court rulings enabled Flughafen Zürich AG to undertake a reappraisal of the outstanding cost of compensation for *formal expropriations*. Based on the recalculation, the provision for *formal expropriations* was reduced by CHF 35 million as at 30 June 2018. At the same time, the intangible asset from the right of *formal expropriation* was reduced by the same amount.

On November 22, 2019, the Swiss Federal Supreme Court handed down a ruling in test cases regarding the period of limitation on claims for compensation. This Swiss Federal Supreme Court ruling and other fundamental issues that have been decided enabled Flughafen Zürich AG to undertake a reappraisal of the outstanding cost of compensation for *formal expropriations*. Based on the recalculation, the total cost expected in relation to formal expropriations enabled the provision for formal expropriations to be reduced by CHF 20 million in 2019. At the same time, the intangible asset from the right of formal expropriation was reduced by the same amount.

### Sound Insulation and Resident Protection

In the area of costs for *sound insulation and resident protection*, the Federal Office of Civil Aviation required Flughafen Zürich AG to submit an extended sound insulation program by the end of June 2015. Therefore, the board of directors approved a further CHF 100 million of measures for *sound insulation and resident protection* in 2015 in addition to the already existing CHF 240 million.

In the first half of 2018, the Federal Office of Civil Aviation has initiated a night-time noise abatement procedure. The area with exemptions under the Sectoral Aviation Infrastructure Plan adopted by the Federal Council on August 23, 2017 is to be extended. A provision for further costs of CHF 60 million was recognized in this context as at 30 June 2018 in addition to the cost of CHF 340 million previously estimated for *sound insulation and resident protection*.

Today, Flughafen Zurich AG expects total compensation payments as follows:

<i>(nominal values, in CHF million)</i>	Estimated Cost	Paid	Unpaid
<b>Sound Insulation and Resident Protection</b>	400.0	260.6	139.4
<b>Formal Expropriation</b>	330.0	81.9	248.1

It is currently expected that the total payments for sound insulation and resident protection as well as formal expropriation can be completed by the end of 2030.

### **Regulations of the Airport of Zurich Noise Fund**

In addition to this guidance, we also recommend reading the regulations of the Airport of Zurich Noise Fund: [www.zurich-airport.com/aznf](http://www.zurich-airport.com/aznf)

## Definitions

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### Noise-related costs

- Costs for formal expropriation
- Costs for measures regarding sound insulation and resident protection
- Operating costs in regard of aircraft noise

A list of all cost components, split in more detail, is additionally available in the regulations of the Airport of Zurich Noise Fund.

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### Noise-related charges

- Daytime noise charge as an addition to the landing charge
- Night-time noise charge  
(for take-offs and landings between 9pm and 7am)

The noise-related passenger charge was suspended as per February 1, 2014. Before, CHF 5 per departing passenger were levied as noise-related passenger charge.

All noise-related charges are fully and explicitly dedicated for noise-related costs. Once the formal expropriation and sound insulation and resident protection payments have been settled completely, the objective is to have a zero balance within the Airport of Zurich Noise Fund. Therefore, the level of the noise-related charges will be adjusted accordingly within the existing rules.

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### Airport of Zurich Noise Fund

The Airport of Zurich Noise Fund is a liquidity-based fund that does not take the form of any type of legal entity. The statement of the fund presents the accumulated surplus or shortfall as of balance sheet date arising from noise-related charges, less expenses for formal expropriations, sound insulation and resident protection as well as operating costs.

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## Impacts of noise-related revenues and costs on the income statement

Noise-related revenues and costs form an integral part of the company's overall financial statements:

- All noise-related revenues and costs are fully recognized within the income statement of Flughafen Zürich AG.
- Income statements of a single year were showing higher revenues than costs until the year 2013. Thus "noise" had a positive impact on net income of Flughafen Zürich AG. Because of the suspension of the noise-related passenger charge as of February 1, 2014, the impact was negative in 2014 and 2015, positive in 2016 and 2017, negative in 2018 and again positive in 2019 and could be negative going forward.

### Revenue impact

The noise-related passenger charge has been suspended as per February 1, 2014.

As per September 11, 2019 the model for noise-related landing charges was adopted to ensure the underlying incentive mechanism for less noisy planes. Income from noise-related landing charges will be a low double digit million amount going forward; higher charges due to more traffic might be offset by reductions due to less noisy planes and lower MTOWs.

Should the noise-related charges change in the future, revenue from noise would change as well.

### Operating cost impact

Operating costs are included in various cost items of the P&L such as for example cost of personnel, maintenance or general administration of the noise department. Therefore, they do not have to be projected separately.

Historical impact:

- 2008: CHF 4.3 million
- 2009: CHF 4.7 million
- 2010: CHF 4.3 million
- 2011: CHF 4.3 million
- 2012: CHF 3.8 million
- 2013: CHF 3.9 million
- 2014: CHF 3.9 million
- 2015: CHF 3.1 million
- 2016: CHF 3.5 million
- 2017: CHF 3.5 million
- 2018: CHF 3.4 million
- 2019: CHF 3.5 million

Important: Cost for formal expropriation payments and for sound insulation and resident protection are not recorded in the income statement when payments are made but are reducing the separate provision (see also impact on balance sheet below).

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### Amortization impact

Amortization contains the amortization of the intangible asset from the right of formal expropriation on a straight-line basis until the end of the concession in May 2051 and the amortization of the noise protection hangar (about CHF 1.1 million p.a.).

Historical impact:

- 2009: CHF 5.6 million
  - 2011: CHF 7.0 million
  - 2012: CHF 7.7 million
  - 2013: CHF 7.7 million
  - 2014: CHF 7.5 million
  - 2015: CHF 5.7 million
  - 2016: CHF 5.6 million
  - 2017: CHF 5.3 million
  - 2018: CHF 4.8 million
  - 2019: CHF 4.3 million
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### Finance result impact

Losses or gains on financial assets of Airport Zurich Noise Fund and finance fees are included in the finance result.

Furthermore, the unwinding of the discounts of both provisions (provision for sound insulation and resident protection as well as the provision for formal expropriations) happens through the line item finance result (non-cash effective). The future amounts for unwinding depend a) on how the cash out for formal expropriation payments and sound insulation and resident protection arises and b) on the level of the discount rate as required by IAS 37.

Historical impact:

- 2008: CHF 1.0 million
  - 2009: CHF -4.4 million
  - 2010: CHF -5.1 million
  - 2011: CHF -10.1 million
  - 2012: CHF -21.2 million
  - 2013: CHF 11.5 million
  - 2014: CHF -3.9 million
  - 2015: CHF -15.8 million
  - 2016: CHF 1.5 million
  - 2017: CHF -0.6 million
  - 2018: CHF -7.7 million
  - 2019: CHF 4.2 million
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### Tax impact

The expected income tax rate of Zurich Airport can in principle be applied also for noise-related revenue and cost projections. The note on deferred taxes in the annual report shows the exact amount of deferred tax expense as a result of noise.

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## Impacts of noise-related assets and liabilities on the balance sheet

Assets and liabilities related to noise are included mainly in the following balance sheet line items:

- Current and non-current financial assets (Airport of Zurich Noise Fund)
- Intangible asset from right of formal expropriation
- Provision for sound insulation and resident protection
- Provision for formal expropriation

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### Intangible asset from right of formal expropriation

The intangible asset from right of formal expropriation will be further amortized on a straight-line basis until the end of the concession, i.e. until 2051. Amortization started as of July 1, 2008.

Historical value:

- 2008: CHF 239.0 million
  - 2009: CHF 233.3 million
  - 2010: CHF 285.5 million
  - 2011: CHF 305.4 million
  - 2012: CHF 297.7 million
  - 2013: CHF 289.9 million
  - 2014: CHF 165.9 million
  - 2015: CHF 161.4 million
  - 2016: CHF 135.6 million
  - 2017: CHF 131.7 million
  - 2018: CHF 93.7 million
  - 2019: CHF 70.8 million
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Provision for sound insulation and resident protection & provision for formal expropriation

Payments for sound insulation and resident protection as well as payments for formal expropriation decrease the provision.

According to IFRS, the provisions are recorded at a discounted value and have to be unwound with a discount rate on an annual base.

Historical value for provision for sound insulation and resident protection:

- 2008: CHF 118.8 million
- 2009: CHF 115.6 million
- 2010: CHF 110.6 million
- 2011: CHF 100.4 million
- 2012: CHF 86.3 million
- 2013: CHF 65.7 million
- 2014: CHF 46.1 million
- 2015: CHF 131.4 million
- 2016: CHF 119.7 million
- 2017: CHF 102.7 million
- 2018: CHF 148.2 million
- 2019: CHF 139.4 million

Historical value for provision for formal expropriation:

- 2008: CHF 125.8 million
- 2009: CHF 130.8 million
- 2010: CHF 192.3 million
- 2011: CHF 233.3 million
- 2012: CHF 248.1 million
- 2013: CHF 239.7 million
- 2014: CHF 352.3 million
- 2015: CHF 354.3 million
- 2016: CHF 320.2 million
- 2017: CHF 316.6 million
- 2018: CHF 275.2 million
- 2019: CHF 248.1 million

Historical discount rate for sound insulation and resident protection:

- 2008: 4.00%
- 2009: 4.00%
- 2010: 3.50%
- 2011: 2.50%
- 2012: 1.20%
- 2013: 1.50%
- 2014: 1.10%
- 2015: 0.40%
- 2016: 0.25%
- 2017: 0.25%
- 2018: 0.35%
- 2019: 0.00%

Historical discount rate for formal expropriation:

- 2008: 4.00%
- 2009: 4.00%
- 2010: 3.50%
- 2011: 2.50%
- 2012: 1.20%
- 2013: 1.50%
- 2014: 1.10%
- 2015: 0.30%
- 2016: 0.35%
- 2017: 0.35%
- 2018: 0.25%
- 2019: 0.00%

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