Act for Protection against Aircraft Noise (Gesetz zum Schutz gegen Fluglärm)

(in the version promulgated on 31 October 2007, BGBI. I p. 2550)

(English translation, unofficial text)

Article 1

Purpose and Scope of Application

The purpose of this Act is to protect the public and the neighbourhood from hazards, significant disadvantage and significant nuisance caused by aircraft noise in the surroundings of airfields by means of building restrictions and structural sound insulation.

Article 2

Establishment of noise protection areas

- (1) In the surroundings of airfields, noise protection areas shall be established which shall comprise the area of the protection zones described in the following paragraph, outside the site of the airfield.
- (2) The noise protection area of an airfield shall be subdivided, according to the extent of the noise impact, into two protection zones for daytime and one protection zone for night-time. Protection zones shall encompass those areas in which the equivalent continuous sound pressure level L_{Aeq} caused by aircraft noise and, in the case of the night-time protection zone, the maximum level L_{Amax} caused by aircraft noise exceeds the following values, whereby the frequency of exceedance shall be determined from the mean value over the six months with the greatest volume of traffic in the forecast year (Annex to Article 3):
- Values for new civilian airfields or civilian airfields which have undergone substantial structural expansion within the meaning of Article 4, para. 1, nos. 1 and 2:

Daytime protection zone 1:

 $L_{Aeq Day} = 60 dB(A),$

Daytime protection zone 2:

 $L_{Aeq Day} = 55 dB(A),$

a)	To 31 Decemb	er 2010:			
,	L _{Aeq Night}	=		53 dB(A),	
	L_{Amax}	=	6 x	57 dB(A),	
b)	From 1 January 2011:				
	L _{Aeq Night}	=		50 dB(A),	
	L _{Amax}	=	6 x	53 dB(A);	
√alu and :		vilian airfields	within the	meaning of Article 4,	para. 1, nos. 1
Dayt	ime protection zo	one 1:			
	$L_{Aeq\ Day}$	=		65 dB(A),	
Dayt	ime protection zo	one 2:			
	L _{Aeq Day}	=		60 dB(A),	
Nigh	t-time protection	zone:			
	L _{Aeq Night}	=	_	55 dB(A),	
	L_{Amax}	=	6 x	57 dB(A);	
	tantial structural	•		ry airfields which hanneaning of Article 4,	
Dayt	ime protection zo	one 1:			
	L _{Aeq Day}	=		63 dB(A),	
Dayt	ime protection zo	one 2:			
	L _{Aeq Day}	=		58 dB(A),	
Nigh	t-time protection	zone			
a)	To 31 Decemb	er 2010:			
,	L _{Aeq Night}	=		53 dB(A),	
	L _{Amax}	=	6 x	57 dB(A),	
b)	From 1 January 2011:				
	L _{Aeq Night}	=		50 dB(A),	
	L_{Amax}	=	6 x	53 dB(A);	
√alu and _'		ilitary airfields	s within the	meaning of Article 4,	para. 1, nos. 3
Dayt	ime protection z	one 1:			
,	L _{Aeq Day}	=		68 dB(A),	
Davt	ime protection zo	one 2:			

55 dB(A), 57 dB(A).

6 x

2.

3.

4.

Night-time protection zone: $\begin{array}{ccc} L_{Aeq\ Night} & = \\ L_{Amax} & = \end{array}$

New airfields or airfields which have undergone substantial structural expansion within the meaning of this regulation are airfields, which from 7 June 2007 are granted approval (Planfeststellung) or simplified authorisation. plan plan (Plangenehmigung) pursuant to Article 6 or Article 8 of the Civil Aviation Act (Luftverkehrsgesetz) for their construction, the building of a new runway or other substantial structural expansion. Such structural expansion of an airfield shall be deemed to be substantial if it leads to an increase of at least 2 dB(A) in the equivalent continuous sound pressure level $L_{\text{Aeq Day}}$ on the perimeter of daytime protection zone 1 or of the equivalent continuous sound pressure level $L_{\text{Aeq Night}}$ on the perimeter of the night-time protection zone. Existing airfields within the meaning of this regulation shall be deemed to be airfields for which the preconditions set out in the third and fourth sentences are not fulfilled.

(3) The Federal Government shall report to the German *Bundestag* at the latest in 2017 and subsequently at least every ten years on the review of the values stated in para. 2, taking account of the status of research on the effects of noise and of aviation technology.

Article 3

Calculation of the noise impact

- (1) The equivalent continuous sound pressure level $L_{Aeq\ Day}$ for daytime protection zones 1 and 2 as well as the equivalent continuous sound pressure level $L_{Aeq\ Night}$ and the maximum sound pressure level L_{Amax} for the night-time protection zone shall be calculated in accordance with the Annex to the present Act, taking into account the type and extent of the foreseeable flight operations.
- (2) After hearing the parties concerned (Article 15), the Federal Government shall be authorised to regulate, by statutory decree with the consent of the *Bundesrat*, the type and extent of information to be provided by those having obligations pursuant to Article 11 and the calculation method for determining the noise impact.

Article 4

Establishment of noise protection areas

- (1) Noise protection areas shall be established for the following airfields:
- 1. Commercial airports with scheduled airline services or charter air traffic,
- 2. Commercial airfields with scheduled airline services or charter air traffic and with a volume of traffic exceeding 25,000 movements per year, excluding those purely for training purposes with light aircraft.
- 3. Military airfields designated for the operation of aircraft with jet engines,

- 4. Military airfields designated for the operation of aircraft with a maximum take-off mass of more than 20 tonnes, with a volume of traffic exceeding 25,000 movements per year, excluding those purely for training purposes with light aircraft.
- (2) Noise protection areas shall be established by means of a statutory decree of the Land Government in question. Maps and plans forming an integral part of the statutory decree may be promulgated by depositing them securely in the archives of an official agency where they shall be open to public inspection. This shall be pointed out in the statutory decree.
- (3) The noise protection area for a new airfield within the meaning of Article 2, para. 2, sentence 2, nos. 1 and 3 shall be established on the basis of the values stated therein. The noise protection area for an airfield within the meaning of Article 2, para. 2, sentence 2, nos. 1 and 3 which has undergone substantial structural expansion shall be re-established or, if no noise protection area has previously been established, established for the first time on the basis of the same values. The noise protection area shall be established as soon as the authorisation, plan approval (*Planfeststellung*) or simplified plan approval (*Plangenehmigung*) for the construction or expansion of the airfield is issued.
- (4) The noise protection area for an existing airfield within the meaning of Article 2, para. 2, sentence 2, nos. 2 and 4 shall be re-established or, if no noise protection area has previously been established, established for the first time on the basis of the values stated therein at the latest by the end of the year 2009. In case substantial structural expansion has been applied for, it shall no longer be required to establish a noise protection area for the existing airfield based on the situation to date if a noise protection area is established for the expanded airfield and the expanded airfield goes into operation immediately afterwards. Noise protection areas for different airfields shall be established according to priorities based on the expected size of the noise protection areas and the affected population; a schedule shall be adopted and made public specifying in which order and when the respective noise protection areas are planned to be established.
- (5) The noise protection area for an airfield within the meaning of Article 2, para. 2, sentence 2, nos. 1 to 4, be it a new or an existing airfield or an airfield which has undergone substantial structural expansion, shall be re-established if any alteration to the airfield or its operation will give rise to any significantly changed noise impact in the surroundings of the airfield. A change in the noise impact shall be deemed to be significant especially in those cases where the equivalent continuous sound pressure level $L_{\text{Aeq Day}}$ at the perimeter of daytime protection zone 1 or the equivalent continuous sound pressure level $L_{\text{Aeq Night}}$ at the perimeter of the night-time protection zone will increase by at least 2 dB(A). The noise protection area for an airfield within the meaning of Article 2, para. 2, sentence 2, nos. 1 and 3a, be it a new airfield or an airfield which has undergone substantial structural expansion, shall be re-established on the basis of the values stated therein. The noise protection area for an existing airfield within the meaning of Article 2, para. 2, sentence 2, nos. 2 and 4 shall be established on the basis of the values stated therein unless paragraph 4, sentence 2 applies.

- (6) No later than ten years after the establishment of the noise protection area, an assessment shall be made to ascertain whether there has been any significant change in the noise impact or whether any significant change can be expected within the next ten years. This assessment shall be repeated at intervals of ten years, unless there are any particular circumstances requiring earlier assessment.
- (7) No noise protection area shall be established or re-established for an airfield pursuant to para. 1 if the closure of the airfield is due within a period of ten years after it has become a requirement to establish a noise protection area pursuant to paras. 4 and 5 and if the administrative procedure for its closure has already commenced. Following closure of an airfield, an existing noise protection area shall be revoked. Sentences 1 and 2 shall apply *mutatis mutandis* for an airfield pursuant to para. 1 if the said airfield permanently forfeits the characteristics stated therein in other ways; para. 8 shall remain unaffected.
- (8) If required for the protection of the public, noise protection areas shall also be established for airfields other than those stated in para. 1. Paras. 2 to 7 shall apply *mutatis mutandis*.

Article 5

Building restrictions

- (1) In the noise protection area no hospitals, homes for the aged, convalescent homes and similar facilities requiring equal protection shall be constructed. In the daytime protection zones of the noise protection area, the same shall apply to schools, children's nurseries und similar facilities requiring equal protection. The authority responsible according to the law of the federal *Land* in question may permit exceptions if this is urgently required for providing the population with public institutions or for other reasons in the public interest.
- (2) In daytime protection zone 1 and in the night-time protection zone, no dwellings shall be constructed.
- (3) The prohibition pursuant to para. 2 shall not apply to the construction of
- 1. dwellings for supervisory and stand-by personnel of plants or public institutions or for plant owners and plant managers,
- 2. dwellings which are permissible pursuant to Article 35, para. 1 of the Federal Building Code (*Baugesetzbuch*) in the area outside the land-use planning area of a local authority,
- dwellings and collective quarters for members of the Federal Armed Forces and for the armed forces stationed in the Federal Republic of Germany on the basis of agreements under international law,
- 4. dwellings in the scope of application of a local development plan published prior to the establishment of the noise protection area,
- 5. dwellings within the coherently built-up areas of a town or village pursuant to Article 34 of the Federal Building Code (*Baugesetzbuch*),

- 6. dwellings in the scope of application of a local development plan published after the establishment of the noise protection area, if this plan serves the maintenance, renewal, adaptation or conversion of existing residential areas.
- Sentence 1, no. 4 shall not apply to properties designated for construction of dwellings under building regulations for a period of more than seven years starting with the establishment of the noise protection area after 6 June 2007, insofar as development or construction has not yet commenced within the scope of the development plan.
- (4) Para. 1, sentences 1 and 2 and para. 2 shall not apply to buildings for which building permission was issued prior to the establishment of the noise protection area, and to buildings not requiring building permission for which, in accordance with building regulations, construction could have started before the establishment of the noise protection area.

Article 6

Other restrictions of land use

Buildings permissible pursuant to Article 5, para. 1, sentence 3, para. 2, sentence 2 and para. 3 as well as dwellings in daytime protection zone 2 shall only be built if they satisfy the noise insulation requirements laid down pursuant to Article 7.

Article 7

Noise insulation

The Federal Government shall be authorised, after hearing the parties concerned (Article 15), to establish, by statutory decree with the consent of the *Bundesrat*, noise insulation requirements, including requirements for ventilation systems, taking into account the present state of noise insulation technology in building construction, to be met by the buildings under Article 6, in order to protect residents from aircraft noise.

Article 8

Compensation in the case of building restrictions

- (1) If, ensuing from building restrictions pursuant to Article 5, para. 1, sentences 1 and 2 or para. 2, sentence 1, the use of the property hitherto permissible is rescinded and the value of the property is thereby reduced by more than an insignificant degree, the owner may raise corresponding claims for adequate monetary compensation. In addition, the owner may claim monetary compensation as far as the building restrictions reduce the value of any expenditure in the development of the property for building purposes which has been incurred by the owner trusting in the continuity of the land use hitherto permissible.
- (2) The provisions of Article 93, paras. 2, 3 and 4, of Article 95, paras. 1, 2 and 4, of Articles 96, 97, 98 and 99, para. 1 of the Federal Building Code (*Baugesetzbuch*), as well as the provisions of Articles 17 and 18, paras. 1, 2, sentence 1, para. 3 and Articles 19 to 25 of the Restricted Areas Act (*Schutzbereichsgesetz*) of 7 December 1956

(Federal Law Gazette I p. 899) as last amended by Article 1, para. 6 of the ordinance of 5 April 2002 (Federal Law Gazette I p. 1250), shall apply *mutatis mutandis*.

Article 9

Reimbursement of expenses incurred for structural sound insulation, compensation for impairment of the outside living area

- (1) The owner of a property situated in daytime protection zone 1 on which, at the time the noise protection area is established, facilities pursuant to Article 5, para. 1, sentences 1 and 2 or dwellings have been erected or on which the erection of buildings in accordance with Article 5, para. 4 is permissible, shall upon application receive reimbursement of expenses incurred for structural sound insulation, in accordance with paras. 3 and 4 of this Article and Article 10. In the case of an existing civilian airfield within the meaning of Article 2, para. 2, sentence 2, no. 2, insofar as the equivalent continuous sound pressure level LAeq Day caused by aircraft noise exceeds the value of 70 dB(A) on a property, the claim shall arise with the establishment of the noise protection area; otherwise, the claim shall arise with the commencement of the sixth year after the establishment of the noise protection area. For an existing military airfield within the meaning of Article 2, para. 2, sentence 2, no. 4, the second sentence shall apply subject to the proviso that the value stated is set at 73 dB(A). For a civilian airfield within the meaning of Article 2, para. 2, sentence 2, no. 1, be it a new airfield or an airfield which has undergone substantial structural expansion, the second sentence shall apply subject to the proviso that the value stated is set at 65 dB(A). For military airfields within the meaning of Article 2, para. 2, sentence 2, no. 3, be they new airfields or airfields which have undergone substantial structural expansion, the second sentence shall apply subject to the proviso that the value is set at 68 dB(A).
- (2) The owner of a property located in the night-time protection zone, on which, at the time the noise protection area is established, facilities pursuant to Article 5, para. 1, sentence 1 or dwellings have been erected or on which the erection of such buildings is permissible in accordance with Article 5, para. 4, shall receive reimbursement of expenses incurred for structural sound insulation for rooms which are used by more than an insignificant degree for sleeping; for civilian airfields within the meaning of Article 2, para. 2, sentence 2, nos. 1 and 2, this shall include the installation of ventilation systems subject to the conditions of paras. 3 and 4 and of Article 10. Insofar as the equivalent continuous sound pressure level LAeq Night caused by aircraft noise exceeds the value of 60 dB(A) at an existing airfield within the meaning of Article 2, para. 2, sentence 2, nos. 2 and 4, the claim shall arise with the establishment of the noise protection area; otherwise, the claim shall arise with the commencement of the sixth year after the establishment of the noise protection area. For a civilian airfield within the meaning of Article 2, para. 2, sentence 2, no. 1a) and no. 3a), be it a new airfield or an airfield which has undergone substantial structural expansion, sentence 2 shall apply subject to the proviso that the value shall be set at 58 dB(A); for an airfield within the meaning of Article 2, para. 2, sentence 2, no. 1b) and no. 3b), the value shall be set at 55 dB(A).
- (3) If a noise protection area is re-established on the basis of Article 4, para. 3, 4 or 5, the costs of structural sound insulation measures shall not be reimbursed if pursuant to Article 6, buildings as well as dwellings were already required to comply with sound

insulation requirements on their construction in what was daytime protection zone 2 until its re-establishment and the requisite sound insulation measures are in keeping with the statutory decree adopted pursuant to Article 7. Furthermore, no reimbursement shall be made if the payer pursuant to Article 12 has already reimbursed the expenses of such structural sound insulation measures as are in keeping with the statutory decree issued in accordance with Article 7, within the framework of voluntary sound insulation programmes or under other circumstances. The adoption of sound insulation measures by a property owner or other entitled person pursuant to para. 7 prior to the point in time at which the claim for reimbursement of expenses arises shall not preclude reimbursement, provided that execution took place after the establishment of the noise protection area giving rise to the claim.

- (4) Expenses incurred for structural sound insulation measures shall only be reimbursed as far as they are in keeping with the statutory decree issued in accordance with Article 7. The Federal Government shall be authorised to establish, by statutory decree with the consent of the *Bundesrat*, the maximum amount of reimbursement per square metre of living space and the calculation of the living space, standardised reimbursement amounts, and the type and scope of reimbursable associated works.
- (5) In the case of the establishment of a noise protection area for an airfield within the meaning of Article 2, para. 2, sentence 2, nos. 1 and 3, be it a new airfield or an airfield which has undergone substantial structural expansion, the owner of a property located in daytime protection zone 1, on which, at the time the noise protection area is established, facilities pursuant to Article 5, para. 1, sentences 1 and 2 or dwellings have been erected or on which the erection of such buildings is permissible in accordance with Article 5, para. 4, may claim adequate monetary compensation for the impairment of the outside living area, subject to the conditions of the statutory decree issued pursuant to Article 6. In the case of a civilian airfield within the meaning of Article 2, para. 2, sentence 2, no. 1, be it a new airfield or an airfield which has undergone substantial structural expansion, insofar as the equivalent continuous sound pressure level LAeq Day caused by aircraft noise on a property exceeds the value of 65 dB(A), the claim for reimbursement shall arise from the time the airfield goes into operation; otherwise, the claim shall arise with the commencement of the sixth year after the establishment of the noise protection area. In the case of military airfields within the meaning of Article 2, para. 2, sentence 2, no. 3, be they new airfields or airfields which have undergone substantial structural expansion, the second sentence shall apply subject to the proviso that the value shall be set at 68 dB(A).
- (6) The Federal Government shall be authorised to regulate, by statutory decree with the consent of the *Bundesrat*, the payment of compensation for impairment of the outside living area, especially the extent of the outside living area that requires protection and the evaluation of the decrease in value and of compensation, also taking account of the intensity of the aircraft noise impact, the previously existing noise impact and the type of building use of the areas affected. The expropriation laws of the federal *Länder* shall apply to the procedure.

(7) If the building or parts thereof are the property of a person holding a heritable building right or are the property of the owner of a dwelling, that person or owner shall take the place of the owner of the landed property entitled to claim under paras. 1, 2 and 5. The claim arising under paras. 1, 2 and 5 may only be raised within a period of five years after the establishment of the claim.

Article 10

Procedure for the reimbursement of expenditure

The authority responsible according to the legislation of the federal *Land* in question shall, after hearing the parties concerned (payee and payer) communicate to the parties by written notice the amount of the reimbursable expenses. The notice shall include instructions on legal remedies and shall be served on the parties concerned.

Article 11

Information

- (1) The operator of an airfield and those charged with air traffic control shall be obliged to furnish the authority responsible according to the legislation of the federal *Land* in question with the information required to determine the noise impact pursuant to Article 3 and to submit the necessary data, supporting documents and plans.
- (2) The person obliged to supply information shall be permitted to refuse information on questions, the answer to which would expose him or one of his relatives or associates as defined in Article 383, para. 1, nos. 1 to 3 of the Code of Civil Procedure (*Zivilprozessordnung*) to the risk of criminal prosecution or a procedure according to the Act on Administrative Offences (*Gesetz über Ordnungswidrigkeiten*).
- (3) Articles 93, 97, 105, para. 1, Article 111, para. 5 in conjunction with Article 105, para. 1 and Article 116, para. 1 of the Tax Code (*Abgabenordnung*) shall not be used. This shall not apply insofar as the financial authorities require the information for the execution of proceedings involving fiscal offences or related tax assessment proceedings, the pursuit of which is conclusively in the public interest, or if deliberately false information has been given by the person liable to furnish information or by persons acting for him.

Article 12

Payer

- (1) Compensation pursuant to Article 8, reimbursement of expenses for structural sound insulation measures pursuant to Article 9, paras. 1 and 2 and payment of compensation for impairment of the outside living area pursuant to Article 9, para. 5 shall be paid by the airfield operator.
- (2) As far as the armed forces stationed in the Federal Republic of Germany on the basis of international agreements use airfields within the territory of the Federal Republic and a sending state is liable to pay in its capacity as the airfield operator, the Federal Republic of Germany shall assume responsibility for the fulfilment of the payment

liability. Any litigation in connection with the payment of compensation or the reimbursement of expenses for structural sound insulation measures shall be conducted by the Federal Republic of Germany in its own name on behalf of the sending state against which the claim is directed.

Article 13

Other provisions

- (1) This Act, in the version effective from 7 June 2007, regulates, for the surroundings of airfields, the reimbursement of expenditure for structural sound insulation measures pursuant to Article 9, paras. 1 to 4, including the underlying sound insulation requirements, and compensation for the impairment of the outside living area in the environs of new airfields and of airfields which have undergone substantial structural expansion pursuant to Article 9, paras. 5 and 6, having effect on the authorisation procedure pursuant to Article 6 of the Civil Aviation Act (*Luftverkehrsgesetz*) and the plan approval (*Planfeststellung*) or simplified plan approval (*Plangenehmigung*) procedures pursuant to Article 8 of the Civil Aviation Act (*Luftverkehrsgesetz*) as well. Insofar as more extensive provisions have been established in any authorisation, plan approval (*Planfeststellung*) or simplified plan approval (*Plangenehmigung*) granted prior to 6 June 2007, these shall remain unaffected. Inasmuch as the authorisation, plan approval (*Planfeststellung*) or simplified plan approval (*Plangenehmigung*) is not final and absolute, the execution of the more extensive provisions shall be suspended.
- (2) Provisions which permit more extensive planning measures shall remain unaffected.

Article 14

Protection targets for noise action planning

Noise action planning pursuant to Article 47d of the Federal Immission Control Act (*Bundes-Immissionsschutzgesetz*) shall comply with the values applicable to airfields under Article 2, para. 2 of the Act for Protection against Aircraft Noise (*Gesetz zum Schutz gegen Fluglärm*).

Article 15

Hearing of parties concerned

To the extent that authorisations for the adoption of statutory decrees prescribe the hearing of parties concerned, hearings shall be held with a selected group of representatives of science, technology, airfield operators, airline companies, local government associations, noise abatement and environmental associations, the commissions pursuant to Article 32b of the Civil Aviation Act (*Luftverkehrsgesetz*), and the highest *Land* authorities responsible for aviation and immission control.

Article16 (revoked)

Article 17 (revoked)

Article 18 (revoked)

(to Article 3)

The equivalent continuous sound pressure level for daytime protection zones 1 and 2 shall be determined in accordance with equation (1) and for the night-time protection zone in accordance with equation (2):

(1)
$$L_{\text{Aeq Day}} = 10 \ lg \left[\frac{0.75}{T} \sum_{i=1}^{n} \ t_{\text{10, i}} \cdot 10^{0.1} \ L_{\text{Amax, i}} \right]$$

(2)
$$L_{\text{Aeq Night}} = 10 \ lg \left[\frac{1.5}{T} \sum_{i=1}^{n} \ t_{\text{10, i}} \cdot 10^{0.1} \ L_{\text{Amax, i}} \right]$$

with

L_{Aeq Day} – Equivalent continuous sound pressure level by day (06:00 to 22:00 hrs) in dB(A) during the assessment period T

L_{Aeq Night} – Equivalent continuous sound pressure level at night (22:00 to 06:00 hrs) in dB(A) during the assessment period T

lg – logarithm to the base 10

Assessment period T in s; the six months of the forecast year with the largest number of flights shall be used as the assessment period (180 days)

Sum of all flight movements during the day (06:00 to 22:00 hrs) or night
(22:00 to 06:00 hrs) during the assessment period T, whereby the predicted flight movement figures for the individual operating directions are incremented in order to take account of time variations in the use of the individual operating directions. For daytime protection zones 1 and 2 and for the night-time protection zone, the increment amounts to three times the standard deviation of the usage of each operating direction over the previous 10 years (3 Sigma).

i – Summation index of the individual aircraft noise event

t_{10, i} – Duration of the ith aircraft noise event at the point of exposure in s (duration of the aircraft noise event during which the noise level lies not more than 10 dB(A) below the highest noise level (10 dB-down-time))

L_{Amax, i} – Maximum sound pressure level of the ith aircraft noise event at the point of exposure in dB(A), determined from the noise emission of an aircraft, taking into account the distance to the flight path and sound propagation conditions.

In addition, in accordance with the statutory decree issued in accordance with Article 3, para. 2, the number above threshold (NAT) contour for the frequency maximum level criterion will be determined for night-time (22:00 to 06:00 hrs) taking into account a sound pressure level difference between outdoors and indoors of 15 dB(A). The night-time protection zone is defined as the envelope of this contour and of the contour of the constant equivalent continuous sound pressure level during the assessment period T at night.