



# **RATINGS IN AIR TRAFFIC CONTROL IN THE FEDERAL REPUBLIC OF GERMANY**

**HISTORY / LEGAL BASIS**



31 July 2004

# **Training and authorization of air traffic control personnel before commercialization in 1993**

## Training and authorization of air traffic control personnel before commercialization 1993

Before German air traffic control was commercialized in 1993, air traffic control had been, acc. to art. 87d, German Constitutional Law, exclusively performed as a function of air traffic administration, i.e. under Federal administration, which had the following consequences:

- a) As a rule, exercise of sovereign authorities (including exercise of sovereignty of the airspace and thus performance of air traffic control) was, acc. to art. 33 sec. 4, German Constitutional Law, to be assigned as a permanent function to civil service employees, who were employed under public law and bound by loyalty oath (civil servants).  
Acc. to art. 33 sec. 5 German Constitutional Law, civil service rights were to be regularized with due regard for the traditional principles of civil service.
  
- b) From a) follows art. 34, German Constitutional Law (liabilities of authorities in case of breach of official duties). It reads: If someone breaches official duties incumbent on him towards third parties while performing the duties of a public office entrusted to him, responsibility fundamentally lies with the government or with the public body this person is employed with (government liability). In case of intent or gross negligence, the right of recourse is reserved.

## Training and authorization of air traffic control personnel before commercialization in 1993

With this legal background, air traffic control functions including operational and engineering services were entrusted to Civil servants until 1993. Particularly, this meant training and examination according to the training and examination regulations for **civil servants**. Rights and obligations of civil servants are laid down by the German **Federal Civil Service Law** (BBG). The Federal Republic of Germany thus considered the requirements of the German Constitutional Law met and the rules applicable by then ensured a uniform training standard complying with international ICAO recommendations. Furthermore, training and the permission to operate air traffic safety electronic facilities and systems as well as training facilities were regulated in detail.

In compliance with the German air traffic control's request for commercialization, art. 87d sec. 1 of the German Constitutional Law was amended by Bundestag and Bundesrat (Upper House of the German Parliament) in 1992 as follows:

**“The form of organization, be it under public or private law, is ruled by Federal Law.”**

# **Foundation of DFS Deutsche Flugsicherung GmbH**

## **Foundation of DFS Deutsche Flugsicherung GmbH**

The 10th amendment to the German Aviation Law of 30. Jul. 1992 resulted in the commercialization of German air traffic control, which was entrusted to Deutsche Flugsicherungs GmbH (in the following referred to as DFS) acc. to § 31 b German Aviation Law. Sole shareholder of DFS is the Federal Republic of Germany.

This was effected by the Decree on the commissioning of an air traffic control company (FS-AuftragsV) dated of 11-11-1992, Federal Law Gazette I, page 1928.

# **Reasons for establishing the new rating**



## Reasons for establishing the new rating

In January 1993, DFS GmbH became a private-law organization so that subsequently all new staff was employed under private-law contracts and training was no longer based on the training and examination rules for civil servants. From the Federal Government's point of view, this situation necessitated the Decree on air traffic control personnel requiring a licence and on the training of such personnel (FSPAV, today FISichPersAusV) in order to maintain due training standards and due quality on both a national and international level. The Federal Minister of Transport therefore availed himself of the option provided for by § 32 sec. 4 no. 4 and 5 of the German Aviation Law and regulated all details by decree.

Basically, the decree (FISichAusPersV) defines the requirements on qualification and eligibility of air traffic control personnel requiring a licence as well as technical qualifications, types and scope of licences. The regulations also provide the procedures for the acquisition of licences and ratings as well as for their revocation or limitation.

Air traffic control personnel requiring a licence also includes operational air traffic control staff (air traffic controllers and flight data processing staff) as well as engineering air traffic control staff in preventive maintenance of operational air traffic safety electronics facilities.

**Legal basis of  
German air traffic control  
following  
commercialization  
in 1993**

**Legal Basis of German air traffic control following commercialization in 1993**

**Level: German  
Constitutional Law**

**German Constitutional  
Law**

**Federal Republic of  
Germany**

(Constitution)

**Art. 87 d (1)  
(Air traffic administration)**

Sec. 1 amended by law of  
19.Jul.1992

(1) Air traffic administration is performed under Federal Administration. The type of public-law or private-law organization is ruled by Federal Law.

**Legal Basis of German air traffic control following commercialization 1993**

**Level: Federal Law**

**Aviation Law**

**Aviation Law  
(German Aviation Law)**

10th Amendment to the  
German Aviation Law by law of  
30. Jul. 1992.

**§ 31 b (1), German Aviation  
Law  
(Collateral of DFS GmbH)**

(1) The Federal Ministry of Transport is authorized to entrust the performance of such air traffic control functions as are specified in §27 c to a limited liability company with the Federal Government as sole shareholder (air traffic control company, DFS GmbH) by way of decree and without prior consent of the Bundesrat (Upper House of the German Parliament).

**Legal Basis of German air traffic control following commercialization 1993**

<p><b>Level: Federal Law</b></p> <p><b>Aviation Law</b></p> <p><b>Aviation Law (German Aviation Law)</b></p>	<p><b>§ 31 d (1), clause 1, German Aviation Law (Government supervision)</b></p>	<p>(1) An appointment acc. to secs. 31a to 31c is not admissible without consent of the mandatory who has to furnish reasonable guarantees for due performance of the function.</p>
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**Legal Basis of German air traffic control following commercialization 1993**

<p><b>Level: Federal Law</b></p> <p><b>Aviation Law</b></p> <p><b>Aviation Law (German Aviation Law)</b></p>	<p><b>§ 32 (4), German Aviation Law (Decrees)</b></p>	<p>(4) The Federal Ministry of Transport issues, without prior consent of the Bundesrat (Upper House of the German Parliament), decrees on :</p> <p>4. the requirements on qualification and eligibility of air traffic control personnel requiring a licence under this law and of instructors of such personnel, on type, scope and technical prerequisites of licences and on the procedures required for the acquisition, suspension, revocation or limitation of licences and ratings</p> <p>.</p>
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## Legal Basis of German air traffic control nach der commercialization 1993

### Level: Federal Law

### Aviation Law

### Aviation Law (German Aviation Law)

### § 4 (1), German Aviation Law (Licence/Conditions)

- (1) Any person piloting or operating an aircraft (aviator) requires a licence. The licence is granted only if
1. the applicant has reached the prescribed minimum age
  2. the applicant has furnished proof of his physical fitness
  3. there is no evidence questioning the applicant's reliability as to flying and operating aircrafts,

**Legal Basis of German air traffic control nach der commercialization 1993**

**Level: Federal Law**

**Aviation Law**

**Aviation Law  
(German Aviation Law)**

**§ 4 (1) German Aviation Law  
(Licence/Conditions)**

- (1) Any person piloting or operating an aircraft (aviator) requires a licence. The licence is granted only if
- ...
4. the applicant passed an examination pursuant to the Decree on Aviation Personnel and
  5. the applicant holds no licence of the same kind and scope under this decree.



**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level: Federal Law</b></p> <p><b>Aviation Law</b></p> <p><b>Aviation Law (German Aviation Law)</b></p>	<p><b>§ 4 (3) German Aviation Law (Revocation of licences)</b></p> <p><b>§ 4 (5) German Aviation Law (Air traffic control personnel)</b></p>	<p>(3) In the event of a lapse of the qualifications laid down in section 1, the licence is to be revoked</p> <p>(5) Section 1, clause 1, 2, no. 1 to 3 and section 3 analogously apply to air traffic control personnel employed in</p> <ul style="list-style-type: none"> <li>a) operational air traffic control services</li> <li>b) operation, maintenance and supervision of air traffic safety electronic facilities</li> </ul>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level: Federal Law</b></p> <p><b>Aviation Law</b></p> <p><b>Aviation Law (German Aviation Law)</b></p>	<p><b>§ 4 (5) German Aviation Law (Air traffic control personnel)</b></p>	<p>(5) Section 1, clause 1, 2, no. 1 to 3 and ...</p> <p>In addition, the applicant has to furnish proof of his qualification and eligibility as defined by a legal regulation pursuant to § 32, section 4, no. 4.</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level: Federal Law</b></p> <p><b>Aviation Law</b></p> <p><b>Aviation Law (German Aviation Law)</b></p>	<p><b>§ 27 c (1) German Aviation Law (Function)</b></p> <p><b>§ 27 c (2) German Aviation Law (Tasks)</b></p>	<p>(1) air traffic control serves the purpose of safe, orderly and smooth air traffic management</p> <p>(2) It particularly comprises the following tasks:</p> <ol style="list-style-type: none"> <li>1. operational air traffic control services including             <ol style="list-style-type: none"> <li>a) air traffic control</li> <li>b) traffic flow regulation</li> </ol> </li> </ol>
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## Legal Basis of German air traffic control nach der commercialization 1993

### Level: Federal Law

### Aviation Law

### Aviation Law (German Aviation Law)

### § 27 c (2) German Aviation Law (Tasks)

- (2) It particularly comprises the following tasks :
2. air traffic safety electronic services including
    - a) acquisition, installation and inspection of air traffic safety electronic equipment,
    - b) operation, maintenance and control of air traffic safety electronic facilities,

**Legal Basis of German air traffic control nach der commercialization 1993**

**Level: Federal Law**

**Aviation Law**

**Aviation Law  
(German Aviation Law)**

**§ 27 c (2) German Aviation  
Law  
  
(Tasks)**

- (2) It particularly comprises the following tasks  
:
2. air traffic safety electronic services including
    - c) development and maintenance of application programs for electronic data processing in air traffic control;

## Legal Basis of German air traffic control nach der commercialization 1993

### Level: Federal Law

### Aviation Law

### Aviation Law (German Aviation Law)

### § 27 c (2) German Aviation Law

### (Tasks)

- (2) It particularly comprises the following tasks :
3. planning and testing of air traffic control procedures and equipment;
  4. collection and publication of aeronautical news items, production and publication of maps and publication of procedural air traffic rules .

**Legal Basis of German air traffic control following commercialization 1993**

**Level:  
Federal Ministry  
of Transport**

**Decrees**

**Decree  
on  
the commissioning  
of an  
air traffic control  
company  
(FS-AuftragsV)**

On grounds of § 31 b sec. 1 and § 31 d sec. 1 clause 1 of the German Aviation Law, inserted by virtue of the 10th amendment to the Aviation Law of 23. July 1992, the Federal Minister of Transport decrees

## Legal Basis of German air traffic control following commercialization 1993

**Level:**  
**Federal Ministry  
of Transport**  
  
**Decrees**

**§ 1 FS-AuftragsV**

§1 Deutsche Flugsicherungs GmbH, registered under no. 8533 at the Commercial Register, division B, of the Offenbach Local Court, is commissioned with the performance of the functions specified in § 27 c sec. 2, Aviation Law.



**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p>On grounds of § 32, section 4, clause 1, no. 4 and 5 and clause 3 of the German Aviation Law as amended and published on March 27, 1999 in conjunction with article 56 of the Competence Amendment Law of March 18, 1975 and the Organization Decree of October 27, 1998, the Federal Ministry of Transport in agreement with the Federal Ministry of Education and Research decrees:</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Index</b></p> <p>Section One</p> <p><b>Scope and Obligation to Acquire a Licence</b></p> <p>§ 1 Scope</p> <p>§ 2 Personnel requiring a licence</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p>Section Two</p> <p><b>Training, Examinations, Licences and Ratings</b></p> <p><b>First Subsection: Qualifications</b></p> <p>§ 3 Qualifications</p> <p>§ 4 Determination and proof of physical fitness</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Second Subsection: Training and examinations for the acquisition of licences and ratings</b></p> <ul style="list-style-type: none"> <li>§ 5 Training</li> <li>§ 6 Basic training</li> <li>§ 7 Performance tests</li> <li>§ 8 Licence examination</li> <li>§ 9 Acquisition, conferment and effect of licences</li> <li>§ 10 Operational training, performance tests</li> </ul>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Second Subsection: Training and examinations for the acquisition of licences and ratings</b></p> <p>§ 11 Examination for the acquisition of a rating, conferment and effect of ratings</p> <p>§ 12 Saving clauses</p> <p>§ 13 Rating for practical training</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Third Subsection: Examination Rules</b></p> <p>§ 14 Examining boards, examination procedure</p> <p>§ 15 Assessment and passing of performance tests, subexaminations and examinations</p> <p>§ 16 Re-examination</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Third Subsection: Examination Rules</b></p> <p>§ 17 Withdrawal</p> <p>§ 18 Consequences of default</p> <p>§ 19 Infraction of regulations and attempt to deceive</p> <p>§ 20 Examination documents</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b> <b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on air traffic safety personnel requiring a licence and on the training of such personnel (FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p><b>Fourth Subsection : Period of validity, extension, renewal, revocation and suspension of licences and ratings</b></p> <p>§ 21 Validity, revocation, suspension and renewal of licences</p> <p>§ 22 Period of validity, extension and renewal of ratings</p> <p>§ 23 Revision, revocation and suspension of ratings</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on</b></p> <p><b>air traffic safety personnel requiring a licence and on the training of such personnel</b></p> <p><b>(FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p>Section Three</p> <p><b>Training Facilities</b></p> <p>§ 24 Licensing of training facilities</p>
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**Legal Basis of German air traffic control nach der commercialization 1993**

<p><b>Level:</b></p> <p><b>Federal Ministry of Transport</b></p> <p><b>Decrees</b></p>	<p><b>Decree on air traffic safety personnel requiring a licence and on the training of such personnel (FISichPersAusV)</b></p> <p>as amended on June 30, 1999</p>	<p>Section Four</p> <p><b>Provisional Clauses ; Effective Date</b></p> <p>§ 25 Provisional clauses § 26 Effective date</p>
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# **Effect of the Decree on air traffic safety personnel requiring a licence and on the training of such personnel**

## **Effect of the Decree on air traffic safety personnel requiring a licence and on the training of such personnel**

**The decree on air traffic safety personnel requiring a licence and on the training of such personnel (FISichPersAusV) ensures that within Deutsche Flugsicherungs GmbH**

- 1. applicants have reached the prescribed minimum age.**
- 2. applicants have furnished proof of their physical fitness so that all employees working at air traffic safety electronic facilities meet the minimum health requirements.**

Experience shows that permanent shift work is particularly detrimental to health. Fitness examinations at defined intervals ensure preservation of health which lies in the interest of both employer and employees.

- 3. employees are reliable, i.e. personally suited for performing air traffic control functions.**  
Before issuing a licence or rating, the authority checks both qualification and personal suitability of employees to be assigned to air traffic safety electronic facilities.

## Effect of the Decree on air traffic safety personnel requiring a licence and on the training of such personnel

- 4. only employees who are appropriately qualified for their job are employed at air traffic safety electronic facilities.**

Ratings ensure comprehensive theoretical and practical employee training by an appropriate examination. The conditions of continuance of ratings (extension) are particularly targeted at preserving employee professionalism.

- 5. employees working at air traffic safety electronic facilities have the basic knowledge of air traffic control as a complex system and are conscious of the consequences of their work thus being able to estimate the risks involved in their activities.**

Training imparts knowledge of air traffic control standards, i.e. knowledge of the employees' personal responsibility and of the air traffic control service provider's responsibility as well as of operational procedures in air traffic control, functions and interoperability of the individual air traffic control systems.

## Effect of the Decree on air traffic safety personnel requiring a licence and on the training of such personnel

### 6. employees working at air traffic safety electronic facilities are not overtaxed.

The so-called Service Qualification Groups (EBG-T) on the basis of an average knowledge spectrum are intended to prevent overtaxing of employees. These Service Qualification Groups are formed in cooperation with employee representatives who co-determine structural and health protection issues.

### 7. air traffic safety electronic facilities meet both operational requirements and safety standards.

Rating brought about a great number of internal rules and provisions for the commissioning of air traffic safety electronic facilities as well as for their maintenance. In **operational release**, for instance, operational and engineering services closely cooperate in defining the **projected status of air traffic safety electronic facilities**. This projected status, to be approved by both parties, standardizes operational release following the completion of preventive maintenance work. The sole responsibility for release following the completion of preventive maintenance work lies with the holder of the rating.

## Effect of the Decree on air traffic safety personnel requiring a licence and on the training of such personnel

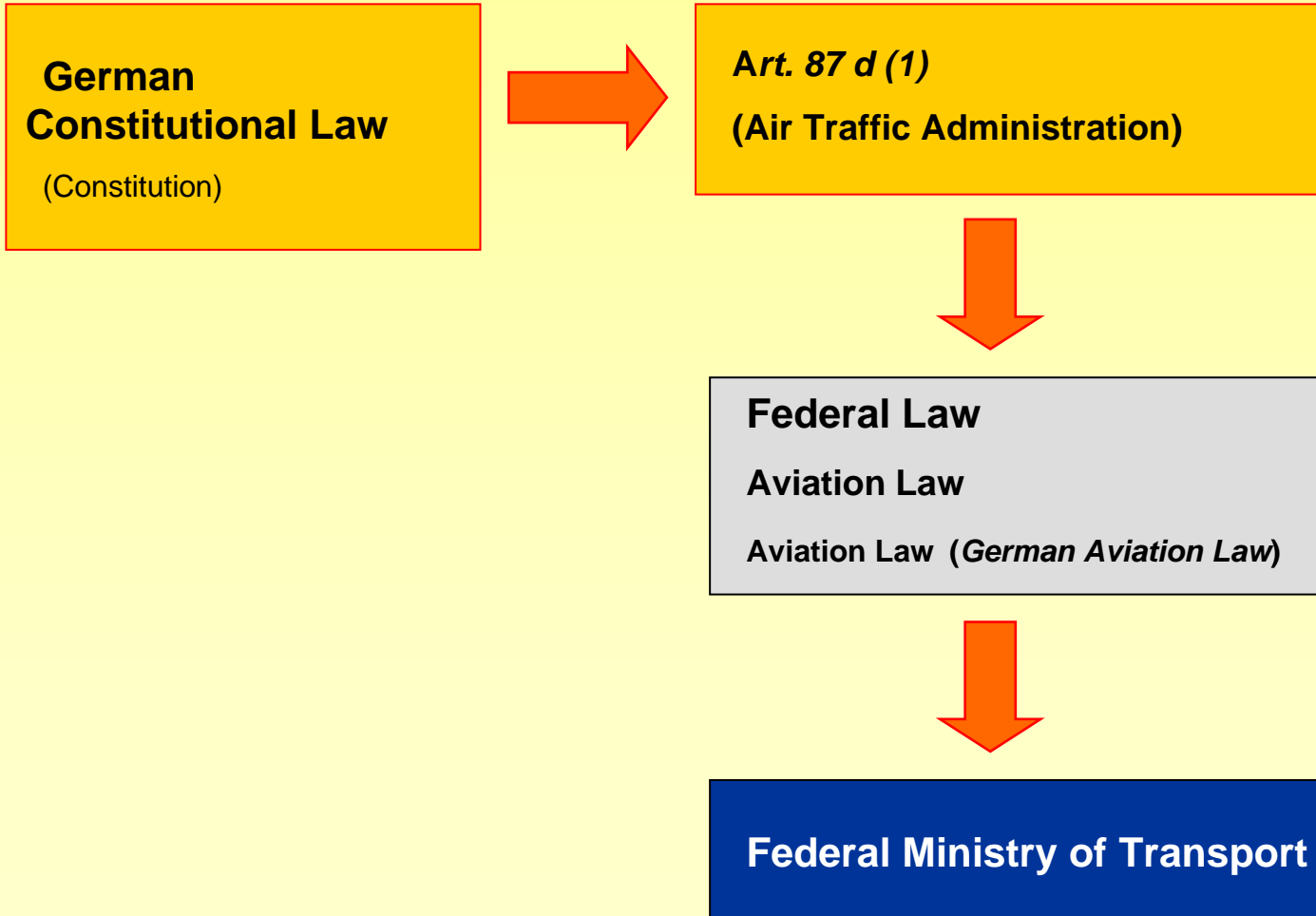
8. the quality of air traffic safety electronic facilities meets the highest possible quality standards which could not have been achieved by certification alone.



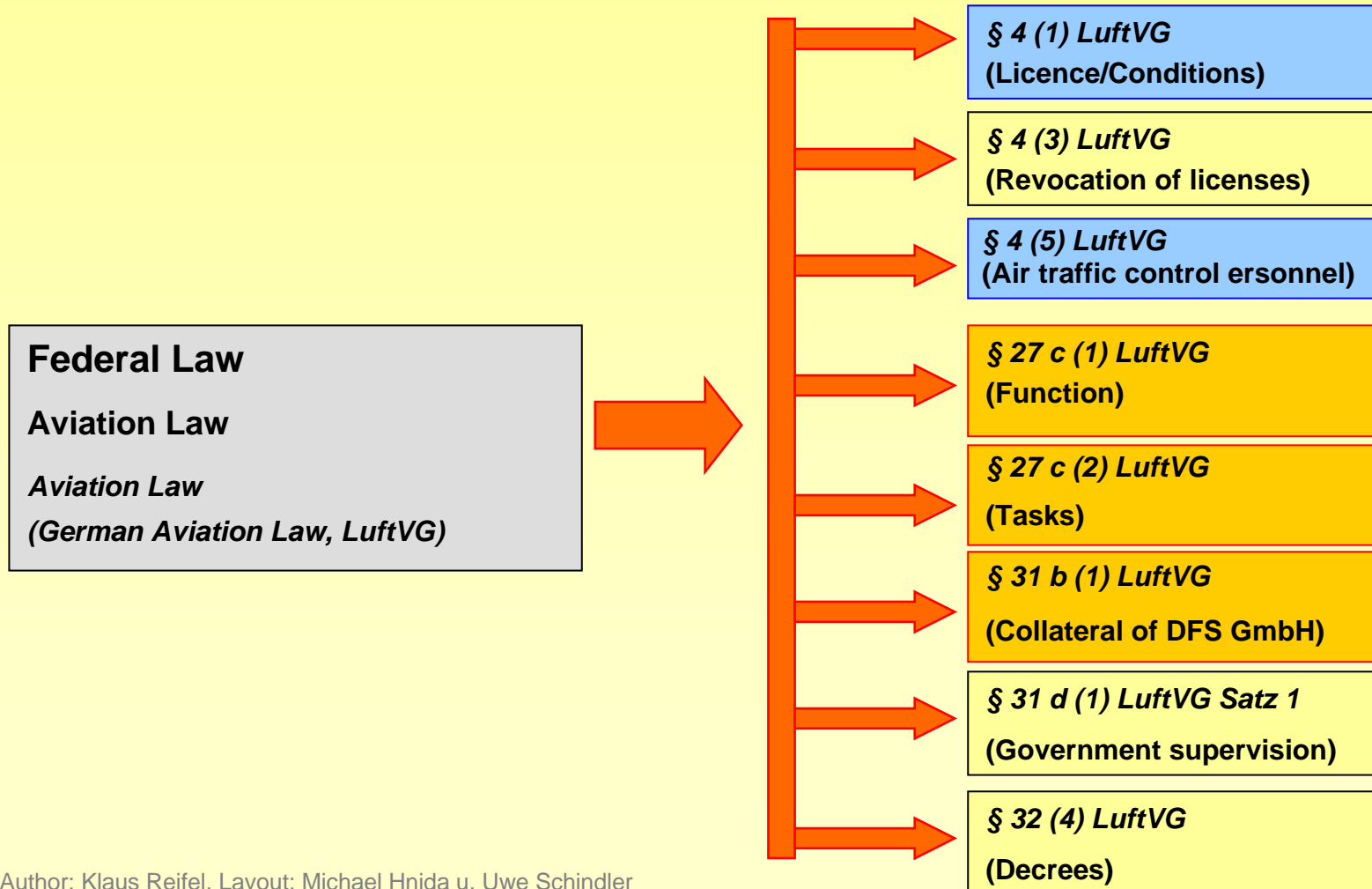
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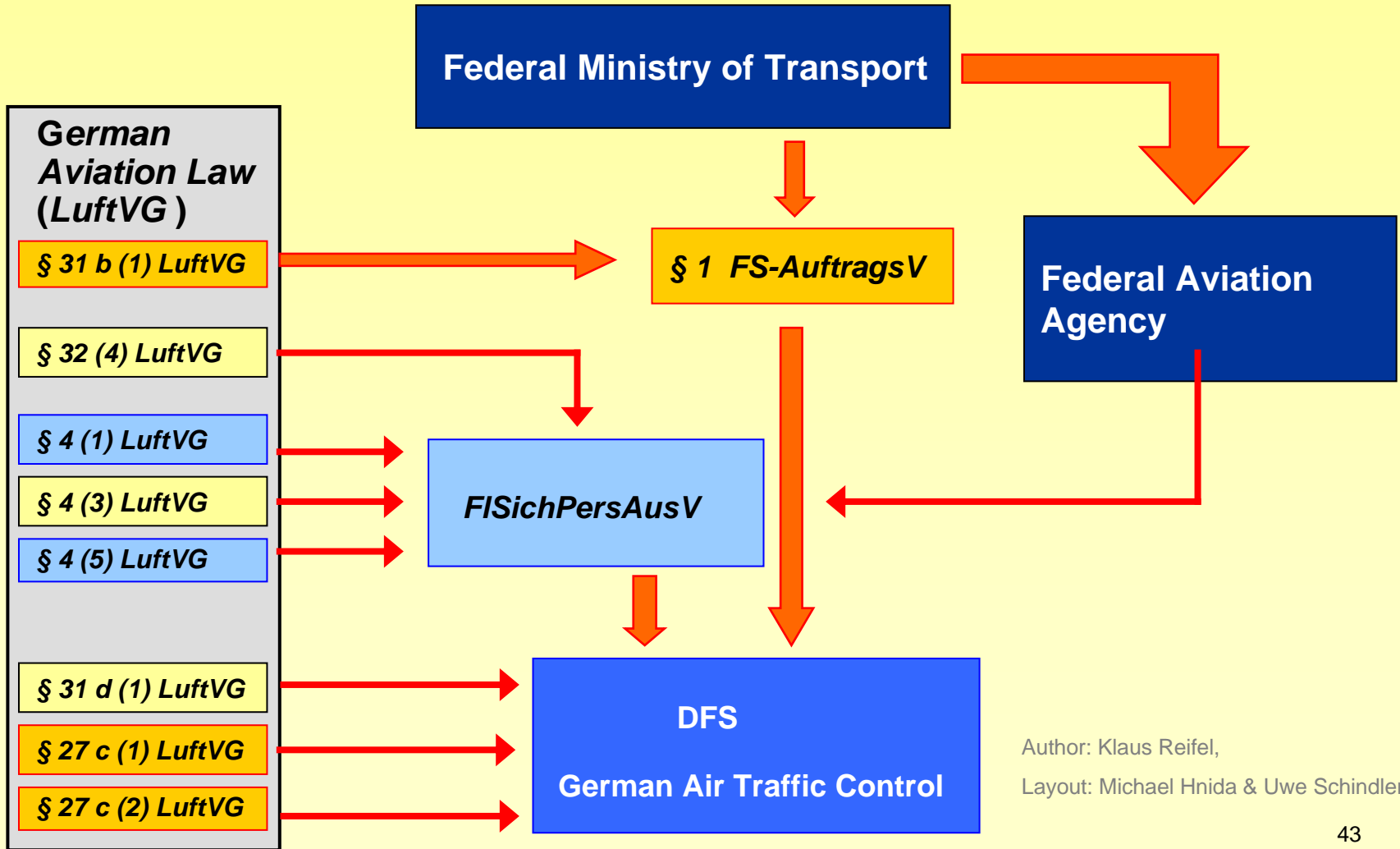
**Summary**



## Summary



**summary**



Author: Klaus Reifel,  
Layout: Michael Hnida & Uwe Schindler

Thank you very much for your attention

