



## 第十届统计专业会议

2009 年 11 月 23 日至 27 日，蒙特利尔

议程项目 5：机场财务数据

议程项目 6：空中航行服务提供者（ANSPs）航路设施财务数据

### 将机场和空中航行服务提供者的航空运输统计资料标准化

（由秘书处提交）

#### 摘要

数年来，国际民航组织每两年发布一次关于机场和空中航行服务提供者财务状况的报告。这些报告分别根据对机场和航路设施问卷的答复予以制作。这样收集的数据又通过国际民航组织统计方案所收集的数据加以补充。本文件提议将这些报告所需的数据收集合并到国际民航组织的统计方案当中。这一整合将减少对缔约国的报告要求，将数据收集标准化，并且克服航空运输方案内工作重复现象，同时通过综合统计数据库（ISDB）便利提供数据。

专业会议的行动在第 4 段。

#### 1. 引言

1.1 多年来，国际民航组织统计方案一直在增删数据序列，不断进行改动，以满足本组织及其缔约国不断变化的需求。因此，根据公约第五十四条和第五十五条，理事会于 1960 年制定了关于机场业务量的统计要求，并于 1976 年制定了关于机场和空中航行服务提供者财务数据的统计要求。通过以下航空运输报表（ATRFs）收集这些数据：

- 机场财务数据——报表 J；
- 空中航行服务财务数据——报表 K；

1.2 继 1991 年机场和航路设施管理会议之后，理事会于 1992 年 6 月确认它打算更定期地研究和报告机场和航路设施的经济情况。大会第 36 届会议随后接受了这一建议，并将其纳入涵盖本组织航空运

输领域工作的大会决议当中<sup>1</sup>。

1.3 目前根据随同国家级信件发送给各缔约国的对机场和空中航行服务提供者的业务量、财务和就业数据的问卷的答复，分别进行关于机场和空中航行服务提供者的财务状况的研究<sup>2</sup>。收集的这些数据又通过统计方案所收集的数据予以补充。

1.4 本文件提议将这些问卷与国际民航组织统计方案的相关表格合并起来，以便减少对缔约国的报告要求，并将航空运输方案内的数据收集予以标准化。此外，在国际民航组织统计方案项下整合数据收集的益处之一就是，各方数据将会纳入国际民航组织综合统计数据库。因此，所有报告的数据都可向缔约国在线提供。值得指出的是，这两个数据来源提供的 2005 年和 2007 年数据都须人工进行合并，从而造成工作重复。

## 2. 对航空运输报表的拟议修改

2.1 本节讨论了拟议做出的修改，分别载于有关附录之中。将根据专业会议的建议发布相关报告指示。

### 2.2 机场财务数据——报表 J

2.2.1 对这一报表的拟议修改是为了将其项目与有关问卷所载项目，以及相关国际民航组织指导材料（即《机场经济手册》（Doc 9562 号文件））所载项目保持一致。这些修改扩展了非航空收入项下的项目数量，以便更好地理解收入来源及其收入构成。此外还提议删除关于记帐方法和资产估价方法的填写部分，这是因为自从采用这一报表以来，会计做法已经广泛实行标准化。最后还提议增加关于机场就业情况的部分，纳入机场当局以及机场其他实体的雇员人数。原来的报表 J 及其拟议修订分别载于附录 A 和附录 B。

### 2.3 空中航行服务提供者的财务数据——报表 K

2.3.1 除了格式编排方面的改动以外，提议增加一部分，纳入空中航行服务提供者的雇员人数。原来的报表 K 及其拟议修订分别载于附录 C 和附录 D。

## 3. 经济分析与规划方面的应用

3.1 根据航空运输方案<sup>3</sup>，国际民航组织的任务包括，除其他外，协助各缔约国，尤其是发展中国家，开展经济分析和规划活动，例如航空业务量（航空公司和机场）预测、机场规划的经济内容、分析民用航空对经济的贡献或航空环境措施的经济内容。因此，机场和空中航行服务提供者的机场和航路业

<sup>1</sup> 有关这些研究的最新任务规定载于第 A36-15 号决议附录 F——机场和空中航行服务，第 II 节经济和管理，第 6 和第 7 议条款，可在专家组网站 <http://portal.icao.int/> “文件（documentation）”项下查阅。

<sup>2</sup> 最新一期出版物为 2007 年机场和空中航行服务提供者财务状况的报告，可在以下网站上查阅：  
[http://www.icao.int/icao/en/ATB/Studies/FinancialSituation\\_Ans\\_2007.pdf](http://www.icao.int/icao/en/ATB/Studies/FinancialSituation_Ans_2007.pdf)。

<sup>3</sup> A36-15 号决议“国际民航组织关于航空运输领域持续政策的综合声明”，《大会有效决议》（截至 2007 年 9 月）——Doc 9902 号文件，可在专家组网站 <http://portal.icao.int/> 的“文件（documentation）”项下查阅。

务量、财务和就业统计资料对于国际民航组织至关重要，以便完成其提供数据的任务，并发挥其在基础设施发展和/或管理以及决策方面向缔约国提供咨询服务的潜力。

### 3.2 基础设施规划的预测

3.2.1 目前，机场或空中航行服务提供者的业务计划中，都明确规定了民用航空的基础设施要求。涵盖任一给定时期的计划都应规定其各自的战略和资本投资，包括融资和摊销，藉此实现其各自的长期业务目标。这一计划还应概述机场和空中航行服务提供者预期运作的业务环境，及其对投资规划的影响。

3.2.2 如上所述，可向综合统计数据库订户提供在线数据服务。此外，可以应要求提供符合客户特定需求的数据集，无论是否通过国际民航组织经常方案和/或技术合作方案提供经济分析和预测援助。国际民航组织每两年进行关于机场和空中航行服务提供者财务状况的调查，并调查其各自的组织结构和所有权结构以及这些实体衡量其各自经济效绩的职能。外部客户包括服务提供者或政府机构，例如那些经营/管理机场/空中航行服务的国有实体、完全自主或部分自主的实体，或者负责进行经济监督的实体。

### 3.3 评估民用航空对经济的贡献

3.3.1 衡量民用航空对经济的贡献，可以评估航空运输、航空航天及其他相关行业在产出和创造就业机会方面对整个经济产生的影响。为了提供航空旅行和货运服务，航空承运人和其他运营人主要是从机场、空中航行服务提供者、政府机构、公有公司以及航空航天制造业及其他行业购买各种各样的产品（商品与服务）。机场为其所在的当地/地区和国家经济做出重大贡献。行业界在全球化的贸易机制内依赖航空运输，尤其是对于极端脆弱的岛国和内陆国家而言更是如此。一项透彻的经济影响研究可以显示出机场对有关经济做出的贡献。这对于获得融资或谈判更好的贷款条件将大有助益，尤其是指公有资金或外资来源而言（例如政府担保或发展银行和基金），改进航空基础设施所产生的广泛经济效应将会吸引这些资金来源。

## 4. 专业会议的行动

4.1 请专家组审查并批准以下拟议的修改：

- a) 报表 J——机场财务数据，（i）扩展非航空收入项下的项目数量，（ii）简化要求提供的一些辅助财务信息；和（iii）增加机场员工人数的内容；和
- b) 报表 K——空中航行服务财务数据，增加空中航行服务提供者的雇员人数的内容。

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INTERNATIONAL CIVIL AVIATION ORGANIZATION  
AIR TRANSPORT REPORTING FORM

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AIRPORT FINANCIAL DATA

Contact person: \_\_\_\_\_ State: \_\_\_\_\_  
 Organization: \_\_\_\_\_ Airport: \_\_\_\_\_  
 Tel.: \_\_\_\_\_ Year ended: \_\_\_\_\_  
 Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_ Currency: \_\_\_\_\_

Estimated data, identified by an asterisk (\*), may be used if exact data are not available

INCOME, EXPENSES AND INVESTMENTS

	DESCRIPTION	AMOUNTS		
		SUBTOTAL	TOTAL	
INCOME	1. Air traffic operations .....			
	1.1 Aircraft related charges .....			
	1.2 Passenger related charges .....			
	1.3 Other charges on air traffic operations .....			
	2. Ground handling charges .....			
	3. Concessions .....			
	of which, fuel and oil .....			
	4. Rentals .....			
5. Other revenues .....				
6. Total revenues (sum of items 1 through 5) .....				
7. Operating subsidies .....				
8. TOTAL INCOME (sum of items 6 and 7) .....				
EXPENSES	9. Operations and maintenance (including labour) .....			
	9.1 Personnel costs .....			
	9.2 Supplies .....			
	9.3 Services - contracted .....			
	10. Administrative overheads .....			
	11. Other non-capital costs .....			
	12. Capital costs .....			
	12.1 Depreciation and/or amortization .....			
	12.2 Interest .....			
	12.3 Other capital costs .....			
13. TOTAL EXPENSES (sum of items 9 through 12) .....				
INVESTMENTS	14. Gross capital investments during the year .....			
	14.1 Aircraft movement areas .....			
	14.2 Terminal buildings (owned by airport) .....			
	14.3 Equipment and vehicles .....			
	14.4 Other facilities .....			
	14.5 Land .....			
Basis on which airport income and expense accounts maintained .....		<input type="checkbox"/> Accruals	<input type="checkbox"/> Cash	<input type="checkbox"/> Other*
Basis on which airport capital assets valued .....		<input type="checkbox"/> Historic	<input type="checkbox"/> Current	<input type="checkbox"/> Other*
*If other please explain in remarks section or in a separate attachment.				

AIRPORT AREAS AND/OR SERVICES INFORMATION

Indicate with a check (✓) in column b whether all or nearly all expenses associated with the airport areas or services listed below are included in the expense data reported in the previous section. Also, if available, enter in column c the operation and maintenance expenses associated with each area or service.

Airport area or service	All or nearly all expenses included		Operation and maintenance expenses (amounts)
	Yes	No	
a	b		c
1. Aircraft movement areas and their associated lighting .....	<input type="checkbox"/>	<input type="checkbox"/>	
2. Passengers and cargo terminal facilities .....	<input type="checkbox"/>	<input type="checkbox"/>	
3. Hangar and maintenance areas .....	<input type="checkbox"/>	<input type="checkbox"/>	
4. Approach and aerodrome control (including communication, nav. & survell.(CNS)) .....	<input type="checkbox"/>	<input type="checkbox"/>	
5. Meteorological services .....	<input type="checkbox"/>	<input type="checkbox"/>	
6. Security .....	<input type="checkbox"/>	<input type="checkbox"/>	
7. Crash, firefighting & rescue services .....	<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS: (including a description of any major deviation(s) from the reporting instructions).

**ICAO AIR TRANSPORT REPORTING FORM**  
**AIRPORT FINANCIAL AND EMPLOYMENT DATA**

Page of

Contact person: \_\_\_\_\_ State: **ICAO CONTRACTING STATE**  
Organization: \_\_\_\_\_ Airport: \_\_\_\_\_  
Tel: \_\_\_\_\_ Year ended: \_\_\_\_\_  
Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_ Currency: \_\_\_\_\_

**Estimated data, identified by an asterisk (\*), may be used if exact data are not available**

	DESCRIPTION	SUB-TOTAL	TOTAL	
	<i>Income by function and item</i>	Amount		
<b>I N C O M E</b>	1. Air traffic operations			
	1.1 Aircraft related charges			
	1.2 Passenger related charges			
	1.3 Other charges on air traffic operations			
	2. Ground handling charges			
	3. Concessions			
	3.1 Fuel and oil			
	3.2 Duty-free shops			
3.3 Automotive parking				
4. Rentals				
5. Other revenues				
6. Total revenues (sum of items 1 through 5)				
7. Operating subsidies				
8. TOTAL INCOME (sum of items 6 and 7)				
	<i>A. Expenses by cost item</i>	Amount		
<b>E X P E N S E S</b>	9. Operations and maintenance (including labour)			
	9.1 Personnel costs			
	9.2 Supplies			
	9.3 Services - contracted			
	10. Administrative overheads			
	11. Other non-capital costs			
	12. Capital costs			
	12.1 Depreciation and/or amortization			
	12.2 Interest			
	12.3 Other capital costs			
	13. TOTAL EXPENSES (sum of items 9 through 12)			
		<i>B. Allocation of total expenses by function</i>	Amount	
	13.1 Aircraft movement areas and their associated lighting			
13.2 Passengers and cargo terminal facilities				
13.3 Hangar and maintenance areas				
13.4 Approach and aerodrome control (incl. communication, navigation & surveillance)				
13.5 Meteorological services				
13.6 Security				
13.7 Crash, firefighting & rescue services				
13.8 Other (specify).....				
	<i>Gross capital investments by function</i>	Amount		
<b>I N V E S T M E N T S</b>	14.1 Aircraft movement areas			
	14.2 Terminal buildings (owned by airport)			
	14.3 Equipment and vehicles			
	14.4 Other facilities			
	14.5 Land			
14. TOTAL GROSS CAPITAL INVESTMENTS				
	<i>Employment by function</i>	No. of employees		
<b>E M P L O Y M E N T</b>	15. Personnel of airport operator (in full-time equivalents)			
	15.1 Aeronautical activities			
	15.2 Non-aeronautical activities			
	16. Personnel of other airport-based entities (in full-time equivalents)			
	16.1 Aeronautical activities (e.g. air carriers, sub-contractors)			
16.2 Non-aeronautical activities				
17. TOTAL AIRPORT-BASED PERSONNEL (sum of 15 + 16 in full-time equivalents)				

REMARKS (including a description of any major deviation(s) from the reporting instructions):

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INTERNATIONAL CIVIL AVIATION ORGANIZATION  
 AIR TRANSPORT REPORTING FORM

AIR NAVIGATION SERVICES FINANCIAL DATA

Contact person: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Tel: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

State: \_\_\_\_\_  
 FIR/UIR(s) covered: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Estimated data, identified by an (\*), may be used if exact data are not available

Year ended: \_\_\_\_\_

Currency: \_\_\_\_\_

Revenue by function and item	Amounts	
	Subtotal	Total
1. En-route services.....		
1.1 Revenues from route charges.....		
1.2 Other revenues (e.g. from airport and approach and aerodrome control charges).....		
2. Approach and aerodrome control services.....		
2.1 Revenue from approach and aerodrome control charges.....		
2.2 Other revenues (e.g. from airport and route charges).....		
3. Grants and subsidies.....		
4. Other revenues.....		
5. TOTAL REVENUES.....		

**PART II - EXPENSES**

Expenses by item	Amounts
1. Operation and maintenance ( e.g. staff, supplies, services, etc).....	
2. Administrative overhead.....	
3. Depreciation and/or amortization.....	
4. Interest.....	
5. Other expenses.....	
6. TOTAL EXPENSES.....	
Expense allocation by function (amounts or percentages of total expenses)	
6.1 En-route services.....	
6.2 Approach and aerodrome control services.....	
6.3 Non-aeronautical activities.....	

**PART III - EXPENSES BY SERVICE**

Service	Amounts
1. ATM - Air traffic management.....	
2. CNS - Communications, navigation and surveillance.....	
3. MET - Meteorological services.....	
4. SAR - Search and rescue services.....	
5. AIS - Aeronautical information services.....	
6. TOTAL.....	

**PART IV - GROSS CAPITAL INVESTMENTS DURING THE YEAR BY SERVICE**

Services	Gross capital investments
1. ATM - Air traffic management.....	
2. CNS - Communications, navigation and surveillance.....	
3. MET - Meteorological services.....	
4. SAR - Search and rescue services.....	
5. AIS - Aeronautical information services.....	
6. TOTAL.....	

Remarks (including a description of any unavoidable deviation(s) from the reporting instructions):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**AIR TRANSPORT REPORTING FORM  
AIR NAVIGATION SERVICES FINANCIAL AND EMPLOYMENT DATA**

Contact person: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Tel: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

State: **ICAO CONTRACTING STATE**  
FIR/UIR(s) covered: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Estimated data, identified by an (\*), may be used if exact data are not available

Year ended: \_\_\_\_\_

Currency: \_\_\_\_\_

**PART I - INCOME**

Revenues by function and item	Amount	
	Sub-total	Total
1. En-route services.....		
1.1 Revenues from route charges.....		
1.2 Other revenues (e.g. from airport and approach and aerodrome control charges).....		
2. Approach and aerodrome control services.....		
2.1 Revenue from approach and aerodrome control charges.....		
2.2 Other revenues (e.g. from airport and route charges).....		
3. Grants and subsidies.....		
4. Other revenues.....		
5. TOTAL REVENUES.....		

**PART II - EXPENSES**

A. Expenses by cost item	Amounts
1. Operation and maintenance ( e.g. staff, supplies, services, etc).....	
2. Administrative overhead.....	
3. Depreciation and/or amortization.....	
4. Interest.....	
5. Other expenses.....	
6. TOTAL EXPENSES.....	
B. Allocation of total expenses by function	Amounts
6.1 Aeronautical activities .....	
6.1.1 En-route services.....	
6.1.2 Approach and aerodrome control services.....	
6.2 Non-aeronautical activities.....	
C. Expenses by service	Amounts
1. ATM - Air traffic management.....	
2. CNS - Communications, navigation and surveillance.....	
3. MET - Meteorological information.....	
4. SAR - Search and rescue.....	
5. AIS - Aeronautical information.....	
6. Other (specify).....	
7. TOTAL.....	

**PART III - GROSS CAPITAL INVESTMENTS**

Service	Amounts
1. ATM - Air traffic management.....	
2. CNS - Communications, navigation and surveillance.....	
3. MET - Meteorological services.....	
4. SAR - Search and rescue services.....	
5. AIS - Aeronautical information services.....	
6. Other (specify).....	
7. TOTAL.....	

**PART IV - EMPLOYMENT**

Service	No. of employees
1. ATM - Air traffic management.....	
2. CNS - Communications, navigation and surveillance.....	
3. MET - Meteorological services.....	
4. SAR - Search and rescue services.....	
5. AIS - Aeronautical information services.....	
6. Other (specify).....	
7. TOTAL (in full-time equivalent).....	

REMARKS: (including a description of any major deviation(s) from the reporting instructions).