



理事会 — 第 178 届会议

题目编号 45: 国际民航组织对于提供空中航行设施和服务的政策和方案

关于所有地区规划和实施组/咨询组
第五次会议（ALLPIRG/5）的成果和后续行动的报告

（由理事会主席提交）

摘要

本文件对所有地区规划和实施组（ALLPIRG）/咨询组第五次会议做了报告，其成员由范围广泛的 CNS/ATM 实施合作伙伴组成。会议对 18 项结论达成共识，呼吁 ALLPIRG 成员通过各种相互组合的方法采取后续行动。本文件的附录对这些建议的行动做了分析，并提请理事会加以确认，即国际民航组织应该对这些任务作出适当的贡献。

理事会的行动在第 4 段。

参考文件

Doc 7300 号文件《地区补充程序》
2006 年 4 月 19 日 PRES AK/1186 号备忘录
*ALLPIRG/5 次会议的报告

本工作文件涉及战略目标 A、B、C 和 D。

*主要参考文件。

1. 引言

1.1 本文件对所有地区规划和实施组（ALLPIRG）/咨询组第五次会议（ALLPIRG/5）做了报告，本次会议在国际民航组织理事会主席的主持之下，于 2006 年 3 月 23 日至 24 日在国际民航组织总部召开。六个地区规划和实施组（PIRGs）、五个全球和地区服务提供者、四个国际组织的 100 名代表和 51

名观察员参加了本次会议。

1.2 ALLPIRG 的主要作用之一是就 CNS/ATM 系统实施问题，以便最终实现全球空中交通管理（ATM）系统，向国际民航组织理事会提供建议。随 2006 年 4 月 19 日的 PRES AK/1186 号备忘录送发的 ALLPIRG/5 次会议的报告，是该组在这方面所做的贡献。ALLPIRG/5 次会议报告的摘要载于本工作文件的第 I 部分。文件第 II 部分对 ALLPIRG/5 次会议成果后续行动的作法做了讨论。

2. 第 I 部分——ALLPIRG/5 次会议报告的摘要

2.1 会议按照理事会为 ALLPIRG 制定的职权范围编制的议程进行了工作。会议制定了 18 项结论，所有结论在下列段落中都有对照参考，对报告做了归纳。

2.2 议程项目 1：审议 ALLPIRG/4 次会议报告的后续行动

2.2.1 会议注意到空中航行委员会和理事会对上次会议报告采取的行动。会议还对 ALLPIRG/4 次会议期间得出结论的后续行动进行了审议，并注意到，在多数情况下行动已经完成。

2.3 议程项目 2：全球空中航行规划

全球规划的框架

2.3.1 会议听取了对全球空中航行计划第二次修订草案的完整介绍，它涵盖了为实现全球 ATM 系统的过去、现在和未来的相关工作。会议对经修改的全球规划以及规划和实施的新举措表示支持。但是，仍提出了一些问题，会议因此要求秘书处最后确定经修改的全球规划时须解决以下问题：a) 制定一种确保将全球规划纳入地区规划当中的机制；b) 规划和实施的整体进程应力求简易；c) 国际民航组织总部确保最大限度的转让知识；d) 将航空器的运行纳入相关的活动当中；e) 完成效绩框架工作以便参与者能更好地理解如何实现效绩目标；和 f) 在全球规划的举措中（GPIs）应充分处理好安全问题。会议同意，国际民航组织在支持全球规划当中，应针对将经修改的规划过程和 GPIs 纳入目前的规划框架，以及利用规划工具和方法的问题，在地区办事处组织举办一系列讲习班（参见第 5/1 号结论）。会议意识到，全球规划是制定地区和国家计划的一个重要组成部分，它连同全球 ATM 运行概念，为实现全球 ATM 系统提供了一个有效的框架体系。在对全球规划的讨论进行总结时，会议同意实施 GPIs 的一种做法，包括在每次 PIRG 会议上，使用一种通用模式，并对取得的进展和实施 GPIs 当中查明的挑战进行审议（参见第 5/2 号结论）。

PIRGs 的作用

2.3.2 作为根据理事会就需要对航委会向理事会提交报告的格式和处理方法进行审议，以及对 PIRGs 职权范围发表的意见的后续行动，会议收到了有关这一题目迄今所完成工作的进展报告。会议在讨论 PIRGs 的作用时指出，鉴于国际民航组织的战略目标适用于世界民用航空界，因此，对 PIRGs 职权范围的任何修改应该与战略目标，而不是与国际民航组织的业务计划相关。会议要求国际民航组织与所有 PIRGs 的主席和秘书进行磋商，最后落实所有 PIRGs 的职权范围（参见会议报告的 2.2.3 段）。

业务案例模式

2.3.3 会议注意到国际民航组织为实施 CNS/ATM 系统制定的业务案例模式，认可了其价值并呼吁国际民航组织组织举办一系列的地区培训讲习班（参见第 5/3 号结论），并对成本效率、成本效益分析和业务案例建立一个专家网络，以便共享专业知识并向地区办事处提供援助（参见第 5/4 号结论）。

可在线搜索的 ANP 数据库

2.3.4 在继续讨论全球规划时，向会议做了一次使用国际民航组织地理信息系统（GIS）入口可在线搜索航行规划（ANP）数据库的现场演示。会议满意地注意到，通过该入口可使用的数据库和服务能够提高效率，并对进行电子更新和及时向所有用户提供最新的全球 ANP 资料创造了条件。因此，这将确保地区航行系统的现实性、协调和实施，并将进一步为在国家一级、地区一级、地区间和全球一级制定 ANPs 发挥贡献（参见第 5/5 号结论）。会议认为，在开发规划工具和服务时，国际民航组织应满足地区办事处制定的要求，以及对类似欧洲空中航行安全组织（EUROCONTROL）等其他组织开发的类似工具加以考虑（参见第 5/6 号结论）。

CNS/ATM 系统的环境效益

2.3.5 向会议介绍了国际民航组织航空环境保护委员会（CAEP）工作的最新情况，以及对 CNS/ATM 系统对全球和地区层次的环境影响进行评估的方法。会议注意到，CAEP 提供的 CO₂ 的换算因素将对实施 CNS/ATM 系统的环境效益进行分析有帮助意义（参见第 5/7 号结论）。会议确认，PIRGs 和各国应与空域用户紧密协调，制定一份全球统一和有重点的改进航路和终端区（TMA）的清单（参见第 5/8 号结论），并在所有的 TMA 实施区域导航（参见第 5/9 号结论）。在对环境问题的讨论进行总结时，会议要求国际民航组织对采用缩小垂直间隔（RVSM）的环境效益开展研究（参见第 5/10 号结论）。

2.4 议程项目 3：航空安全

民航局长会议后续行动的成果

2.4.1 会议注意到，于 2006 年 3 月 20 日至 22 日在蒙特利尔国际民航组织总部召开的全球航空安全战略的民航局长会议（DGCA），并对通过所有缔约国、国际民航组织和航空界的协调行动来改进航空安全的统一做法，表示赞同。会议听取了与 PIRGs 工作方案有关的结论和建议的口头介绍。会议意识到，PIRGs 在确保 DGCA 会议的建议能够以最有效的方式加以实施方面发挥重要的作用。在这方面，会议同意，每个 PIRG 为实施民航局长会议的结论和建议制定切实可行的措施，并定期向国际民航组织提交报告。作为民航局长会议的后续行动，会议强调了 ATM 的安全领域需要得到紧迫和高度优先的关注，并因此要求国际民航组织敦促各国为建立和有效地运行其 ATM 安全管理和安全规章职能给予重视（参见第 5/11 号结论）。关于各国实施欧洲航空事故征候报告系统协调中心（ECCAIRS）的软件或兼容设备，以便将其调查报告提交给国际民航组织的事故/事故征候数据报告（ADREP）系统的问题，会议同意须对 ECCAIRS 或兼容系统实施的程度进行跟踪，此举将有助于在各国之间和各国与国际民航组织之间交换事故的数据。会议再次同意要鼓励各国分享安全数据。

2.5 议程项目 4：航空保安

2.5.1 会议收到了一份关于普遍保安审计计划（USAP）所取得进展、它对查明各国航空保安系统的缺陷，及其为解决缺陷提供建议的总体影响作用的报告。此外，这份报告还讨论了航空保安协调的援助方案，它为各国有效地发展其航空保安基础设施，为改正 USAP 暴露的任何尚未解决的航空保安缺陷，提供了支持。

2.6 议程项目 5：地区间的协调和统一

地区监测机构的成本回收安排

2.6.1 在这一议程项目之下，会议注意到某些地区，比如中东地区，对地区监测机构（RMAs）的供资是监测活动继续运行的主要障碍。根据目前的安排，各国在自愿基础上承担所有费用从长远角度来看是无法持续的。因此，向会议介绍了一个由秘书处制定的回收 RMAs 成本和分阶段实施成本回收安排程序的全球化做法。会议注意到，所提议的全球化做法将由空中航行服务经济专家组第 6 次会议（ANSEP/6）对其审议之后再予以落实，专家组于 2006 年 3 月 27 日至 31 日在国际民航组织总部召开了会议。

地区监测机构之间的协调

2.6.2 在继续讨论时，会议审议了 RMAs 为保证监测方案能达到确定的安全目标，查明有待解决的问题，以便提高对 RVSM 监测有效性的作用。会议同意，缺乏全球化的协调机制是 RVSM 运行有效地发挥作用的障碍。会议认为，各个不同的 RMAs 之间的全球协调能够达到交换运行资料、监测数据和最佳做法的目标。鉴于国际民航组织欧洲和北大西洋（EUR/NAT）办事处已经在两个 RMAs 之间进行联络并执行所需的全球协调任务，会议因此建议该办事处担任初期的联络点（参见第 5/12 号结论）。

监测数据链的应用

2.6.3 会议意识到，装备有 FANS-1/A 航空电子设备的航空器正在不断扩大，因为波音和空中客车目前已经在全部新交付的远程航空器上安装了这些系统。因此，各国在某些程序空域实施由 FANS-1/A 启用的数据链应用作为高频（HF）语音的替代方法非常具有吸引力。会议注意到，亚洲和太平洋地区已建立了一个中央报告机构（CRA），来解决实施数据链技术当中的技术和运行问题并进行全面协调。在这方面，会议认识到地区性的 CRAs 不可能独立地管理全球范围的 FANS-1/A 数据链的运行，同时太多的不同地区性的 CRA 功能将可能会耽搁查明和解决所遇到的问题。因此，会议接受了采用全球化 CRA 功能概念的益处，但也考虑到现阶段认可这种建议尚不成熟，在认可之前还需要一些业务案例。

RNP/RNAV 实施的全球化协调

2.6.4 会议注意到，国际民航组织正在对目前的所需导航性能（RNP）概念进行审议，以便满足空域规划者和航空器经营人对于以效绩为基础导航（PBN）日益增长的需求。预计新概念将按照一个一贯和统一的概念，对目前实行的区域导航（RNAV）和 RNP 指定的 PBN 应用加以统一。此外，为了支持 PBN 概念，根据不同地区的需要，正在与各国、工业界和航空公司进行紧密协调，制定一套完整的导航规范。会议在支持 PBN 方案的同时，呼吁国际民航组织举办讲习班和培训活动，并同意所有的 PIRGs

应该实施 PBN 概念（参见第 5/13 号结论）。

统一的方法

2.6.5 关于缺陷的问题，会议审议了对为查明、评估和报告空中航行的缺点和缺陷的统一方法进行更新的地区性建议，这项建议最初是在 PIRGs 的协助之下制定的，并经国际民航组织理事会于 1998 年 6 月批准，随后于 2001 年做了修订。

2.6.6 关于开发空中航行地区性在线数据库的建议，会议认识到这种方法除了能够提供透明度之外，还能够使数据库当中的资料保持最新状态，并按国家、类型、缺陷、日期等加以编排，并同意它适用于所有地区（参见第 5/14 号结论）。关于消除长期存在的缺陷问题，会议意识到，虽然许多缺陷尚未得到解决，但各地区只有少数国家用消除缺陷的行动方案做了答复。因此，会议通过了一项建议，呼吁所有 PIRGs 在使用了各种替代方法，但为消除缺陷的努力证明仍不成功时，采取一种“最后手段的行动”。最后手段的行动包括两部分：首先，建议在 ANP 当中加入预备的设施/程序；其次，如果上述不可行，应向各国、用户和国际民航组织提供一份与上述缺陷相关风险的分析（参见第 5/15 号结论）。

VSAT 的使用

2.6.7 会议讨论了与实施使用甚小孔径终端（VSAT）地面通讯网络相关的问题。会议注意到，在国际民航组织的某些地区，VSAT 一直是提供航空固定服务（AFS）和其他地对地通信的技术选择。但是，由于成本和网络互联的复杂性以及终端至终端性能潜在的衰减，对这种网络不断扩散的趋势一直是一种关注。因此，会议同意在单一（中央化）运行控制一体化的地区/地区间的数字通讯网络方面工作，并最好以互联网协议（IP）为基础（参见第 5/16 号结论）。关于 VSAT 和其他数字通信网络使用的网络协议，会议注意到 IP 产品和服务已可广泛提供，并要求国际民航组织加快其在制定在航空通信中使用互联网规约阵列（IPS）以及使用公共互联网规定方面的工作（参见第 5/17 号结论）。

地区补充程序

2.6.8 会议认识到，《地区补充程序（SUPPs）》（Doc 7030 号文件）是支持实施 CNS/ATM 系统的重要文件，并为在地区应用全球规定提供了一个可行的案文。因此，各国经常使用该文件作为不断对其国家规章进行修订的一种根据。会议被告知国际民航组织秘书处已经对 Doc 7030 号文件开展了一项分析，目的旨在为有助于 CNS/ATM 系统的实施制定适当的格式和细化，并已决定应分两阶段进行修订。第一阶段是考虑对系统性能和能力不断提出的要求，按照更连贯一致的方式对 Doc 7030 号文件重新编写。第二阶段是对补充程序适用的索引进行修改，更密切地反映出国际民航组织各地区和 PIRGs 责任的领域（参见第 5/18 号结论）。

3. 第 II 部分——对 ALLPIRG/5 次会议的结论及所需资源拟议的后续行动

3.1 ALLPIRG 的组成和作用要求其工作按照不同于传统的 PIRG 的方式进行。在对本文件附录列出的 ALLPIRG/5 次会议结论所需要的后续行动进行审议时，这种区别越发明显。

3.2 举例来说，可以看出许多结论不仅要求国际民航组织采取行动，同时也要求 ALLPIRG 成员的其他 CNS/ATM 合作伙伴采取行动，因此，通过国际民航组织和 ALLPIRG 成员的协调努力需要提前采

取后续行动。

3.3 经确认，ALLPIRG/5 次会议的后续任务是对国际民航组织的战略目标作出回应，并与本组织的业务计划以及全球规划的举措相关。预计后续行动将通过在目前方案预算中调拨资源由秘书处来完成。

4. 理事会的行动

4.1 根据上述，请理事会：

- a) 注意到 ALLPIRG/5 次会议的报告和结论；
- b) 对附录当中提出的结论采取具体行动；和
- c) 注意到后续行动将通过在目前方案预算中调拨资源由秘书处予以执行。

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APPENDIX
PROPOSED FOLLOW-UP ON CONCLUSIONS DEVELOPED BY THE ALLPIRG/5 MEETING

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/1 — Workshops on the Global Plan for Regional Offices				
That, in support of the Global Plan, ICAO conduct workshops in the Regional Offices to provide training on planning tools and methodologies as well as strengthening the interaction between technical officers at Headquarters and Regional Offices.	Increases efficiency (Strategic objective D) Relates to all GPIs	Conduct workshops in the Regional Offices to provide training on planning tools and methodologies through the SIP mechanism	ICAO Headquarters	Approve, with the understanding that the proposal for a SIP would be submitted to the Council through established procedures
Conclusion 5.2 — Implementation of Global Plan Initiatives (GPIs)				
That, recognizing that the evolution continues from a systems-based to a performance-based approach to planning and implementation of the air navigation infrastructure, the regional planning groups:	Increases efficiency (Strategic objective D) Relates to all GPIs			
a) note that the Global Plan is a significant component in the development of regional and national plans and that, together with the global ATM operational concept, provide an effective architecture for achieving a harmonized and seamless Global ATM system;		Note that the Global Plan is a significant component in the development of regional and national plans	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note, with an understanding that the revised Global Plan will be presented to the Council in late 2006
b) identify GPIs that most closely align with the well established implementation plans of their respective regions;		Identify GPIs that most closely align with the implementation plans of their respective regions	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
c) select GPIs that would be most effective in achieving the objectives of the region while ensuring continuation of the work already accomplished;		Select GPIs that would be most effective in achieving the objectives of the region	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
d) implement GPIs that take into account the Initiatives across regions, to align work programmes and to develop national and regional plans that facilitate achieving a Global ATM system;		Implement GPIs in the development of national and regional plans	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
e) utilize the planning tools as the common planning and implementation mechanism, thereby ensuring proper coordination and global integration; and		Utilize the planning tools as the common planning and implementation mechanism	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
f) review, at each PIRG meeting as a part of its regular agenda, the progress achieved and challenges identified in the implementation of GPIs using a common template.		Review, at each PIRG meeting as a part of its regular agenda, the progress achieved and challenges identified in the implementation of GPIs	ICAO Regional offices and PIRGs	Note

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/3 — Workshop on the business case model for communications, navigation, and surveillance/air traffic management (CNS/ATM) Systems				
That, in support of the development of business cases for the implementation of CNS/ATM systems, ICAO convene a training workshop for States at the Regional Offices through an appropriate mechanism, such as Special Implementation Projects (SIPs).	Increases efficiency (Strategic objective D) Relates to all GPIs	ICAO to convene a training workshop for States at the Regional Offices through the SIP mechanism	ICAO Headquarters	Approve, with the understanding that the proposal for a SIP would be submitted to the Council through established procedures
Conclusion 5/4 — Application of the business case model for CNS/ATM systems implementation				
That PIRGs, States and airspace users:	Increases efficiency (Strategic objective D) Relates to all GPIs			
a) note that business cases for the implementation of CNS/ATM systems leading to a global ATM system is a key element in the development of regional, subregional and national plans;		Note that business cases for the implementation of CNS/ATM systems is a key element in the development of regional, subregional and national plans	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
b) consider the application of the model for the development of business cases in the formulation of national and subregional plans with a view to facilitating the achievement of a global ATM system; and		Apply the model for the development of business cases in the formulation of national and subregional plans	ICAO Regional Offices, PIRGs, States, and international organizations	Note
c) establish, with ICAO's assistance and within the limits of the programme budget, a network of experts on cost-effectiveness, cost-benefit analyses and business cases for the implementation of CNS/ATM systems in order to share expertise and to provide assistance to the Regional Offices.		Establish a network of experts on cost-effectiveness, cost-benefit analyses and business cases for the implementation of CNS/ATM systems	ICAO Headquarters	Note

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/5 — ICAO Global air navigation plan (ANP) database and geographic information system (GIS) portal				
<p>Recognizing that access to an ICAO Global ANP database and associated planning services through an web-based ICAO GIS portal would constitute an invaluable tool in supporting, integrating and monitoring the planning and implementation of harmonized regional, interregional and global air navigation infrastructures, the regional planning groups:</p> <p>a) note the progress made by the Secretariat in accordance with Recommendation 1/14 of AN-Conf/11 and the ICAO Global ANP database;</p>	<p>Increases efficiency (Strategic objective D)</p> <p>Relates to all GPIs</p>	<p>Note the progress made in the development of ICAO Global ANP database</p>	<p>ICAO Regional Offices, PIRGs, States, service providers, and international organizations</p>	<p>Note</p>
<p>b) note the ongoing efforts by the Secretariat in harmonizing formats of all the ANP tables together with the inclusion of temporal information in the tables that would assist the regional planning groups in monitoring and analysing the implementation progress;</p>		<p>Harmonize formats of all the ANP tables</p>	<p>ICAO Headquarters</p>	<p>Note</p>
<p>c) note the intent to expand the ANP tables to include Global Plan Initiatives (GPIs), as appropriate; and</p>		<p>Include GPIs in the ANP tables</p>	<p>ICAO Headquarters</p>	<p>Note</p>
<p>d) utilize, through the ICAO GIS portal, the ICAO Global ANP database and associated planning services so as to ensure the currency, coordination and implementation of regional air navigation planning and to contribute to the further development of air navigation plans as the framework for the efficient implementation of new air navigation systems and services at the national, regional, interregional and global levels.</p>		<p>Utilize the ICAO Global ANP database and associated planning service</p>	<p>ICAO Regional Offices, PIRGs, States, and international organizations</p>	<p>Note</p>
Conclusion 5/6 — Development of planning tools				
<p>That ICAO, in the development of planning tools and services, should accommodate requirements established by the Regional Offices, as well as to take into account similar tools developed by other organizations such as EUROCONTROL.</p>	<p>Increases efficiency (Strategic objective D)</p> <p>Relates to all GPIs</p>	<p>Develop planning tools by taking into account regional requirements and experience gained by other organizations</p>	<p>ICAO Headquarters</p>	<p>Note</p>

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/7 — Environmental benefits of CNS/ATM systems				
That PIRGs and States:	Minimizes environmental impact (Strategic objective C)			
a) use the Committee on Aviation Environmental Protection (CAEP) provided CO ₂ conversion factor in the analysis of environmental benefits of implementing CNS/ATM systems;		Use the CAEP provided CO ₂ conversion factor in the analysis of environmental benefits of implementing CNS/ATM systems	ICAO Regional Offices, PIRGs and States	Note
b) prioritize the implementation of voluntary, operationally-based improvements in their air traffic management systems, with emphasis on fuel savings, emissions reductions and noise benefits, and also to mitigate costs to the industry;		Prioritize the implementation of voluntary, operationally-based improvements in their air traffic management systems	ICAO Regional Offices, PIRGs and States	Note
c) provide feedback to ICAO on studies conducted on the environmental benefits of implementing CNS/ATM systems; and		Provide feedback to ICAO on studies conducted on the environmental benefits of implementing CNS/ATM systems	ICAO Regional Offices, PIRGs and States	Note
d) share air traffic data to improve future CAEP assessments, in line with State letter AN 1/17-03/86.		Share traffic data with CAEP	ICAO Regional Offices, PIRGs, States and international organizations	Note
Conclusion 5/8 — Globally coordinated air traffic services (ATS) routes				
That PIRGs:	Increases efficiency (Strategic objective D) Relates to GPI 7			
a) establish a global consolidated, prioritized list of routes and terminal area (TMA) improvements in close coordination with airspace users; and		Establish a global consolidated, prioritized list of routes and terminal area (TMA) improvements	ICAO Headquarters, ICAO Regional Offices and PIRGs	Note
b) work with neighbouring PIRGs/States/air navigation service providers (ANSPs) to accelerate international route improvements.		Work with neighbouring PIRGs/States/ANSPs to accelerate international route improvements	ICAO Regional Offices, PIRGs and States	Note

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/9 — Terminal area (TMA) structure and area navigation				
That States:	Increases efficiency (Strategic objective D) Relates to GPI 5			
a) employ area navigation in all TMAs, including appropriate arrival and departure procedures, to improve efficiency and reduce emissions in the vicinity of airports; and that, in special cases where there are particularly challenging obstacles and where air traffic density is very high and additional approach paths are possible, the more precise and contained required navigation performance (RNP) procedures be employed; and		Employ area navigation in all TMAs, including appropriate arrival and departure procedures	ICAO Regional Offices, PIRGs and States	Note
b) review operations, procedures and training of controllers to ensure the optimum management of air traffic services.		Review operations, procedures and training of controllers to ensure the optimum management of air traffic services	ICAO Regional Offices, PIRGs and States	Note
Conclusion 5/10 — Environmental benefits of RVSM introduction and regional expertise				
That ICAO:	Minimizes environmental impact (Strategic objective C) Relates to GPI 2			
a) undertake a study on the environmental benefits of the introduction of RVSM and to ensure that this information is transmitted to policy makers; and		Study the environmental benefits of the introduction of RVSM	ICAO Headquarters	Note
b) seek appropriate support from recognized expert organizations in its work on quantifying the environmental benefits of RVSM, noting the support offered by EUROCONTROL in this regard.		Seek support from recognized expert organizations in its work on quantifying the environmental benefits of RVSM	ICAO Headquarters	Note

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/11 — Air traffic management (ATM) safety management				
That ICAO:	Increases safety (Strategic objective A)			
a) urge States to give priority to the establishment and effective operation of their ATM safety management and safety regulatory functions;		Give priority to the establishment and effective operation of their ATM safety management and safety regulatory functions	States	Note
b) support the development of sufficient expertise levels in the industry through formal training in ATM safety issues and, by cooperation through regional bodies, promote collective means to optimize the effectiveness of training provision; and		Develop formal training in ATM safety issues	ICAO Regional Offices, PIRGs, and States,	Note
c) develop further measures to enable the implementation of a “just-culture” reporting environment to facilitate the reporting of ATM occurrences.		Implement a “just-culture” reporting environment to facilitate the reporting of ATM occurrences	ICAO Regional Offices, PIRGs and States	Note
Conclusion 5/12 — Coordination between regional monitoring agencies (RMAs)				
That the ICAO EUR/NAT Office act as the initial focal point for the required coordination between RMAs in order to:	Increases efficiency (Strategic objective D) Relates to GPI 2			
a) facilitate the exchange of monitoring and operational data between RMAs;		Facilitate the exchange of monitoring and operational data between RMAs	ICAO EUR/NAT Office	Note
b) facilitate the exchange information about best practices between RMAs;		Facilitate the exchange information about best practices between RMAs	ICAO EUR/NAT Office	Note
c) ensure that incident reports are correctly disseminated to the appropriate RMA;		Ensure that incident reports are correctly disseminated to the appropriate RMA	ICAO EUR/NAT Office	Note
d) provide a forum to manage changes to monitoring requirements; and		Provide a forum to manage changes to monitoring requirements	ICAO EUR/NAT Office	Note
e) ensure the maintenance of the RMA Handbook.		Ensure the maintenance of the RMA Handbook	ICAO EUR/NAT Office	Note

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/13 — Implementation of performance-based navigation concept				
That, to increase awareness and understanding of the performance-based navigation concept and its elements: a) ICAO organize workshops and training activities; and	Increases efficiency (Strategic Objective D) Relates to GPI 5	Organize workshops and training activities through the SIP mechanism	ICAO Headquarters	Approve, with the understanding that the proposal for a SIP would be submitted to the Council through established procedures
b) where area navigation (RNAV) or required navigation performance (RNP) implementations are required, these will be implemented by PIRGs and States according to the performance-based navigation concept.		Implement performance-based navigation concept	ICAO Regional Offices, PIRGs, States, service providers and international organizations	Note
Conclusion 5/14 — A regional online database of air navigation deficiencies				
That, PIRGs consider establishing and maintaining a regional online database of air navigation deficiencies that ensures transparency and provides a secure access to authorized users.	Increases safety (Strategic objective A)	Establish and maintain a regional online database of air navigation deficiencies	ICAO Regional Offices and PIRGs	Note
Conclusion 5/15 — Last resort action to resolve regional air navigation deficiencies				
That, when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives, PIRGs adopt the following last resort action, which consists of the two parts: a) propose the inclusion of an alternate facility/procedure in the air navigation plan (ANP); or b) when a corrective action as a) above cannot be recommended, provide the State(s)/Territory(ies)/users and ICAO with an analysis concerning risk associated with such a deficiency.	Increases safety (Strategic objective A)	Implement last resort action when efforts to eliminate deficiencies prove unsuccessful after exhausting all alternatives	ICAO Regional Offices and PIRGs	Approve

ALLPIRG/5 Conclusions	Relationship with Strategic Objective & Global Plan Initiatives (GPIs)	Follow-up task	To be initiated by	Proposed action by the Council
Conclusion 5/16 — Implementation of very small aperture terminals (VSATs)				
That PIRGs:	Increases efficiency (Strategic Objective D) Relates to GPI 22			
a) discourage the proliferation of VSAT networks where one/some of the existing ones can be expanded to serve the new areas of interest;		Discourage the proliferation of VSAT networks	ICAO Regional Offices, PIRGs and service providers, States	Note
b) work towards integrated regional/interregional digital communication networks with a single (centralized) operational control and preferably based on the Internet Protocol (IP); and		Work towards integrated regional/interregional digital communication networks	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
c) give due consideration to managed network services (e.g. a virtual private network (VPN)), subject to availability and cost-effectiveness.		Give due consideration to managed network services	ICAO Regional Offices, PIRGs, States, service providers, and international organizations	Note
Conclusion 5/17 — Provisions for digital communication networks				
That ICAO:	Increases efficiency (Strategic Objective D) Relates to GPI 22			
a) expedite the development of provisions relating to the use of the Internet Protocol Suite (IPS) in the aeronautical telecommunication infrastructure; and		Expedite the development of provisions relating to the IPS in the aeronautical telecommunication infrastructure	ICAO Headquarters	Note
b) initiate the development of provisions governing the end-to-end performance of digital communication networks, irrespective of the technologies and protocols utilized therein.		Develop provisions governing the end-to-end performance of digital communication networks	ICAO Headquarters	Approve
Conclusion 5/18 — Changes to the Regional Supplementary Procedures (SUPPs) (Doc 7030)				
That ICAO	Increases efficiency (Strategic Objective D) Relates to all GPIs			
a) restructure the SUPPs (Doc 7030) by the complete reordering and reorganization of the material;		Restructure the SUPPs by the complete reordering and reorganization of the material	ICAO Headquarters	Approve
b) align the area of application of the SUPPs with the area of application of the regional air navigation plans (ANPs); and		Align the area of application of the SUPPs with the area of application of the ANPs	ICAO Headquarters	Note
c) make SUPPs available on a CD as well as on the ICAO website.		Make SUPPs available on ICAO website	ICAO Headquarters	Note