



大会 — 第39届会议

技术委员会

议程项目36：航空安全和空中航行实施支助

空中航行影响评估与客观衡量指标

(由多米尼加共和国提交)

执行摘要

通过按照设定的指标审查空中航行的状况，我们可以清楚地了解各项实施工作的进展。然而，似乎尚缺少前述实施工作的绩效结果。

这种情况促使我们提出了一种影响评估机制，它将使我们能够参照所开展的每项实施工作的预定指标对结果进行监测、追踪和控制。

行动：请大会：

- a) 注意本工作文件所载的信息；
- b) 批准影响评估表；和
- c) 就任何其他适宜的行动达成共识。

战略目标：	本工作文件涉及安全、空中航行能力和效率战略目标。
财务影响：	希望三年期经常项目预算将涵盖与实施全球空中航行计划有关的活动。然而，也许需要国际民航组织提供额外资源，为大会支持的其他举措提供支助。
参考文件：	《2013-2028年全球空中航行计划》(Doc 9750号文件) 《空中航行报告》(2016年版) 《西班牙港宣言》 第三次北美、中美/加勒比地区空中航行实施工作组会议(ANI/WG/3)，2016年4月4-6日，墨西哥城 2016年3月7日的NACC 59843号国家级信件 — 北美、中美/加勒比地区基于性能导航地区实施计划空中航行指标的实施情况 2015年12月1日的AN 13/54-15/77号国家级信件 — 拟议的第五版《全球空中航行计划》(GANP, Doc 9750号文件)

<sup>1</sup> 西班牙文文本由多米尼加共和国提交。

## 1. 引言

1.1 对《西班牙港宣言》和《基于性能导航的地区实施计划》有关地区空中航行指标的实施进度进行的审查初步显示，我们已经圆满地实现了预定的指标，或者说一切进展顺利。但是深究之下，我们不禁要对前述指标的客观性产生疑虑，因为它们没有清楚地表明预期的结果，或者未能明确规定需要衡量哪些指标。

1.2 此外，正如全球空中航行计划(GANP)所表明的，在《基于性能导航的地区实施计划》和航空系统组块升级(ASBU)组块 0 之间建立的关联，使该地区在优先安排和协调统一有关“不让任何国家掉队”举措方面面临着进退两难的局面。这是因为，由于该地区各个国家运行需求的单一性和现有的特定发展水平，致使各自的国情差异甚大。

1.3 为此，需要建立一种更加有效和直接的、可促进本地区的实施工作取得一致进展的追踪机制。

## 2. 讨论

2.1 若想一想航空系统组块升级所展现的灵活性，即每个国家各自实施符合自身运行需求的模块或模块要素，“协调统一”就会变成矛盾。这是因为，没有协同就不会有统一，而协同(恰好也是“不让任何国家掉队”共同发展举措所寻求的目标)明白无误地表明了需要建立最低限度的有关实施和结果的参数，从而实现这种令人渴慕已久的协调统一。

2.2 所谓的“最低限度的实施参数”是指：由于没有明确规定必须实施哪些内容，则至少需要包含确保在每个地区提供同等服务水平所需的要素。这些要素将促使相邻的国家在投资水平、互联互通、协调等方面保持协调统一。

2.3 所谓的“最低限度的结果参数”是指：一旦明确规定了有关某种特定情况的预期结果，“用什么”的问题就不重要了，关注的重点会转到“为什么”上来。例如，如果将监视确定为本地区的一个最低限度参数，则无论此种监视使用的是自动相关监视(ADS)，还是一次监视雷达(PSR)，或是二次监视雷达(SSR)，这些都无关紧要了，最为重要的是“危险进近下降了(n)X%”或“安全失控情形下降了(n)X%”，等等，不一而足。这类最低限度参数的建立，将为某个地区航空运输系统的最终用户提供严密的安全保障，因为无论使用哪一种工具，预期绩效结果都将是一样的。

2.4 同样，明确实施目的，也会帮助各国选择最适合其特定需求的 ASBU 模块或模块要素，从而确保达到该地区的指标。然而，最重要的是，它将有助于衡量预定实施的影响，因为有形的结果将有助于实现客观监控，并使我们有改进前述结果。

2.5 我们向大会提议，在空中航行委员会的修订提案中所使用的表格的基础上，使用影响评估表。这一表格可帮助各国按照各自的运行需求和能力确定 ASBU 组块或组块要素的可用性和可实施性，同时也可建立预期的实施成果。

2.6 适时地明确所获得的效益或结果以及相关的战略目标，将便于实施决策。各国还可以使用更少的经济资源，努力寻求全球空中航行计划中提出的可行的替代做法，并推动实现全球航空安全计划的各项目标。它还将确保对绩效进行监测和客观的衡量，从而实现管控和持续的改进。

2.7 各国可将对本表产生的结果的追踪和评估用于各自的实施计划，地区小组也可将其用于审查、监测，以及编拟年度绩效报告。

### 3. 结论

3.1 若要持续推进地区实施计划，最好的方法是使用可反映地区质变而非量变发展的衡量指标，并为各国提供速度适宜的自由成长空间，但要符合该地区的优先实施指导原则，而且，最重要的，要考虑到实施对特定国家和整个地区的影响。

3.2 最好是设立成果指标而不是实施指标，以便能够建立一套可用来指导地区有效实施和适时查明需求的指标。只有这样，我们才能从国家的具体层面上升到地区和全球的总体层面，而不是一味地设立高不可攀的指标。

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**APPENDIX**  
**IMPACT ASSESSMENT FORM**  
*(English only)*

**PART 1: IMPACT ASSESSMENT**

1.1 What is the problem/opportunity that this Implementation is designed to address? *Please include reference to Jobcard / ASBU / RPOs / work programme item, as applicable*

.....  
 .....

1.2 What is the overall impact of this proposal on the strategic objectives of ICAO, namely: Answer  
 (Positive / Negative / Negligible / None)

Rationale:  
*Please provide an explanation for your choice and highlight any caveats or limitations in the selection*

Capacity	...	...
Safety	...	...
Security	...	...
Environment	...	...
Efficiency	...	...

1.3 What is the overall impact on resources of this proposal for: Answer (Increase / Decrease / Negligible / Unknown)

Rationale:  
*Please provide an explanation for your choice and highlight any caveats or limitations in the selection*

Financial	...	...
Personnel	...	...
Other	...	...

1.4 Is there any other mechanism established to contribute to this problem:

Rationale:  
*Please provide an explanation for your choice and highlight any caveats or limitations in the selection*

Yes	...	...
No	...	...
Not Sure	...	...

1.5 In your opinion, do the benefits of this proposal justify the cost of implementing the proposal from the perspective of: Answer (Yes / No / Not sure / Not applicable)

Rationale:  
*Please provide an explanation for your choice and highlight any caveats or limitations in the selection*

States	...	...
Operators	...	...
Users	...	...

**PART 2: IMPLEMENTATION PLAN**

To assist ICAO and States ensure this proposal will be effectively implemented please answer the following questions.

*Note: ICAO recognizes that States experts may feel limited in their ability to answer some or all of these questions, however, encourages experts to provide their views.*

2.1 Is there any supporting documentation required for this implementation? *If Not, please include reference to any documents that require initial release/amendment e.g. ICAO Document or Circular name and number, industry specification, national reclamation, etc*

- ...
- ...
- ...

2.2 What other guidance, training and support activities do you recommend ICAO undertake to ensure the effective implementation of this proposed implementation? Please include reference to any existing support/promotional programmes and whether it is required globally or regionally e.g. regional seminars, ikits, etc

- ...
- ...
- ...

2.3 What are the essential steps to be followed by a State in order to implement this module/element? *Please include the major steps e.g. amendment of national legislation, change of oversight procedures, training of oversight personnel, required competencies, etc.*

- ...
- ...
- ...

2.4 What is the timeframe needed to implement this module/element by: Answer  
(0-1 years / 1-2 years / 2-5 years / 5-10 years / not applicable)

Rationale:  
*For the State, the timeframe is the length of time needed implement in the national regulatory framework*  
*For operators, the timeframe is the length of time needed for industry to start implementing in their operations*

States	...	...
Operators	...	...

**PART 3: AUDIT PLAN**

*Note: This section will be completed by ICAO prior to the presentation of any proposed Regional or Global Implementation referred to SARPs or PANS. The Panel Secretary will coordinate with the relevant experts in ICAO.*

3.1 Does this implementation require an amendment of the USOAP CMA protocol questions to assess effective implementation by States? *Please include reference to existing PQs that may need amendment or description of any new PQs that may be required. State 'Not applicable' if no impact*

- ...
- ...
- ...

## **Attachment: Guidance on Completing this Form**

### **Part 1: Impact Assessment**

**Section 1.1:** This section is meant to capture, in general terms, a need or an opportunity for change. The information needed will typically be contained and extractable from a related Job card. Its size should ideally be limited to a few statements and its scope should remain focused on the issue at hand.

**Section 1.2:** This section seeks to establish the impact of the proposed change, in terms of capacity, safety, security, efficiency, and the environment. Drop-down boxes are provided to assist selection of a standardized answer. Rationale statements should substantiate in general terms the assessment of these specific items, outlining any significant caveats to which the panel may wish to draw attention. It may also outline differing views of State and Industry if necessary. Items deemed ‘negligible/none’ do not require a rationale statement unless you deem appropriate to provide one.

**Section 1.3:** This section seeks to obtain a very high-level understanding of the overall impact of the proposal on States and Industry, in terms of financial and other resource costs. For the State, this may include the cost to develop, implement, maintain, and consider oversight issues associated with the proposed change. For the Industry, it may refer to the cost of implementing the change (where compliance is required by the State) which may translate into costs for equipage, human resources, training, documentation, aircraft modifications or upgrades, operations and airworthiness for example. Drop-down boxes are provided to assist selection of a standardized answer.

It is recognized that while the implementation of a proposal may involve an initial cost to one system, the overall impact of the proposal when implemented may be to reduce costs in the overall system over a longer period (for example through introduction of new ATM operational procedures) and this should be reflected in the answer and rationale provided.

Whereas some changes have limited implications, other changes may be far-reaching in terms of resource commitment and long-term implications. The Rationale field should not attempt to quantify the impact on resources, but identify the overall scope (narrow change with no interdependencies; broad changes with numerous interdependencies) and timeline (a one-time change, or an evolving change with short-, medium- and/or long-term implications).

**Section 1.4:** This section seeks to provide waiver for States to implement any other tool, technology or procedure to get the same results as for the Region, but adapted to its own reality or particularity.

**Section 1.5:** This section seeks to obtain an overall summary of the merits of the proposal that should go forward for Stakeholders consideration. It is structured to allow any differing opinions to be reflected, from the State or industry perspective. The Rationale section should reflect any significant differences of opinion on implementation within the expert group. It must be noted that a negative response selection will not imply that the proposal will be rejected. Likewise, positive responses do not imply it will be accepted. Drop-down boxes are provided to assist selection of a standardized answer.

### **Part 2: Implementation Plan**

The ICAO Council has requested that all proposals for adoption should contain detailed information on the steps necessary for adoption of a proposal. As stated in the form, ICAO recognizes that States experts may feel limited in their ability to answer some or all of these questions, however, encourages the experts to provide their views. The answers in this section will inform the applicability date decided upon by the States.

**Section 2.1:** This section seeks to identify all documentation (Annex, PANS, Doc or Circular) that needs to be created, amended to complete or support the proposed implementation. A simple bullet-point list of the document references is requested.

**Section 2.2:** This section seeks to identify any promotional activities ICAO should undertake to ensure the proposed implementation is clearly understood and effectively adopted. This is not of particular interest in routine Annex or PANS amendments but is a particular issue for new and/or far-reaching proposals. It is typically addressed by providing regional seminars, producing explanatory ‘ikits’, etc. A simple bullet-point list of suggested activities is requested.

**Section 2.3:** This section seeks to capture the essential steps a State needs to undertake to effectively implement the new requirement, assisting a State understand the overall impact of the proposal and what it will need to do to fully implement. As an example, the State may need to amend its national regulation, the CAA may need to amend its oversight procedures and applicable

operators in the State may need to provide additional training to all flight personnel. A simple bullet-point list of the essential steps is requested.

**Section 2.4:** This section seeks to obtain a very high-level understanding of the time needed by both States and Industry to implement the proposal. As an example, it is the time needed by a typical State to amend its national regulation and implement perhaps new oversight procedures. The answer should not reflect when the ICAO believes the final State will implement the proposal (worst-case scenario) but instead the time needed by a typical State. For Industry, the estimate should reflect the time needed to implement a new national regulatory requirement into its operation and again should not reflect the worst-case scenario but instead the average time needed. It should not include any allowances for ‘sunset clauses’ or delayed applicability dates sometimes needed for implementation within operational cycles. Drop-down boxes are provided to assist selection of a standardized answer.

### **Part 3: Audit Plan**

**Section 3.1:** This section seeks to capture whether an amendment to the USOAP CMA process and its protocol questions is required. The proposal may require a new protocol question to capture if the State is effectively implementing or may simply require an amendment to an existing protocol question. A simple bullet-point list outlining the protocol question (s) is requested.