交　通　部　民　用　航　空　局

民　　航　　通　　告

主旨：安全績效指標（ Safety　Performance　indicators）		
發行日期：2015.11.11	編號：AC 120-049	發行單位：飛航標準組

一、目的：

本通告旨在提供經由安全績效評量來驗證安全管理系統之運作成效，及透過訂定安全績效指標與目標來評估組織安全績效之方法，並提供建構安全績效指標及目標之指引。

二、修正說明：

新訂。

三、背景說明：

航空業是由很多專業機構在一多變及複雜環境中一起運作、相互作用及依賴之產業，也相互影響到最終之飛航安全。因此在多數情況下是無法從特定參數或安全行動中找出最終與飛航安全有直接關聯之線性關係。故安全績效評估之重點應著重於組織應如何確保系統之安全，同時也要考量外部因素會如何影響組織的飛航安全。

很多組織會把重點放在重大意外事件及事故上，因為此類指標很容易評估及得到關注。依安全管理角度來說，把重點放在此類負面指標上時要注意以下問題：

- 此類高嚴重後果的指標因發生頻率低，會讓你誤以為系統很安全。

- 得到此類安全資訊時為時已晚，且一直專注在此類負面結果，你將無法查覺組織已潛在之危害或系統問題，可能會導致嚴重後果的負面結果。

有效的安全管理必需備有完善的系統及程序，同時組織也必需非常瞭解其運作情況及其應有的效果，故組織必需訂有安全管理的評量機制才能達到此一目標。組織必需選定適合組織能確保及精進安全的績效指標來做評量，而非隨意選擇容易評量的指標來做評量。這表示組織必需要選出一組適宜的績效指標及方法，來評量各階層應如何確保及精進組織的飛航安全。

安全績效評量最好由領先及落後指標組合而成。且要把重點放在利用組織系統之運作有效管理飛安，並以落後指標來驗證安全管理是否有效。藉由不嚴重的系統失效之落後指標，能有效驗證利用領先指標分析反饋作為或實施某特定之安全行動是否有效。

AC 120-32D 第 4.1.2 節有概要說明如何建立安全績效指標，並於附件五中提供航空服務提供者選擇適合組織的安全績效指標樣本。而本民航通告除進一步說明建置安全績效指標的準則及步驟外，同時也依據我國近 10 年來之安全資料統計分析結果，所顯示出我國必需優先強化之安全區域包括飛行中失控、可控飛行下撞地及偏離跑道(Lost of Control-Inflight, Control Flight into Terrain 及 Running Excursions)，前述三個失事面向亦為歷年來全球失事之前 3 大主要型態，各業者得以納為外部資訊，再依自己組織特性、營運型態及安全資料分析結果，訂定相應之指標據以管理，以有效提升我國的整體飛安。

四、需求說明：

（一）ICAO Annex 19 Safety Management

（二）07-02A「航空器飛航作業管理規則」第 9 條。

（三）06-02A「航空產品與其各項裝備及零組件維修廠設立檢定管理規則」第 27 條。

（四）06-07A「航空產品與其各項裝備及零組件適航檢定管理規則」

第 3 條之 1。

五、執行要點說明：

國家民用航空安全計畫(State Safety Program, SSP)第 3.2.1 節規範航空服務提供者安全管理系統之安全績效指標及目標應與民航局訂定之可接受安全水準與安全指標相襯，並由民航局與航空服務提供者相互確認同意。

依據國際航權分配及包機審查綱要，民用航空運輸業最近一年以內依據民航局所列之安全績效指標提報相應之年度安全績效指標/目標與安全計畫(註 1)，經民航局於每年 1 月底前同意備查者加 1 分。

民用航空運輸業所謂航空業者所提報之安全績效指標/目標與安全計畫應至少包含我國優先強化安全區域包含飛行中失控、可控飛行下撞地及偏離跑道所相應之指標/目標，並訂定安全執行計畫據以管理。另業者可依組織的特性、營運型態及安全資料分析結果，再參考前述外部資訊及本通告第 3 節所列之指標訂定適合之安全績效指標及目標報民航局備查。

除前述必要之指標外航空業者及維修廠也應參考 AC 120-32D 附件五，選擇適合組織系統面、營運面及外部因素面的安全績效指標，以確保安全績效監測之完整性。

註 1(相應之年度安全績效指標/目標與安全計畫說明)：

(1) 相應之安全績效指標：是指與國家之安全指標(Safety indicators, SI)相應之領先指標，例如國家之 SI 為偏離跑道(RUNWAY EXCURSION)，則公司之相應領先指標如不穩定進場(UNSTABLE APPROACH)、地面失去控制(LOSS OF CONTROL ON GROUND)等。

(2) 安全績效目標(Safety Performance Target, SPT)：是指針對安全績效指標今年要達到的目標(如去年不穩定進場 3 次/1000 飛時，今年要進步 10% 即 SPT 為 2.7 次/1000 飛時)。

(3) 安全計畫(Safety Plan)：是指針對今年要進步 10%，公司所訂定之策略、計畫及作為，依此安全計畫執行應可達到今年的目標(2.7 次/1000 飛時)。

六、相關規定及參考文件：

（一）ICAO Doc 9859「Safety Management Manual (SMM)」及後續更新版本。

（二）Safety Management International Collaboration Group 相關安全管理系統文件。

（三）國家民用航空安全計畫第二版及後續更新版本。

（四）EASA Member States Common Safety Performance Indicators

（五）AC 120-32D Safety Management System

簽署：林俊良

飛航標準組組長林俊良

AC 120-49　Safety Performance Indicators

01 October, 2015

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1. GENERAL

1.1 Purpose

Measuring safety performance is a key activity of an effective safety management system (SMS). The safety performance of an SMS is expressed by safety performance indicators and their corresponding alert and target values.

This AC is issued to provide general guidance and principles on the development of Safety Performance Indicators (SPIs) for Air Operator's Certificate (AOC) holders and repair station certificate holders of CAA, Taiwan. And how to submitted to the CAA for acceptance.

1.2 Requirements and References

- 06-02A Regulations for Repair Station Certification and Management
- 07-02A Aircraft Flight Operation Regulations
- CAA State Safety Program, SS
- P(as revised)
- CAA AC 120-32 safety management system (as revised)
- ICAO Safety Management Manual (Doc 9859 as revised)
- ICAO Annex 19
- Safety Management International Collaboration Group - Measuring Safety Performance Guidelines for Service Providers
- EASA Member States Common Safety Performance Indicators

1.3 Definitions

The following definitions are used in this document:

Safety performance. a service provider's safety achievement as defined by its safety performance targets and safety performance indicators

Safety performance indicator. a data-based safety parameter used for monitoring and assessing performance".

Safety performance target. the planned or intended objective for safety performance indicator(s) over a given period.

Lagging indicator Metrics that measure safety events that have already occurred including those unwanted safety events you are trying to prevent.

Leading indicator Metrics that provide information on the current situation that may affect future performance.

High-consequence indicators. Safety performance indicators pertaining to the monitoring and measurement of high consequence occurrences, such as accidents or serious incidents. High-consequence indicators are sometimes referred to as reactive indicators.

Lower-consequence indicators. Safety performance indicators pertaining to the monitoring and measurement of lower-consequence occurrences, events or activities such as incidents, non-conformance findings or deviations. Lower-consequence indicators are sometimes referred to as proactive/predictive indicators.

1.4 Introduction

The aviation system is a highly dynamic, complex system with many different players, interactions, dependencies and parameters that may have a bearing on final safety outcomes. Therefore, in most cases it is impossible to establish a linear relationship between specific parameters or safety actions and the final, aggregate safety outcome.

Measures should in particular focus on those features of your system that are intended to ensure safe outcomes — those elements that will constitute organizational enablers of safe outcomes and specific safety controls and barriers for any risks identified. Measures also need to address how external factors may influence these enabling elements, risk controls and barriers or how these controls and barriers influence each other.

In many areas safety metrics tend to focus on serious incidents and accidents, as these are easy to measure and often receive more attention. In terms of safety management, the focus on such negative events should be considered with some caution, because:

- in systems such as aviation with a low number of high consequence negative outcomes, the low frequency of such outcomes may give the wrong impression that your system is safe;
- the information is available too late to act on it;
- counting final outcomes will not reveal any of the systemic factors, hazards or latent conditions that have a potential to result in high consequence negative outcomes, under the same conditions; and
- where the resilience of a system has been undermined, such outcomes are more likely to occur by chance and therefore these outcomes may draw unwarranted attention and use scarce resources when they are not predictive of later events.

Effective safety management requires a thorough understanding and sound

management of your system and processes. This cannot be achieved without some form of measurement. Rather than randomly selecting outcomes that are easy to measure, you should select safety performance indicators that consider the type of feedback needed to ensure your company's capabilities for safety management can be properly evaluated and improved. This implies that you will need to measure performance at all levels of your organization by adopting a broad set of indicators involving key aspects of your system, and operations and allowing to measure those key aspects in different ways.

Safety performance measurement should ideally consider a combination of leading and lagging indicators. The main focus should be to measure and to act upon the presence of those systemic and operational attributes that enable effective safety management within your company and meanwhile, use lagging indicators to ensure that this safety management is effective. Lagging indicators, particularly indicators for lower level system failures, are useful to validate the effectiveness of specific safety actions and risk barriers or to support the analysis of information derived from your leading indicators.

The safety performance of an SMS is expressed by safety performance indicators and their corresponding alert and target values depending on the size and complexity of the organization. The safety indicators, targets and alerts should be:

- a combination of high and lower-consequence SPIs as appropriate;

- pertinent to the service provider's aviation activities;

- consistent with other service providers of the same sector/category;

- congruent with the CAA SSP aggregate safety indicators for the service provider sector/category.

Once the safety indicators, targets and alerts have been developed, the service provider's safety action plans in relation to achievement of the targets and their corrective action plans in case an alert level is reached need to be documented.

AC 120-32D paragraph 4.1.2 were general written how to develop the SPI and the examples of possible Indicators are listed at the Attachment 5. In this AC provide general guidance and principles on the development of Safety Performance Indicators (SPIs) and guidelines for the definition and reviewing safety performance indicators and the indicators which CAA has identified as the implement priority Safety Enhancement Initiative (SEI) on the areas of LOC-I, CFIT, Runway Safety.

1.5 CAA Requirement and Priorities

1.5.1 CAA Requirement

According to the CAA SSP, Chapter 3, Section 2., CAA has to agree with individual service providers (Air Operator's Certificate (AOC) holders and repair station certificate holders) on the safety performance of their SMS. The agreed safety

performance of an individual service provider's SMS is periodically reviewed to ensure it remains relevant and appropriate to the service providers.

According to the SSP and CAA policy, the service providers' safety performance indicators (SPI), safety performance target (SPT) and the safety action plans in relation to achievement of the targets must be submitted to the POI/PMI for acceptance before the end of January of each year starting from January 2015. The SPI/SPT and safety action plans should at least included the CAA priority Safety Enhancement Initiative (SEI) on the areas of LOC-I, CFIT and Runway Excursion.

1.5.2 CAA Priorities

The CAA safety data (from 2004 to 2014) for Civil Air Transport Enterprises or General Aviation Enterprises has identified LOC-I, CFIT and Runway Excursion accidents are the main contributing factors to fatal accidents in Taiwan, which is in line with the analysis in the RASG-APAC and the ICAO GASP.

CAA will continue its focus as Implement priority Safety Enhancement Initiative (SEI) on the areas of LOC-I, CFIT and Runway Excursion. Service provider should likewise accord priority to the implementation of these SEIs.

2. Safety performance measurement process

2.1 Prerequisites for effective safety performance measurement

As a prerequisite for effective safety management, your organization needs to perform a system analysis to generate an accurate and reliable description of your organizational structures, policies, procedures, processes, staff, equipment, and facilities. This analysis should have a particular focus on the interactions between system components and external factors. This will provide you with a model of how your system elements and activities interact to produce the expected safety outcomes, allowing you to identify the strengths and weaknesses of your system. The system description and related model of how your activities lead to the expected outcomes will inform you on what to measure to drive safety performance and what to monitor to keep an eye on all of those elements that may affect your organization's safety performance.

Following completion of the system description, including analysis and assessment, your company should have gained or confirmed its understanding of where it stands with regard to safety. Through this exercise you should have identified:

At the systemic level:

- whether the elements that constitute enablers of effective safety management are present, suitable, and effective;
- the elements that are still missing for effective safety management;
- whether the elements are sufficiently integrated with each other and with the core management and operational processes of your organization; and

- the weaknesses and vulnerabilities in your organization.

At the operational level:

- the main risks in operations that need to be addressed (the things that may cause 'your next accident').

This will form the basis for reviewing the adequacy of your safety policy, defining or adapting your safety objectives, and deriving your safety performance indicators.

2.2 *Process for defining and reviewing safety performance indicators*

As with anything that relates to effective safety management, defining and using safety performance indicators must be a dynamic process. A step-by-step process for developing your own set of safety performance indicators is proposed, which follows the 'Plan-Do-Check-Act' logic for continual improvement. This should help you to involve and get buy-in from all staff concerned.

Step 1: Designate responsibilities

It is critical to the success of the SPI project, as to the SMS journey in general, that your management are fully committed to implementing SPIs as a fundamental part of your company's safety management approach. Rather than just supporting a system of SPIs, management must define aspects of your organization that require measurement and management and then must commit to a systematic approach to managing those elements, in accordance with your safety policy and defined safety objectives.

The first step for establishing SPIs will be for management to designate personnel with responsibilities for initiating the effective promotion and coordination of the introduction of the SPIs. This will require responsibility for ensuring effective communication and generally overseeing the implementation, with due consideration of your existing organizational setup in relation to safety management. These personnel (hereafter referred to as 'SPI team') should ideally include, and certainly have access to, personnel with appropriate experience and knowledge of safety and/or quality management principles and data analysis. They should also have experience applying this knowledge and these skills in the context of your policies, programs, operational procedures and practices. Process owners must be directly involved even if 'specialists' are used to supply measurement expertise or to support/facilitate the SPI development process. Also, it is essential that process owners take ownership of safety performance measurement for their processes. The SPI team (or individual with designated responsibilities, depending on the size and complexity of your organization) must clearly be shown to be in either a support or advisory role to management and process owners.

Management should be kept informed of progress on a regular basis and should take an active role in steering the process of implementing SPIs. For larger organizations it may be useful to develop an analysis of the costs and benefits of the SPI development project,

with particular focus on the positive effects on your company's 'management information system' that will lead to improved resource allocation.

Finally the SPI team should set a reasonable timetable, including milestones, to ensure adequate progress in developing the SPIs.

Step 2: Review safety policy and objectives – identify key issues and main focus

At this step, the SPI team should identify the scope and focus of measurement considering the results of the system analysis, paying particular attention to the completeness and adequacy of your SMS.

A thorough hazard identification will be required as part of your system analysis to provide a good understanding of threats to safety in your operations.

The SPI team may also review typical indicators used within your industry segment and assess them to determine whether they are pertinent to your organization. For example, measuring the number of internal reports may not be meaningful if your system analysis reveals that there are no easily accessible means to report or there are concerns about confidentiality.

Step 3: Determine data needs

To be meaningful, measures of performance must be based on reliable and valid data, both qualitative and quantitative. Therefore the SPI team should identify all pertinent data and information that is available within your company and determine what additional information is needed. It should also consider information available through the internal audit/compliance monitoring system.

Regardless of the type of data, quality is one of the most important elements in ensuring that the data can be integrated and used properly for analysis purposes. Data quality principles and practices should be applied throughout the processes from data capture and integration to analysis.

You may be tempted to identify things that lend themselves to being measured instead of identifying what you should measure. This is likely to result in identifying SPIs that are most obvious and easy to measure rather than SPIs that are most valuable for effective safety management. Therefore, at this step of the process, it is important to focus on what changes your organization wants to 'drive' and what aspects it needs to 'monitor.' You should also consider that, to be effective at assessing system safety, a broad set of indicators involving key aspects of your system and operations should be developed; this will reduce the possibility of having a narrow and therefore potentially flawed view of your company's safety performance.

Also, it may be necessary to measure the same system in several ways in order to gain a more precise idea of the actual level of safety performance. For example, only assessing your company's safety culture without measuring operational parameters will merely

provide a very partial indication of safety performance.

In the area of hazard identification and risk management in operations (core processes), availability of data will depend in part on the maturity of your internal safety reporting schemes. Aggregate data for your industry segment may also be considered, particularly when your SMS has not yet generated sufficient data. Other information, such as number of flights, fleet size, and financial turnover, may contribute to a better understanding of the context of operations. Continuous availability of data should be ensured to generate relevant and timely indicators. Delays in compiling data for the generation of indicators are likely to delay any safety actions that may be required.

Step 4: Define indicator specifications

Once the scope and focus of your SPIs have been determined and available data/information reviewed, the specifics need to be defined. Each SPI should be accompanied by sufficient information (or metadata) which enables any user to determine both the source and quality of the information, and place this indicator in the context necessary to interpret and manage it effectively.

Whenever possible, indicators should be quantitative, as this facilitates comparison and detecting trends. Quantitative metrics should be precise enough to allow highlighting trends in safety performance over time or deviations from expected safety outcomes or targets.

For qualitative SPIs, it is important to minimize subjectivity. This may be achieved through an evaluation by members of staff not directly involved in the definition of SPIs.

Depending on the size of your company and the complexity of your activities, a hierarchical framework for your SPIs could be defined to reflect the different processes and sub-systems within your organizational structure. While some indicators for assessing systemic issues may be common to different processes and subsystems, indicators for assessing operational issues will need to be specific. This underlines the importance of having performed an accurate system analysis identifying all system components and sub-systems as a prerequisite for implementing SMS.

Aspects of good SPIs include:

- The indicator is:

  *valid and reliable,

  *sensitive to changes in what it is measuring, and

  *not susceptible to bias in calculating or interpretation.

- Capturing the data is cost effective.

- The indicator is:

  *broadly applicable across company operations, and ideally throughout the larger

aviation sector, and

*easily and accurately communicated.

Step 5: Collect data and report results

Once you have defined your SPIs, you must decide how you will collect the data and report the results. Data collection approaches (i.e., data sources, how data will be compiled, and what the reports will look like), as well as roles and responsibilities for collection and reporting, should be specified and documented. Data collection procedures should also consider the frequency with which data should be collected and the results reported for each SPI. Some of these issues will have been addressed when deciding on the SPIs in steps 3 and 4.

The presentation format of the indicator results should take into account the target audiences. For example, if you track several indicators addressing the same key issue, it may be useful to identify a subset of the most critical indicators to be given greater emphasis for reporting to top management. The presentation of indicator results should facilitate understanding of any deviations and identification of any important trends (e.g., scoreboards with traffic lights, histograms, linear graphs).

Step 6: Analyze results and act on findings from SPI monitoring

This is the most relevant step in terms of safety management, as the ultimate goal of implementing SPIs is to maintain and improve your company's safety performance over time. There is no point in collecting information if the results are not used. Remember that SPIs are indicators of safety performance, not direct measures of safety. The information collected through different SPIs needs to be carefully analyzed, and SPIs collected for different issues need to be put in perspective and the results interpreted, so as to gain an overall picture of the organization's safety performance. The results obtained through an individual indicator may be insignificant if taken in isolation, but may be important when considered in combination with other indicators.

Inconsistencies between SPIs may be an indication of an inaccurate system description or problems with the SPIs themselves. For example, you may encounter situations where leading and lagging indicators associated with the same safety issue provide contradictory results or where a positive trend in systemic indicators goes with a negative trend in operational indicators.

If you find that the metrics are not defined well enough to capture safety critical information the SPIs should be reviewed. Any inconsistencies in the overall picture represent a potential opportunity for learning and for adjusting not only the SPIs (see Step 7) but your SMS itself.

Indicators should not be simply seen as a metric, with actions being taken to get a good score rather than to improve safety performance. It is important that results obtained

through the collection, analysis and interpretation of SPIs are conveyed to your management for decision and action. Ideally, these results should be presented at regular meetings (e.g., management reviews, safety review board meetings) to determine what actions are required to address deficiencies or to further improve the system. It is important that such actions do not focus on certain indicators in isolation, but on optimizing your organization's overall safety performance.

As part of your safety communication and promotion, all staff should be informed of the results obtained through the collection, analysis, and interpretation of SPIs.

Step 7: Evaluate SPIs and make changes as appropriate

The systems analysis of your organization, along with the set of SPIs and their specifications, including the metrics and any defined targets, should be periodically reviewed and evaluated to consider:

-the value of experience gained,

-new safety issues identified,

-changes in the nature of risk,

-changes in the safety policy, objectives; and priorities identified,

-changes in applicable regulations, and

-organizational changes, etc.

The frequency of the review cycle should be defined. Periodic reviews will help to ensure that the indicators are well defined and that they provide the information needed to drive and monitor safety performance. Periodic reviews will also help identify when specific 'drive' indicators are no longer needed (e.g., if the intended positive changes have been achieved) and allow adjustment of SPIs so that they always focus on the most important issues in terms of safety. Nevertheless, too frequent reviews should be avoided, as they may not allow establishing a stable system.

After the first two to three cycles, you should have collected enough data and gained sufficient experience to be able to determine which are your 'key' SPIs - those that are most valuable and most effective to monitor and to drive safety performance. At this stage you may be able to derive targets for these key SPIs by extrapolating the data collected during previous cycles. Any such extrapolation needs to consider the 'dynamics' of your organization. You might also compare your SPIs with those implemented by other organizations within your industry segment, but you should never simply copy another organization's SPIs without checking that they are meaningful for your organization.

3. SAMPLE OF SAFETY PERFORMANCE INDICATORS

Safety Performance Indicators (SPIs) are grouped into three levels or tiers.

First tier SPIs refer to the number of accidents. This is mainly intended for the general public and describes the final result of the safety level visible to the public.

Second tier SPIs measure the functionality of the system and focus on certain crucial issues identified as the most common or serious accident types, including at international level, and which therefore require monitoring and safety enhancement measures.

Third tier SPIs were developed by reflecting on the causal factors of second tier incident types. After identifying causal factors, the incident types and indicators expressing these factors were determined. By monitoring the third tier SPIs, defining the relevant safety performance targets for national operators and following up on how these targets are achieved, we seek to prevent second tier incidents. At the same time, the follow-up of third tier SPIs assists in measuring the functionality of the targets defined. Third tier SPIs may be contributing factors in more than one type of second tier incident. The titles of third tier SPIs given are followed by a reference in parentheses to the second tier SPI considered to be the closest related.

First tier SPIs	Number of aviation accidents: no accidents
Second tier SPIs	↗ Reducing the 10 year moving average of serious incidents rate of national airline aircraft by 5/million flight hours. (RE, CFIT, LOC-I) ↗ Rate of air traffic control incidents below 1.5 per 100,000 flights ↗ Rate of missed approach (due to ATC factor) below 0.6per 10,000 flights ↗ Maintain aircraft accidents caused by collisions between aircraft, vehicles or other ground equipment below 1 time per million operations. ↗ Maintain events of damage to the aircraft which requires a repair due to ground handling mishaps or system failure for 2 time per hundred thousand operations.
Third tier SPIs	↗ **Runway Excursions (RE):** ↗ Unstable Approach ↗ Loss of control on ground ↗ Long or fast landings ↗ Occurrences with crosswind conditions ↗ High speed rejected take-offs ↗ ATA32 related occurrences ↗ **Controlled flight into terrain (CFIT):** ↗ EGPWS hard warnings

	↗ Descent below MSA ↗ Navigation error ↗ **Loss of control in flight (LOC-I):** ↗ Stick shaker ↗ Increased roll attitude or rate ↗ High pitch angle ↗ Overspeed (vertical or configuration) ↗ Wake turbulence incidents ↗ Failure of primary flight instruments ↗ Fire or smoke on aircraft ↗ Deicing and anti-icing errors ↗ Aircraft weight and balance errors ↗ **Mid-air collisions and near misses (MAC)** ↗ Stick shaker ↗ Loss of Separation ↗ Inadequate separation ↗ Level Bursts ↗ Air space infringement ↗ **Ground collisions (GCOL)** ↗ Pushback or taxi interference ↗ Insufficient supervision at apron ↗ **Fatigue** ↗Total and average flight hours per month ↗Total and average duty hours per month ↗Number of minimum rest periods per month as a percentage of all rest periods ↗ Number of extended flight duty periods for a specific pairing ↗ **Dangerous Goods** ↗ Undeclared Dangerous Good ↗ Dangerous good spillage, leakage and/or improper handling ↗ **Aircraft technical systems and maintenance** ↗ Failure of more than on system in a multiple-redundancy system ↗ Air turn back due to technical failure ↗ Shutdown an engine in flight ↗ **Human Factor** ↗ Human Error leading to incident (such as but not limited to wrong configuration, technical failure, wrong weight, wrong FMS data or wrong location upon takeoff) ↗ **External Competition** ↗ average time to fill a vacant post ↗ number of staff leaving to work for a competitor ↗ number of cases where the reasons for departure of key personnel have been analyzed

	↗ **System** ↗ number of significant findings versus total number of findings ↗ number of repeat findings within audit planning cycle

4. CAA ACCEPTANCE

Service provider will used the following form (Form No. 120-49-001) to summit its safety performance indicators (SPI), safety performance target (SPT) and the safety action plans to CAA ASI for acceptance.

SPI/SPT for Acceptance		
Company Name:		Date:
Safety Performance Indicators	Safety Performance Targets	Remarks
Safety Action Plan:		
Company Safety Manager:	Accepted by CAA ASI:	

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