

**Review of the Breaks and Staffing policy**

Presented by PLC

**SUMMARY**

In 2020, International Civil Aviation Organization (ICAO) Annex 11 was revised and the importance of fatigue management in the aviation industry was first proposed by ICAO. In 2013, the ICAO Aviation Committee decided to introduce fatigue risk management (FRM) for air traffic controllers (ATCOs), as fatigue is considered a hazard that affects their safe operations. Since then, FRM has been progressively implemented worldwide, but its effectiveness remains a concern. This paper focuses on the challenges posed by staffing shortages, which hinder the proper implementation of FRM, particularly in ensuring adequate rest periods for controllers. It highlights how insufficient staffing levels lead to frequent deviations from regulatory break and rest requirements, and how, to take breaks, the flow of air traffic may be impacted. Additionally, this paper examines the crucial role that quality breaks play in mitigating fatigue, emphasising the need for physical and mental detachment during breaks to maintain ATCO performance and safety.

**1. INTRODUCTION**

- 1.1. Fatigue is a recognised risk that affects human performance and can contribute to various incidents, including possibly leading to accidents (EASA, 2024). The Colgan Air crash in 2009 triggered a focus on FRM in the aviation industry. It was concluded that the accident was caused by operational errors due to poor judgement and lack of attention, which were associated with the pilots' having been on duty without proper sleep the previous day. The problem of poor performance due to fatigue seriously affecting operations became apparent, and the entire airline industry moved to strengthen FRM.
- 1.2. For ATCOs, as well as pilots, fatigue is recognised as a safety hazard. To manage and assess fatigue effectively based on scientific understanding, *Fatigue Management Guide for Air Traffic Service Providers*, cosigned by ICAO, Civil Air Navigation Services Organisation (CANSO) and IFATCA, was released in 2016. Followed by the release of the guidance, recommendation

of FRM was added to the ICAO International Standards and Recommended Practices (SARPs) Annex 11, with the effective date set for November 5, 2020. In 2020, ICAO Doc 9966, Manual for the Oversight of Fatigue Management Approaches, was also updated to incorporate amendments to Annex 11 and the *Fatigue Management Guide for Air Traffic Services Providers*.

- 1.3. Four years have passed since FRM was included in the SARPs. It is time to examine whether the FRM is being properly operated in each state and, if not, what are the contributing factors.
- 1.4. Fatigue management involves the strategies used by service providers and operational staff to mitigate the safety risks associated with fatigue (ICAO, 2020). In ICAO Doc 9966, two distinct approaches for managing fatigue are explained as follows:
  - 1.4.1. Prescriptive Approach: Operations must stay within regulator-established work period and non-work period limitations regulations. The service provider should manage fatigue hazards using existing Safety Management System (SMS) processes, similar to how other hazards are managed.
  - 1.4.2. FRMS (Fatigue Risk Management System) Approach: This approach allows air navigation services providers (ANSPs) to use scientific advancements to improve safety, use resources more efficiently, and increase operational flexibility. Unlike the prescriptive approach, FRMS focuses on managing specific fatigue risks in particular operations. It requires additional safety measures to ensure an equivalent or higher level of safety compared to operating within prescriptive limitations. FRMS must include four key components: policy and documentation, fatigue risk management processes, safety assurance processes, and promotion processes.
- 1.5. While FRMS still requires maximum work periods and minimum non-work periods, these are proposed by the ANSPs and must be approved by the regulator. ANSPs can choose to manage all, some, or none of their operations under FRMS if their State has such regulations.

## 2. DISCUSSION

### Staff Shortage Problem

- 2.1. According to the survey for IFATCA member states conducted by the Japan Federation of Air Traffic Controllers (JFATC), about half of the 56 states that responded to the survey indicated that they apply FRM. The majority of the states that reported not having adequate breaks or rest attributed this to "insufficient staff."

- 2.2. The implementation of prescriptive FRM approach requires limitations regulations on consecutive work days, work hours in a duty period and consecutive time-in-position, etc. set by the regulator to ensure adequate breaks and rest periods, which will require adequate relief ATCOs. Shortage of ATCOs can lead to an increased need for overtime to maintain service levels (IFATCA, 2013).

### **Member Association examples – Japan**

- 2.3. In Japan, a prescriptive model of FRM was introduced in 2020. The prescriptive limitations regulations of the consecutive time-in-position and the duration of breaks are shown in Appendix A. Obviously, more staff are needed to comply with the prescriptive limitations regulations than when FRM is not applied. A calculation conducted by the ATCOs' union in a major international airport of Japan showed that, assuming normal operating conditions, an increase of nearly 1.5 times the number of ATCOs currently assigned would be necessary to comply with the prescriptive limitations regulations and to work without vacancies in all operating positions. However, when introducing FRM, the Japanese Civil Aviation Bureau did not focus on recalculating and increasing the number of ATCOs needed.
- 2.4. If no increase in staff is made despite the introduction of prescriptive limitations regulations regarding consecutive time-in-position and breaks under more stringent conditions than before, deviations from those regulations will occur more frequently. Therefore, the rules shown in Appendix B were established in Japan to manage fatigue without increasing the number of staff. At low-traffic airports in Japan, it is common for the number of ATCOs to match the number of operational positions. For instance, if there are two controllers for two positions, it may be feasible to leave one's position for a brief break, such as a restroom break, during periods when there is no aircraft in the airspace. However, in principle, controllers are expected to remain at their positions, and whether they can take such breaks depends on unpredictable factors, such as the timing of aircraft operations. When it comes to securing time for lunch or dinner, it is impossible to leave one's position for a long period of time, and the controllers bring their meals into the operation room and eat them while communicating with the aircraft. At large airport, as in low-traffic airports, the number of ATCOs assigned matches the number of operational positions. During moderate traffic conditions, positions may be consolidated to allow controllers to take breaks.
- 2.5. The Director General of Japan Civil Aviation Bureau officially stated during the Diet session in May 2025 that there were four reports of regulatory deviations submitted from the introduction of FRM in 2020 through May 2024 (Yamazoe, 2024). In reality, however, deviations have been occurring on a regular basis and most of them have been treated as if they had never occurred. Currently, in most air traffic control facilities in Japan, the number of controllers is limited to the number of controlling positions in each shift zone, and the consolidation of positions is a prerequisite for obtaining even the legally mandated breaks.

The number of qualified ATCOs is also insufficient to cover both planned and unplanned absences or events. With staffing levels already at the minimum, the introduction of FRM, which mandates frequent breaks, makes it impossible to follow the prescriptive regulations limitations.

- 2.6. The supervisor in charge of managing the breaks for each team of ATCOs do not have enough time to check that each member has secured the appropriate break due to the enormous workload caused by the shortage of qualified ATCOs. Even if they admit that they could not secure the breaks, they have to submit many reports due to the high frequency of deviations, which makes it difficult to handle. Furthermore, according to the ATCOs' labour union, there are cases where, even when deviations occur and the supervisor tries to submit a report, the report is suppressed by the manager if the deviation occurred because paid leave was granted, and the necessary staffing levels were not met. In some cases, supervisors avoid submitting reports because they are fearful for being held accountable for granting the paid leave. An effective FRMS should incorporate all necessary components, ensuring that employees understand the risk of fatigue and feel safe to report it without fear of punishment or adverse consequences (Transportation Safety Board of Canada, 2022; Federal Transit Administration, 2015). Effective fatigue management and minimising related risks demand significant shifts in attitudes and behaviours at both the management and operational levels (Transportation Safety Board of Canada, 2022). Although submitting a report on the fact that a deviation from the prescriptive limitations has occurred for whatever reason and analysing the causes and risks of the deviation are fundamental to the purpose of FRM. If that valuable data is not submitted, the risk analysis, which is the fundamental strategy of FRM, cannot be conducted, rendering FRM ineffective.
- 2.7. A previous IFATCA working paper on FRMS (IFATCA, 2013) studied the risk mitigation measures that can be taken in FRM and the prerequisites for the introduction and effective operation of FRM. It was concluded that a prerequisite for risk mitigation and FRM measures to be effective is that sufficient ATCOs are in place.

The prerequisite of any well working FRMS is the existence of sufficient and adequately trained staff. All tools and measures depend on given boundaries for what is deemed acceptable in sense of fatigue accumulation. Failing to allocate a sufficient level of staff will severely weaken any measures taken (IFATCA, 2013).

- 2.8. It was proposed and carried that this element be incorporated into the FRMS elements model and included as IFATCA's provisional policy in the "Fatigue in Air Traffic Control" section of IFATCA Technical and Professional Manual (TPM).

Tool	Control mechanism
Prerequisite 1	Regulation to establish a FRMS
Prerequisite 2	Adequate staffing levels
Prerequisite 3	Awareness of the effects of sleep obtained and promotion of a healthy lifestyle
Prerequisite 4	Environmental and ergonomical provisions regarding working conditions
1	Application of breaks during work time
2	Maximum length of shifts regulation / overtime limitation
3	Appliance of roster model / scheduling
4	Training of the understanding of Prior Sleep and Wake Model (PSWM)
5	Awareness of fatigue and Team Resource Management (TRM)
6	Outcome based fatigue risk management (Fatigue Risk Incident/Fatigue Risk Errors (FRI/FRE) and fatigue risk trajectory model)

2.9. ICAO's Annex 11 provides the following regarding the introduction of FRM.

2.28.1 States shall establish regulations for the purpose of managing fatigue in the provision of air traffic control services. These regulations shall be based upon scientific principles, knowledge and operational experience, with the aim of ensuring that air traffic controllers perform at an adequate level of alertness (ICAO, 2018).

2.10. *Fatigue Management Guide for Air Traffic Service Providers* provides guidance on FRM for ATCOs. In the guidance, the following factors on staffing are identified as having the potential to affect ATCO fatigue

Factor in operational context	Possible effect(s) on fatigue
Staffing arrangements	<ul style="list-style-type: none"> <li>• The ability to offer adequate recovery and preparation opportunities to avoid cumulative fatigue</li> <li>• Sufficient staff to cover sickness and other absences</li> <li>• Career stability</li> <li>• Changing employment arrangements (e.g., use of contractors and contractual obligations and constraints)</li> <li>• Sufficient staff to cover the specific operational demands</li> </ul>

Factor in organizational context	Possible effect(s) on fatigue
Staffing levels	<ul style="list-style-type: none"> <li>• Sufficient to be able to offer adequate recovery and preparation opportunities during and between work periods to avoid cumulative fatigue</li> </ul>

	<ul style="list-style-type: none"> <li>· Sufficient to cover sickness and other absences</li> <li>· Sufficient to provide level of autonomy consistent with experience level</li> </ul>
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2.11. Neither the SARPs nor the Guidance requires ANSPs to calculate and assign the staff necessary to operate FRM when implementing it, but it does mention that understaffing can be a factor in fatigue.

2.12. The ICAO regulations allow for flexibility for ANSPs to differ from prescriptive limitation regulations in order to meet operational needs under exceptional circumstances.

2.28.3 Where the air traffic services provider complies with prescriptive limitation regulations in the provision of part or all of its air traffic control services in accordance with 2.28.2 a), the State:  
 [...]
   
d) may approve variations to these regulations using an established process in order to address strategic operational needs in exceptional circumstances, based on the air traffic services provider demonstrating that any associated risk is being managed to a level of safety equivalent to, or better than, that achieved through the prescriptive fatigue management regulations (ICAO, 2018).

2.13. The ICAO SARPs allow ANSPs in states with a prescriptive approach to apply to the regulator for approval to change the prescriptive limitations regulations. However, the SARPs specify that variations can only be approved for exceptional circumstances and approval must be based on a risk assessment provided by the operator. The operator has to show how they will provide a level of safety equivalent to, or better than that achieved by operating within the prescriptive limitations (ICAO, 2016). This involves forecasting the expected situation and associated tasks in advance, as well as identifying mitigation measures to address the anticipated increase in fatigue risk. Additionally, it requires obtaining approval from the regulator for the ANSPs to tolerate occasional deviations while not allowing regular deviations (ICAO, 2018).

Where the air traffic services provider complies with prescriptive limitation regulation of part or all of its air traffic control services in accordance with 2.28.2 a), the state:  
 [...]
   
d) may approve variations to these regulations using an established process in order to address strategic operational needs in exceptional circumstances, based on the air traffic services provider demonstrating that any associated risk is being managed to a level of safety equivalent to, or

better than, that achieved through the prescriptive fatigue management regulations (ICAO, 2018).

2.28.3 d) relates to the possibility of more strategic responses by ATS Providers to address expected by minor changes to usual air traffic service demands in exceptional circumstances, such as planning for increased traffic during an Olympics, or to meet limited seasonal demands, without the need for the ATS Provider to develop a full FRMS. This Standard requires ATC providers to seek approval for any variations or exceptions to the prescriptive limits that they wish to schedule air traffic controllers to work. These variations should be for a defined period of time(s) and made in association with identified mitigation strategies. The intent of Standard 2.28.3 d) is to minimise “regulation through variations” and to avoid the approval of variations that meet operational imperatives in the absence of a risk assessment. It is not intended to offer a quick and easy alternative to an FRMS when a more comprehensive fatigue risk management approach is required (ICAO, 2016).

- 2.14. If deviations are expected to occur under normal circumstances, then staffing should be provided in advance. The replenishment of qualified ATCOs is a primary risk mitigation measure in FRM. Whether before or after the implementation of FRM, it is essential to continuously review the number of qualified ATCOs, ensuring that there are enough to meet the prescriptive limitations regulations, except in exceptional circumstances.

#### **MA Examples - Australia**

- 2.15. Airservices Australia, the air traffic services provider in Australia, has been operating its own FRMS since 2003, 17 years before ICAO released its standards for FRMS. As introduced in 1.4., unlike the prescriptive approach, FRMS allows ANSPs to use scientific advancements to improve safety, use resources more efficiently, and increase operational flexibility.
- 2.16. The shortage of ATCOs is also a serious issue in Australia. In 2022, an incident occurred at Brisbane Centre where an air traffic controller fell asleep during a night shift. An investigation revealed that the controller’s consecutive night shifts, along with the low traffic volume overnight, contributed to a lack of focus. Additionally, it was pointed out that insufficient rest due to a shortage of ATCOs was a factor in the incident.
- 2.17. In Australia, to ensure that controllers received appropriate breaks during temporary staffing shortages, two methods are implemented: “Short Break Procedure” and “Traffic Information Broadcasts by Aircraft (TIBA) (see Appendix C)”.
- 2.18. The Short Break Procedure is commonly implemented in control units where only a single ATCO is responsible for an airspace, or in situations where sector combining is not feasible. This method effectively ensures that ATCOs

can secure rest breaks even in such environments. However, since causing delays to aircraft is not permitted, the procedure must be executed during natural traffic gaps, which does not guarantee immediate rest opportunities. Additionally, reports submitted to the Australian Transport Safety Bureau (ATSB) indicate that some controllers have reservations about the procedure, with one stating that "many controllers refuse to conduct a short break procedure as their ATC license is effectively being used to control aircraft when they are not present" (Australian Transport Safety Bureau, 2022).

- 2.19. While TIBA is not unique to Australia—its standards are established by ICAO—it is implemented more frequently in Australia than anywhere else in the world. According to the Australian Airline Pilots' Association (AusALPA), TIBA airspace in Australia was activated approximately 250 times in 2022 and about 90 times in the first half of 2023 (IFALPA, 2024). TIBA is used as a last resort but is an effective method for ensuring breaks. However, TIBA significantly impacts the Australian domestic aviation network. As explained in the Appendix C, no air traffic services are provided within TIBA airspace, placing full responsibility for safety on the pilots operating within the airspace. Consequently, few aircraft choose to fly through these areas, leading to delays or cancellations of the flights due to detours around the TIBA airspace. AusALPA opposes the frequent use of TIBA in standard operations, advocating for "the revision of ATC staffing levels to ensure adequate resources are available to provide an acceptable level of ATC to all airspace users" (IFALPA, 2024).
- 2.20. As mentioned above, in Australia, when ATCOs are unable to take their designated breaks, they do not continue operations but instead strictly follow prescribed procedures to ensure breaks are taken, as part of rigorous FRM. However, these procedures come with certain drawbacks and should ideally be applied only temporarily and in contingent situations. If such measures need to be implemented frequently, it becomes necessary to reassess ATCO staffing levels. Ultimately, the fundamental solution to maintaining both aviation safety and efficiency lies in ensuring adequate staffing.
- 2.21. The IFATCA policy mentioned in section 2.8. has already been removed as it is no longer applicable. While IFATCA TPM WC 10.3.6 – STAFFING lists points to consider for staffing, FRM point of view is not included. Therefore, it is proposed to include the operation of FRM as a consideration for staffing in WC 10.3.6.

#### **Definition of “break”**

- 2.22. The nature of a “break” depends on the law of each state and the policies of individual organisations. However, the definition of “break” is not stated in any ICAO publication or IFATCA TPM. In the general sense of the word, “break” is defined as “a short period of time when you stop what you are doing and rest, eat, etc.” in the *Oxford Advanced Learner's Dictionary* (Hornby, 2020). However, this is not sufficient to explain the “breaks” that are necessary for



ATCOs. The roles of ATCOs are complex and require a high level of short-term concentration and alertness when they are delivering air traffic services. To maintain maximum focus while delivering air traffic services, they need high-quality breaks at appropriate intervals. Therefore, it is necessary to define a “break” in accordance with the specialised roles of ATCOs and the objective of FRM.

- 2.23. To define “break,” it might help to first understand what a “duty” refers to. ICAO defines “duty” in Annex 11 as “any task that an air traffic controller is required by an air traffic services provider to perform. These tasks include those performed during time-in-position, administrative work and training” (ICAO, 2018). The most important aspect of an ATCO’s role is providing air traffic control services. Apart from that, tasks such as scheduling for a training, reviewing operational procedures, preparing reports, and maintaining organisational internal documents like manuals can also be regarded as “administrative work” and are considered part of ATCO’s responsibilities.
- 2.24. Again, the discussion returns to the definition of a “break.” As a reference, EU defines a “break” as follows: “a period of time within the duty period when an air traffic controller is not required to perform duties, for recuperation purposes” (European Union, 2017). The shared elements between EU’s definition and the one showed in 2.19. from *Oxford Advanced Learner’s Dictionary* are notions of “being away from duties” and “relaxing to recover both mentally and physically” (i.e., “rest” or “recuperation”), which appear to be the key essences of a “break.”
- 2.25. For a break to be effective, it is not enough to simply leave the workplace; the way the break is utilised plays a key role in its effectiveness. According to Sonnentag and Fritz, along with physically distancing from work, achieving psychological detachment is a crucial aspect of recovery (such as refraining from engaging in job-related activities) (Sonnentag & Fritz, 2007). They believe that psychological detachment is also about the mental disengagement from work, which “implies to stop thinking about one’s work and job-related problems or opportunities” (Sonnentag & Fritz, 2007).
- 2.26. Furthermore, one theory that helps in understanding the importance of a break is the “Ego Depletion Theory” proposed by social psychologist Roy Baumeister. He and his colleagues had some experiments and concluded that self-control, decision making, and active choice draw from a limited resource, which becomes depleted after use, affecting subsequent actions (Baumeister *et al.*, 1998). Drawing on Baumeister’s theory, Trougakos and Hideg explored momentary recovery in the workplace. They suggest that for a break to effectively lead to recovery, individuals should spend the time on activities that lower the demands on their personal resources and provide a chance for those resources to be replenished (Trougakos & Hideg, 2009). Such activities in their view are respite activities, such as low-effort and preferred choice, which reduce work-related strain and stress, and prevent

resource depletion while providing opportunities to restore the resources needed for effective work performance and health (Trougakos & Hideg, 2009).

- 2.27. ATCOs must constantly make quick and accurate decisions, relying heavily on cognitive resources. Prolonged use of these resources without recovery can lead to “ego depletion,” reducing decision-making ability, increasing errors, and lowering work quality. To prevent performance deterioration, effective breaks are essential. However, simply taking a break is not sufficient - its quality is crucial. A break should involve complete physical and mental detachment from air traffic control and other work-related activities to allow cognitive recovery. Engaging in work-related tasks during breaks prevents resource replenishment, prolonging “ego depletion” and negatively impacts performance post-break. The key to an effective ATCOs’ break is full disengagement from work, focusing solely on physical and mental recovery to sustain safety and efficiency in the air traffic control.
- 2.28. In order for countries implementing FRM to ensure appropriate breaks and enhance the effectiveness of FRM, it is essential to establish a shared understanding of what constitutes a "break." However, formalising this understanding as a strict "definition" requires caution. Definitions must be concise and may not fully capture the ideal concept of a break. Additionally, as circumstances evolve and new research emerges, the characteristics of an optimal break may change. In such cases, it would be more practical for IFATCA to adapt it as a policy rather than creating a fixed definition.
- 2.29. The IFATCA Technical and Professional Manual (TPM) has a section titled "WC 10.3.2 WORK AND REST SCHEME," which outlines policies on shift durations, intervals between shifts, break requirements, and the maximum time controllers should remain on duty. Although this section is not specifically dedicated to FRM, incorporating a policy related to the quality of breaks could complement the existing policy and contribute to enhancing the effectiveness of FRM strategies. Based on the above discussion, the suggested new policy and the appropriate place for its insertion are presented in section 4.2.

### **3. CONCLUSION**

- 3.1. Effective FRM requires not only a science-based regulatory framework but also sufficient staffing. Temporary measures like position consolidation, short break procedure, and TIBA may help alleviate shortages but are not sustainable long-term. Inadequate staffing increases deviations from prescriptive limitations regulations, some of which go unreported due to administrative burdens and fear of repercussions. It also places excessive strain on ATCOs, raising fatigue-related risks and compromising safety and efficiency. Ultimately, FRM can only be effective if enough ATCOs are available to meet operational demands, cover absences, and allow proper rest. A proactive staffing approach is essential to maintaining both safety and efficiency.

- 3.2. Effective breaks are essential for ATCOs to maintain performance and safety. Given their demanding role, breaks must provide full physical and mental detachment from work to allow cognitive recovery. High-quality breaks reduce fatigue, sustain decision-making, and minimize errors. Insufficient detachment or engagement in work-related tasks during breaks prolongs fatigue and impairs performance. Therefore, breaks should be structured to ensure genuine recuperation, incorporating scientifically informed practices that prioritize rest, recovery, and detachment. This approach is crucial to sustaining the high levels of alertness and decision-making ability for the safe and efficient delivery of air traffic control services.

#### 4. RECOMMENDATIONS

- 4.1. It is recommended that the policy included in 10.3.6 – STAFFING of the Technical and Professional Manual is updated as follows:

##### **IFATCA TPM (2024), WC 10.3.6 – STAFFING**

###### **Proposal:**

IFATCA strongly recommends that MAs establish a specific task force to work with the employer to identify and achieve the required staffing targets for each individual facility. These minimum staffing levels must take into consideration the following:

1. Human Performance and Fatigue Excessive (no planned overtime shall be used).
2. Minimum staffing number considers only current credentialed ATCOs- Uncredentialed trainees or disqualified ATCOs shall not be taken into account.
3. ~~Staff for normal operations including proper staff relief and provision for unforeseen circumstances and/or events.~~ Enough staff to comply with fatigue management policies, so that deviations from the prescriptive limitations regulations for consecutive time-in-position, work hours in a duty period, and consecutive work days do not occur.
4. Provision for unforeseen circumstances and/or events.
5. Forecast ATCOs retirement.

- 4.2. It is recommended that the policy included in 10.3.2 – WORK AND REST SCHEME of the Technical and Professional Manual is updated as follows:

##### **IFATCA TPM (2024), WC 10.3.2 – WORK AND REST SCHEME**

###### **Proposal:**

[...]

At least one break of a minimum of 1 hour duration, on both day and afternoon shift, shall be given to controllers for the purpose of eating at regular times and to prevent gastrointestinal dysfunctions.

Additionally, breaks must allow for physical and mental recovery to ensure controllers maintain optimal performance and alertness. During this time, controllers are encouraged to physically and mentally detach from work-related tasks to promote effective recuperation.

[...]

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## Appendix A - Regulated Limits for Consecutive Time-in-Position and Break Durations in Japan

1. Maximum consecutive time-in-position for those who are in an operational position communicating with pilots through radio and maintaining separation is 2 hours.
2. Consecutive time-in-position for all operational positions is 4 hours or less.
3. Consecutive time-in-position for more than 2 hours and break, the next time-in-position must be within 2 hours.
4. The break duration after the time-in-position for up to 1 hour is more than 5 minutes.
5. The break duration after the time-in-position for up to 2 hours is more than 10 minutes.
6. The break duration after the time-in-position for more than 2 hours but not more than 3 hours is 15 minutes or more.
7. The break duration after the time-in-position for more than 3 hours but not more than 4 hours is 20 minutes or more.

## Appendix B – Regulations for Breaks and Consecutive Time-in-Position in Operational Situations

1. In situations when only the same number of ATCOs are on duty as the number of operational positions, it is impossible to ensure planned break. For this reason, when an ATCO temporarily leaves the operation room for a restroom or when an ATCO temporarily combines positions and leaves the room in consideration of traffic conditions, these are considered as a break.
2. If the assignment table appears to show that the consecutive time-in-position does not meet the prescriptive limitations regulations, taking temporary time away from the operation room or similar measures shall be regarded as a break, thereby considering the limitations as being met.

## Appendix C – Methods for Allowing ATCOs to Take Breaks During Temporary Staffing Shortages in Australia

### 1. Short Break Procedure

The Short Break Procedure refers to the guidelines for situations where ATCOs take short breaks while relief staff are not endorsed for the specific position. During such breaks, an individual holding a valid ATC license and Class 3 medical certificate, but without the necessary endorsement, may temporarily assume limited responsibilities. These include maintaining a listening watch, relaying instructions verbatim, and providing certain flight information services. Short breaks are restricted to a maximum duration of 20 minutes and are only permissible when air traffic is minimal and does not require active control for aircraft separation. The endorsed controller must conduct a thorough handover and takeover process, record all relevant instructions, and remain on call to address emergencies. Upon return, they are responsible for managing any issues that arise during their absence. Meanwhile, the non-endorsed controller is tasked with following recorded instructions, documenting all communications, and providing limited operational services. They must not initiate communication or issue clearances unless safety is at risk. The document emphasizes that traffic management actions such as metering or delaying flights should not be undertaken solely to facilitate these short breaks.

### 2. Traffic Information Broadcasts by Aircraft (TIBA)

TIBA is a contingency procedure allowing pilots to transmit reports and relevant additional information to share details with other aircraft in the area when air traffic services are unavailable in a specific airspace. Pilots must maintain a listening watch on the assigned VHF frequency from 10 minutes before entering the designated airspace until they leave it. For aircraft departing from within the airspace, the listening watch begins shortly after takeoff. Broadcasts are made at specific intervals, including 10 minutes before entering the airspace, prior to crossing reporting points or ATS routes, during changes in flight levels, and as deemed necessary by pilots. Standardized message formats ensure clarity and consistency in communications, providing crucial information such as flight level, position, and estimated crossing times. Operationally, pilots are advised to minimize changes to their cruising levels within the designated airspace unless necessary for avoiding traffic conflicts, adverse weather, or other operational needs. In cases of collision risk, immediate action such as descending by specific altitudes, activating aircraft lights, and notifying appropriate frequencies is required. Importantly, normal position reporting procedures continue in parallel with TIBA broadcasts to maintain comprehensive situational awareness. Responses to TIBA messages are generally unnecessary unless a collision risk is identified.

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