

7 FLIGHT TIME LIMITATION (FTL) SCHEME

7.0 Flight and Duty Time Limitations and Rest Requirements

General:

This Chapter follows the numbering, of the Air Ops Subpart FTL-Flight and Duty Time Limitations and Rest Requirements Regulation, All associated AMCs which are applicable to the Ryanair FTL, all CS applicable to the Ryanair FTL and selected Guidance Material applicable to the Ryanair FTL scheme is included.

Explanation of Air Ops References in this chapter:

Reference	Description
Article n	Article to Commission Regulation (EU) No 965/2012 (Air Ops Regulation)
ORO.XXX	Part-ORO: Organisation Requirements for Air operators, (Annex III to Commission Regulation (EU) No 965/2012)
ORO.FTL.XXX	Subpart FTL (Flight and Duty Time Limitations and Rest Requirements)
ORO.FTL.1XX	Section 1 (General)
ORO.FTL.2XX	Section 2, Commercial Air Transport Operators (CAT)
AMCn ORO.FTL.xxx	Acceptable Means of Compliance to Part-ORO
GMn ORO.FTL.XXX	Guidance material to Part-ORO Subpart FTL
CS FTL.1.XXX	Certification Specifications: Commercial Air Transport by Aeroplane-Scheduled and Chartered Operations
GMn CS FTL.1.xxx	Guidance Material: Commercial Air Transport by Aeroplane-Scheduled and Chartered Operations

7.1 Ryanair Flight Time Limitation (FTL) Scheme

This Ryanair Flight Time Limitation (FTL) Scheme complies with

- COMMISSION REGULATION (EU) No 83/2014 of 29 January 2014 (the Regulation) amending Regulation (EU) No 965/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EU) No 2018/1139 of the European Parliament and of the Council. This FTL scheme is effective from 18th February 2016 and remains in force until further notice.

- The Council Directive 2000/79/EC ‘Working Time Directive’ limit of 2000 working hours in a year applies to all personnel subject to this FTL.
- European Communities (Organisation of Working Time) (Mobile Staff in Civil Aviation) Regulations 2006.
- SI 507/2006, European Communities (Organisation of Working Time for Mobile Staff in Civil Aviation) Regulations 2006.

7.1.1 Scope

ORO.FTL.100

This Chapter establishes the requirements to be met by Ryanair and Ryanair crew members with regard to flight and duty time limitations and rest requirements.

Owner	Document Title	Output
Finance Manager Operations	Crew Management System Documentation	The control document for all rostering and crew control assignments, legality checks, and actual FTL records
Head of Pilot Rostering	Flight Crew Planning Department: Roster Production Procedure	Pilot Rosters including legality checks and roster stability metrics
Pilot Training Delivery Manager	Training Department Flight Crew Planning: Roster Production Procedure	Rosters for pilots in Training, including legality checks and roster stability metrics
Crew Planning Manager	In-flight Crew Planning Department: Roster Production Procedure	Cabin Crew Rosters, including legality checks and roster stability metrics
In-flight Training admin Manager	In-flight Training: Roster Production Document	Cabin crew in Training Rosters, including legality checks and roster stability metrics
Operations Control Manager Operations Controllers Operations Officers	Ops Center Control Manual OCCM amended by OCI (Operations Control Instruction)	Tactical Management of the Commercial Schedule, including legality checks and Fatigue Management principles applied to tactical changes to the schedule
Operations Control Manager Crew Controllers	Ops Center Control Manual OCCM amended by OCI (Operations Control Instruction)	Tactical changes to rosters in the active week including legality checks and Fatigue Management principles applied to tactical changes to the roster
Operations Control Manager Flight Planners	Ops Center Control Manual OCCM amended by OCI (Operations Control Instruction)	Tactical Management of the Commercial Schedule including legality checks and Fatigue Management principles applied to tactical changes to the schedule

7.1.2 Applicability of Subpart FTL of ANNEX III

(Article 8)

Commercial Air Transport Operations (CAT) is subject to Regulation (EU) No 2018/1139.

7.2 Definitions

OTO.FTL.105

FTL definitions including those not applicable to the Ryanair FTL Scheme, are reproduced in this Chapter. Regulation (EU) No 83/2014.

7.2.1 “Acclimatised”

Acclimatised means a state in which a crew member’s circadian biological clock is synchronised to the time zone where the crew member is. A crew member is considered to be acclimatised to a 2-hour wide time zone surrounding the local time at the point of departure. When the local time at the place where a duty commences differs by more than 2 hours from the local time at the place where the next duty starts, the crew member, for the calculation of the maximum daily flight duty period, is considered to be acclimatised in accordance with the values in the following table:

Time difference (h) between reference time & local time where a crew member starts the next duty	Time elapsed since reporting at reference time				
	< 48	48 – 71.59	72 – 95.59	96 – 119.59	>= 120
< 4	B	D	D	D	D
<= 6	B	X	D	D	D
<= 9	B	X	X	D	D
<= 12	B	X	X	X	D

“B” means acclimatised to the local time of the departure time zone;

“D” means acclimatised to the local time where the crew member starts his/her next duty;

“X” means that a crew member is in an unknown state of acclimatisation.

Note 1: Acclimatised ORO.FTL.105

A crew member remains acclimatised to the local time of his/her reference time during 47 hours 59 minutes after reporting no matter how many time zones he/she has crossed. The maximum daily FDP for acclimatised crew members is determined using the table provided with the reference time of the point of departure. As soon as **48 hours** have elapsed, the state of acclimatisation is derived from the time elapsed since reporting at reference time and the number of time zones crossed.

Note 2: Acclimatised ‘point of departure’ ORO.FTL.105

The point of departure refers to the reporting point for a flight duty period or positioning duty after a rest period.

Note 3: Acclimatised ‘time elapsed since reporting at reference time’ ORO.FTL.105

The time elapsed since reporting at reference time for operations applying Certification Specifications at home base refers to the time elapsed since reporting for the first time at home base for a rotation. (CS) FTL.1.235(b)(3)(ii)

7.2.2 ‘Reference Time’

Reference time means the local time at the reporting point situated in a 2-hour wide time zone band around the local time where a crew member is acclimatised;

Note: Reference time

ORO.FTL.105

Example: A crew member is acclimatised to the local time in Rome and reports for duty in Dublin. The reference time is the local time in Dublin.

7.2.3 “Accommodation”

Accommodation means, for the purpose of standby and split duty, a quiet and comfortable place not open to the public with the ability to control light and temperature, equipped with adequate furniture that provides a crew member with the possibility to sleep, with enough capacity to accommodate all crew members present at the same time and with access to food and drink.

7.2.4 “Suitable Accommodation”

Suitable accommodation means, for the purpose of standby, split duty and rest, a separate room for each crew member located in a quiet environment and equipped with a bed, which is sufficiently ventilated, has a device for regulating temperature and light intensity, and access to food and drink.

7.2.5 “Augmented Flight Crew”

Augmented flight crew means a flight crew which comprises more than the minimum number required to operate the aircraft, allowing each flight crew member to leave the assigned post, for the purpose of in-flight rest, and to be replaced by another appropriately qualified flight crew member.

7.2.6 “Break”

Break means a period of time within a flight duty period, shorter than a rest period, counting as duty and during which a crew member is free of all tasks.

7.2.7 “Delayed Reporting”

Delayed reporting means the postponement of a scheduled FDP by Ryanair before a crew member has left the place of rest.

7.2.8 “Disruptive Schedule”

Disruptive schedule means a crew member’s roster which disrupts the sleep opportunity during the optimal sleep time window by comprising an FDP or a combination of FDPs which encroach, start or finish during any portion of the day or of the night where a crew member is acclimatised.

Early Type disruptive schedule applies to the Ryanair FTL.

Note: If a crew member is acclimatised to the local time at his/her home base, the local time at the home base should be used to consider an FDP as ‘disruptive schedule’. This applies to operations within the 2-hour wide time zone surrounding the local time at the home base, if a crew member is acclimatised to the local time at his/her home base. ORO.FTL.105.

- **“Early type”** of disruptive schedule means:

for **“early start”** a duty period starting in the period between **0500** and **0559** in the time zone to which a crew member is acclimatised; and

for **“late finish”** a duty period finishing in the period between **2300** and **0159** in the time zone to which a crew member is acclimatised; and

7.2.9 “Night Duty”

Night duty means a duty period encroaching any portion of the period between **0200** and **0459** in the time zone to which the crew is acclimatised.

7.2.10 “Duty”

Duty means any task that a crew member performs for Ryanair, including flight duty, administrative work, giving or receiving training and checking, positioning, and some elements of standby.

7.2.11 “Duty Period” (DP)

Duty period means a period which starts when a crew member is required by Ryanair to report for or to commence a duty and ends when that person is free of all duties, including post-flight duty.

7.2.12 “Flight Duty Period (‘FDP’)”

Flight Duty period means a period that commences when a crew member is required to report for duty, which includes a sector or a series of sectors, and finishes when the aircraft finally comes to rest and the engines are shut down, at the end of the last sector on which the crew member acts as an operating crew member.

7.2.13 “Flight Time”

Flight time means the time between an aircraft first moving from its parking place for the purpose of taking off until it comes to rest on the designated parking position and all engines or propellers are shut down.

7.2.14 “Home Base”

Home Base means the location, assigned by Ryanair to the crew member, from where the crew member normally starts and ends a duty period or a series of duty periods and where, under normal circumstances, Ryanair is not responsible for the accommodation of the crew member concerned.

7.2.15 “Local Day”

Local day means a 24-hour period commencing at **00.00** local time.

7.2.16 “Local Night”

Local night means a period of 8 hours falling between **2200** and **0800** local time.

7.2.17 “Operating Crew Member”

Operating crew member means a crew member carrying out duties in an aircraft during a sector.

7.2.18 “Positioning”

Positioning means the transferring of a non-operating crew member from one place to another, at the behest of Ryanair, excluding:

- the time of travel from a private place of rest to the designated reporting place at home base and vice versa; and
- the time for local transfer from a place of rest to the commencement of duty and vice versa.

7.2.19 “Rest Facility”

Rest facility means a bunk or seat with leg and foot support suitable for crew members’ sleeping on board an aircraft.

7.2.20 “Reserve”

Reserve means a period of time during which a crew member is required by Ryanair to be available to receive an assignment for an FDP, positioning or other duty notified at least **10 hours** in advance.

7.2.21 “Rest Period”

Rest period means a continuous, uninterrupted and defined period of time, following duty or prior to duty, during which a crew member is free of all duties, standby and reserve.

7.2.22 “Rotation”

Rotation is a duty or a series of duties, including at least one flight duty, and rest periods out of home base, starting at home base and ending when returning to home base for a rest period where Ryanair is no longer responsible for the accommodation of the crew member.

7.2.23 “Single day free of duty”

Single day free of duty means, for the purpose of complying with the provisions of Council Directive 2000/79/EC, a time free of all duties and standby consisting of one day and two local nights, which is notified in advance. A rest period may be included as part of the single day free of duty.

7.2.24 “Sector”

Sector means the segment of an FDP between an aircraft first moving for the purpose of taking off until it comes to rest after landing on the designated parking position.

7.2.25 “Standby”

Standby means a pre-notified and defined period of time during which a crew member is required by the operator to be available to receive an assignment for a flight, positioning or other duty without an intervening rest period.

7.2.26 “Airport Standby”

Airport standby means a standby performed at the airport.

Note: **Airport standby** counts in full as duty period ORO.FTL.105.

7.2.27 “Other standby”

Other standby means a standby either at home or in a suitable accommodation.

7.2.28 “Window of circadian Low (‘WOCL’)”

WOCL means the period between **0200** and **0559** hours in the time zone to which a crew member is acclimatised.

7.3 Ryanair Responsibilities as the Operator

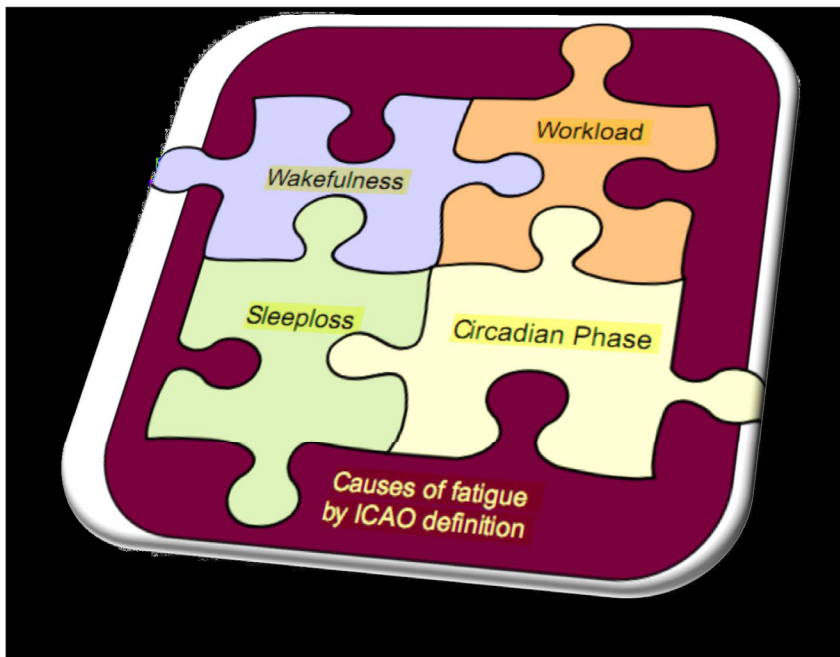
ORO.FTL.110

Ryanair provides policies and procedures, organisation and personnel, publicity, training, reporting and data analysis tools to enable the organisation and operational personnel to manage fatigue.

Crewmember fatigue ICAO Definition can be defined as:

A physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a crew member’s alertness and ability to safely operate an aircraft or perform safety related duties.

The ICAO definition is summarised in the picture below.



Fatigue Hazard Identification

Fatigue is identified as a hazard in the Ryanair Hazard Log and the causes which could promulgate fatigue are communicated and promoted through recurrent training and safety media. A Fatigue Safety Performance indicator has been created, this indicator includes time, place, extent and nature.

Investigations conducted by the Safety Services Office include fatigue as a possible hazard and each investigation includes crew's roster for the previous 28 days to the event.

Ryanair utilises the following aids to identity possible consequences of fatigue:

1. risk assessments;
2. safety reports filed through safety net.
3. external occurrence and accident reports;
4. audits/non-compliance reports;
5. internal reviews including the Daily Safety, Security and FM Review Meeting, Weekly Safety and Fatigue Management Review Meeting and SAG;
6. Post A Query, RCRS and;
7. Safety surveys.

In addition to the above Ryanair has appointed a designated Base Captain (eCDR BC) as the responsible individual for monitoring the use of Commanders Discretion in Ryanair. The eCDR BC reports directly to the Deputy Chief Pilot – Regulatory Compliance (DCP RC) for this purpose.

On a weekly basis, the eCDR reviews all Commanders Discretion Reports (ECDRs) to:

- Ensure that eCDR submitted are complete and accurate.
- Report all exceedances in excess of 1 hour to the IAA on a 28 day basis.
- Identify trends.
- Identify where FTL exceedances are caused by scheduling issues.

The eCDR BC provides a monthly eCDR Report to the NPFO, DCP RC and Safety Manager. This report contains detailed information related to all eCDR filed during the preceding 28 day period including duration of discretion used, route, reason for discretion and details previous cases where discretion was used on the specific route. The NPFO provides a monthly report to the Director of Operations. This Report provides Management with timely information to ensure

that exceedances of the maximum flight duty period on more than 33% of the flight duties in that schedule during a scheduled seasonal period are identified and appropriate action taken i.e. changes to the schedule and/or crew arrangements. This activity is consolidated and reported to the SAG Meeting.

Fatigue as a risk is managed the same as any other risk under the Ryanair Safety Management System (SMS) and as described in the Safety Management Manual. ORO.GEN.200

In Ryanair fatigue management is a scientifically-based, data driven, flexible, ‘continuous process’ of monitoring and managing fatigue. Fatigue management is made up of the following components:

- Ryanair FTL Scheme.
- Occurrence Reporting.
- FTL Audit Schedule.
- Scientific Analysis.

The purpose of fatigue management is to:

- Ensure that the safety objectives of Regulation (EU) No 2018/1139 are met.
- Prevent crew fatigue (transient and cumulative).
- Manage the operational risk(s) which may arise from crew member fatigue.
- Provide crew members with adequate rest opportunities. Crew members must use these opportunities effectively to ensure that they are sufficiently alert to operate to a satisfactory level of performance and safety.
- Provide analysis and support to the risk assessment of proposed changes to fatigue management.

Fatigue management is applicable in all departments. Heads of department have specific responsibility to actively manage fatigue risks, to continually assess fatigue risk measures and to continuously improve fatigue management strategies in place. Heads of Departments continually review all aspects of our operation including specific operational aspects where fatigue could generate an increased risk.

Every person in the organisation, responsible for preparation and maintenance of crew rosters and management personnel concerned receive initial and thereafter recurrent fatigue management training to ensure continued compliance with best practices in the area of fatigue identification and fatigue management. This training is provided by and tracked by the Safety Manager.

Every person subject to this manual has the obligation to report issues relating to safety, which includes fatigue, using the Ryanair reporting systems available. All such reports are captured in SafetyNet and are processed in accordance with the procedures detailed in OMA and SMM. Fatigue management is a fixed agenda item at the daily and weekly safety and fatigue management review meetings. ORO.GEN.200(A)(3)

This section details Ryanair's responsibilities to crewmembers in compliance with EU Regulations: ORO.FTL.110

- a. Duty rosters are published, normally 4 weeks in advance, but at least 14 days in advance to provide the opportunity for crew members to plan adequate rest. Rosters are published by 1700 hrs each Friday and are made available to individual crewmembers via the internal electronic portal appropriate to each functional area, e.g. 'eCrew Roster App' AMC1 ORO.FTL.110(a).
- b. Ryanair crews are normally scheduled to start and finish a duty assignment at the same base. This has the distinct advantage that crews have the opportunity for sleep, usually at home base during the night period. We are 'programmed' to sleep during the night and this also minimises disruption to Circadian Rhythm. The same benefits apply during OFF days whereby aircrew can reduce any sleep deficit acquired during the previous duty period and because of the numbers of days off at a time, report for the next duty period with their 'sleep reservoir' replenished. Sleep is the only antidote to fatigue. This Ryanair model provides significant fatigue management and mitigation most of which is programmed into the Crew Management System FTL ruleset.

All Rosters are constructed in compliance with the Ryanair IFTSS including fatigue management principles therein. OFF days (opportunities for rest) are compliant with EU regulations and working time directive requirements thereby ensuring that crew members have sufficient rest opportunities. This enables fatigue to be managed to be as low as reasonably practicable and enables crew members to remain sufficiently free from fatigue so that they can operate to a satisfactory level of safety under all circumstances. Ryanair typically rosters more 'OFF' days than are required by EU regulations.

Crew controllers ensure that any roster changes on the day or in the crewing period, e.g. working day off, additional sectors etc are firstly legal by using the Crew Management System and thereafter managed as much as possible to avoid elevated levels of fatigue during the duty. Operating crewmembers normally have 4 or more earlies/lates in the 5 ON period. The Early Disruptive Schedule requires that there is a rest period of 60 consecutive hours after four or more early starts (pre 0600), late finishes (2300 – 0159) or night duties (0200 – 0459) and Ryanair complies with

this. Working OFF days during OFF periods is subject to a Crew Management System legality check which would trigger a Disruptive Schedule notification if the 60 hrs is violated, thereby preventing this working OFF day assignment.

Additionally, each WOFF is subject to an assessment conducted in rostering or Operations Control, to ensure that at least an equivalent level of safety and fatigue management is achieved and maintained.

Ryanair has various metrics to assure that flights assigned are completed in the scheduled times and in particular within the max flight duty times. Punctuality is a clear measure that flights are being executed as planned. Any deviations, including eCDR (electronic Commanders Discretion Reports) are analysed and presented to the Safety Action Group Meeting (SAG) and when appropriate schedules and/or pairings are changed as a fatigue management mitigation strategy as indicated earlier in this chapter. Disruption due weather, medical emergencies, associated diversions and technical issues are frequent causes of roster disruption. Industrial action is also a significant contributor. When this analysis is completed it will be apparent where the schedule is challenged by FTL and fatigue management principles and appropriate changes are made. The Safety Manager prepares this report. It is presented to the first SAG meeting following the summer or winter season.

- c. Reporting times in Ryanair allow sufficient time for ground duties. Ryanair expects that the commute from home/residence to the reporting point is achievable in 60 mins. Therefore, the report time excludes passing through staff channels and security in the airport and the commute to the reporting point. The report time for all locations*, crewroom, boarding gate or aircraft is STD-45 mins.

Note: *Reporting point will be identified in the Base Information document on FDF/CDF.

This 45 minute report time in every airport has, over many years, proven resilient to achieve the completion of regulatory and non-regulatory tasks pre-flight. Ryanair has base management in each base lead by the Base Captain to monitor these activities. Better and faster delivery systems have enhanced pre-flight efficiencies. The commute to the aircraft is continuously reviewed to ensure it remains reasonable. The necessary preparations for departure including security checks, PDIs, boarding and fuelling, aircrew briefings and completion of pre departure flows and checklists performance calculations are continually assessed. The introduction of the Electronic Flight Bag has greatly assisted the Flight crew in this period. Where any element of the 45 minute report is

challenged as reported by aircrew or detected from punctuality data, the 45 minute report and/or non-regulatory procedures will be changed to ensure continued compliance.

The frequency of operations in Ryanair ensures crew familiarity and practice to achieve compliance during the reporting period and enables expeditious completion of these tasks whilst maintaining high level of safety – as supported by SMS data. When there are widespread reporting delays and crews are rolled (reassigned) to other same wave flights, crews reporting may be instructed to report, directly to the aircraft/crewroom/gate. Crew members called off standby may be instructed to report to the crew room, the gate or directly to the aircraft. If the crew has overnighted away from a Ryanair base or when returning to duty after the break on the ground during a split duty the most suitable reporting point may be the aircraft. In all cases the standard pre-flight crew briefings must be completed prior to dispatch.

- d. The Ryanair model does not normally involve long duty periods combined with minimum rest periods. It is one of the tasks of the Rostering Manager to identify these and where possible make appropriate roster amendments. In periods of disruption this combination may occur but each crewing or ops control response must be FTL compliant and every effort is made to minimise the fatigue impact. The duty may be completed providing it is FTL compliant (no legality issues flagged). Potential rest opportunities identified prior to the next duty period will be applied by crewing or ops control, where possible including changes to pairings.

Ryanair has significant experience in scheduling and rostering and it is Ryanair policy that our rosters deliver the required hours as evenly as possible across crews throughout the year. This fatigue management principle is included in the configuration of the roster optimiser function in the Crew Management System. The auditing schedule and crew reports in particular will confirm any roster allocation imbalance.

Minimum rest issues rarely arise and when they do it is invariably as a result of a widespread disruptive event such as strikes or weather. Minimum rest is always provided before commencing a rostered duty. Typically, disruptive periods impact over a few days and crew fatigue is managed by rest opportunities during the night period, which are never less than minimum rest. Any potential sleep deficit is contained within the '5 ON' roster and recovered during OFF days.

Very exceptionally, e.g. Volcanic Ash events, the period of disruption can continue whereby a re-rostering solution would be applied. All such rosters will be FTL compliant and every effort will be made to allocate pairings to keep fatigue as low as reasonably practical. Fatigue mitigation measures will continue after this period of disruption until rosters are stabilised and

normal rostering service is resumed. During these periods crews will be reminded of appropriate sleep strategies in conjunction with other rostering tools such as split duty and delayed reporting as appropriate.

- e. Scheduling rules ensure that the rosters allocate duty patterns which avoid causing serious disruption of an established sleep/work pattern. Ryanair roster patterns are normally consecutive ‘Early’-‘Late’-‘Early’ patterns with a sleep opportunity during the night time when we are ‘programmed’ to sleep thereby minimising disruption to circadian rhythms. Transition from Late to Early roster periods is managed by sufficient OFF days to ensure adequate sleep opportunities and compliance with local night requirements. Other rosters as requested by individual crew members, eg all ‘earlies’ or all ‘lates’ are subject to the same fatigue management principles and FTL rules.

The Ryanair schedule does not have crew rest opportunities in locations 4 or more time zones away from a base for scheduled CAT flights.

- f. Schedules and rosters comply with the provisions concerning early disruptive schedules by ensuring at least one local night prior to commencement of ‘earlies’ after ‘lates’. This is one of the legality checks built into the Crew Management System ruleset and the audit and crew reporting processes ensure any errors are trapped and rectified. All roster patterns in Ryanair comply with extended recovery rest periods and early disruptive schedule requirements: 36 hr including 2 Local Nights, 2 local days twice per month and 60 consecutive hours after 4 or more early starts, late finishes or night duties. ARO.OPS.230; CS FTL1.235(a).
- g. Rest periods are provided to enable crew members to overcome the effects of the previous duties and to be rested by the start of the following flight duty period. Minimum rest periods are compliant with EU regulations regardless of geographical location of the individual or the location of the rest period in the 24 hr day, notwithstanding that rest periods in Ryanair are invariably during the night period. Any worked day off or calls off standby are managed to comply with fatigue management guidelines indicated in the Crewing documentation and as indicated in (b) above. Rest periods are always compliant with EU Regulations. Ryanair endeavours to maximise rest periods allocated to crew members including rest periods in excess of Part FTL requirements.

Non-commercial flights will be subject to bespoke scheduling and rostering, will always be FTL compliant and fatigue management principles applicable to CAT operations equally apply to non-commercial operations. Refer OMA 8.7 for categories of non-commercial operations.

The bespoke management of each ad hoc VIP Charter flight will apply fatigue management principles to the scheduling, rostering, control and supervision of these flights. Where crews are called off standby or complete a working day-off (WOFF) or other non rostered activity, fatigue

management principles are applied either to ensure that the crewmember has adequate rest but never less than minimum rest or this duty is changed to achieve an adequate rest opportunity.

- h. The OFF periods (Rest Periods) in any roster assures compliance with Recurrent Extended Recovery Rest Periods requirements which are not specifically notified to crew members in the published rosters.

Roster stability metrics described earlier combined with the audit schedule, crew reports and disruptive schedule legality check in the Crew Management System will trap any rostering errors of extended recovery rest periods and enable corrective actions to be taken to ensure compliance.

- i. Schedule guidelines enable aircrew to have through the night rest and all flight duties are scheduled to be completed within the allowable flight duty period taking into account the time necessary for pre-flight duties, the sectors and turnaround times.
- j. Ryanair will change a schedule and/or crew arrangements if the actual operation exceeds the maximum flight duty period on more than 33% of the flight duties in that schedule during a seasonal period. Additionally, the performance metrics for roster stability/disruption will indicate any roster duties which frequently are outliers and Ryanair will take action to mitigate these.

7.3.1 Scheduling and Rostering

AMC1 ORO.FTL.110

The Ryanair schedule is prepared under the direction of the Chief Commercial Officer in consultation with the Director of Operations and the NPFO. The procedures documentation in each rostering area demonstrates how fatigue risks are identified and assessed, monitored and controlled.

The commercial schedule is presented to the rostering managers who task the rostering departments to roster the commercial schedule. Consideration of fatigue is a fundamental element of the Scheduling and Rostering processes.

Ryanair rosters deliver the schedule in compliance with the following:

- a. Scheduling has an important impact on a crew member's ability to sleep and to maintain a proper level of alertness. Ryanair strikes a balance between the commercial needs and the capacity of individual crew members to work effectively when developing a workable roster to enable

completion of the schedule and these rosters are constructed to distribute the amount of work as evenly among those that are involved over the calendar year.

Schedule disruption is managed by Operations Control and Crew Control. Fatigue management considerations are applied within schedule completion. Duty assignments to achieve this will always comply with the IFTSS scheme.

- b. The schedule construction guidelines require flights to be completed within the maximum permitted flight duty periods and Ryanair crew rosters take into account the time needed for pre-flight duties, taxiing, the flight and turnaround times to include the following:
 - 1. Ryanair schedules and rosters allocate work patterns which avoid undesirable practices. Ryanair scheduling normally avoids alternating day/night duties, alternating eastward-westward or westward-eastward time zone transitions, positioning of crew members so that a serious disruption of established sleep/work patterns occurs;
 - 2. Sufficient rest periods are always scheduled. The Ryanair commercial schedule does not have long flights crossing many time zones; and
 - 3. Duty rosters are prepared and published sufficiently in advance with planning of recurrent extended recovery rest periods and notification to the crew members well in advance to plan adequate pre-duty rest.

The Ryanair area of operations spans 5 time zones, UTC-1 to UTC+3 (5 hour time difference).

Furthermore Ryanair does not normally roster alternating late-early-late duties in the same roster period. During periods of considerable disruption such assignments may arise and will be managed by crew control, including the application of fatigue management to the greatest extent possible. Any extension of the 'ON' days will be carefully considered and have fatigue management principles applied to assure that completion of such additional duty is safe, FTL compliant and manages fatigue to the greatest extent possible.

Scheduling of VIP charter operations is ad-hoc but is subject to the same rostering guidelines as any other flight and is operated under CAT rules. Effectively there is bespoke crew control and operations control applied to charter operations including fatigue management principles and FTL compliance.

Where applicable the operating crews on (VIP) charter flights shall be supplied with the Safety Risk Assessment (SRA) for such flights to alert them to the different fatigue management issues including crossing time zones, night duties etc arising from the different nature and characteristics of charter flights.

7.3.2 Operational robustness of rosters;

AMC1 ORO.FTL.110(j)

Fatigue Risks ([Fatigue Hazard Identification, 7.3](#)) are identified in advance, are assessed and monitored on a continuous basis and controlled as part of fatigue management by adherence to the IFTSS, corrective actions from data from the occurrence reporting scheme, corrective actions from the IFTSS audit schedule and scientific analysis confirming robustness of published rosters.

The Company seasonal schedule does not have east-west and west-east transitions, nor are rest periods in excess of 4 hours from home base required. East-west and west-east transitions are considered as amongst the most fatiguing elements of a schedule. The Company has various roster combinations ranging from the least fatiguing 5 ON x 4 OFF roster to 5 ON x 2 OFF roster. All roster combinations are from time to time subjected to scientific analysis by an independent external organisation recognised as a leading specialist organisation in Fatigue Analysis worldwide.

The following performance indicators KPI's are established, monitored and reported monthly to the NPFO and to the Company Safety Action Group (SAG) Meeting:

- Difference between planned and actual flight hours for the seasonal schedule to date
- Difference between planned and actual duty hours for the seasonal schedule to date;
- Difference between planned and actual number of days off for previous month;
- Number of unscheduled overnights for the previous month;
- Number of OFF days worked (overtime)

- Use of commanders discretion

Number of Duties requiring exercise of Commanders Discretion

Number of Duties requiring exercise of Commanders Discretion \leq 1 hr

Number of Duties requiring exercise of Commanders Discretion $>$ 1 hr

Increased rest

Reduced FDP

Number of changes of schedule route pairings

monitoring in excess of 25% and change if appropriate

mandatory change at 33%

- Number of Fatigue Reports
- Fatigue reported on WOFF

Duties are spread as evenly as possible across rostered crewmembers. Crewing ratios are reported monthly. Furthermore, the rolling average of flight time for each crewmember for the previous 12 calendar months is reported monthly and rostering personnel increase or decrease a crewmembers duty assignments accordingly.

7.4 Crew Member Responsibilities

ORO.FTL.115

The EU regulations below are specifically applicable to crew members who shall:

- a. comply with all flight and duty time limitations (FTL) and rest requirements applicable to their activities; CAT.GEN.MPA.100(b)
- b. make optimum use of the opportunities and facilities for rest provided and plan and use their rest periods properly. Crew member selection of accommodation should establish that it is suitable and conducive to providing uninterrupted sleep opportunities to enable the crewmember to be properly rested prior to the next duty and also that fatigue can be managed to as low as reasonably practicable.
- c. when undertaking duties for more than one operator crew members shall
 - have written prior permission from Ryanair
 - maintain his/her individual records regarding flight and duty times and rest periods in Ryanair and the other operator FTL schemes
 - provide Ryanair and the other operator with the data needed to schedule and record activities in accordance with the Ryanair and other operator FTL requirements. CAT.GEN.MPA.100(b)

- d. crew members are responsible for completion of rostered assignments.
- e. crew members are obliged to report fatigue events using the fatigue report selectable in the ASR section of SafetyNet.

Ryanair will provide additional communication of fatigue management principles via internal e-platforms and SafetyTV. There will be a recurring modular educational programme including Circadian Rhythm, Workload and Sleep Science in particular reflecting that sleep is the only antidote to fatigue. Modules will include advice on sleep strategies, awake strategies and other fatigue mitigation strategies.

The Ryanair Occurrence Reporting scheme is rigorously presented to aircrew, rosterers and controllers as an essential tool in the management of fatigue. The robust reporting culture in Ryanair is encouraged, with fatigue selectable on reporting forms with an additional alertness questionnaire to enable Ryanair and crew members to better understand fatigue, fatigue mitigation and provide continuous review of the occurrence reporting data set.

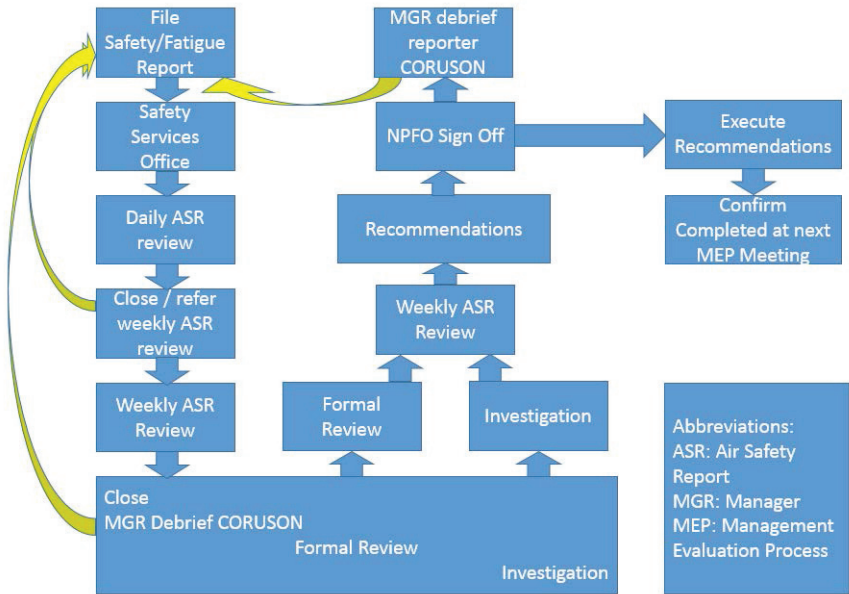
7.4.1 Fatigue Reporting Process

Ryanair provides all crew members with various reporting channels including ASRs, Captains Special Reports, Cabin Crew Safety Reports and Ryanair Confidential Reporting System.

Cabin Crew Fatigue Report – Should a Cabin Crew member call crewing with a fatigue claim, the crew member shall complete a Cabin Crew Fatigue Report as soon as possible on the company reporting system. The Cabin Crew Member should use their duty plan from the crewlink check in/out system to assist them in completing this form.

All ‘fatigue’ reports filed by cabin crew members are processed in the same manner as those filed by pilots. In the first instance the report is assessed at the Daily Safety and Fatigue Management Review Meeting. The cabin crew member who files the report will receive progress updates through the Coruson System.

All fatigue reports are forwarded to the IAA.



7.5 Fatigue Risk Management (FRM)

ORO.FTL.120

Fatigue is a risk to the safe conduct of Air Transport activities. All risks in Ryanair are managed by the Safety Management System which Ryanair has established, implements and maintains. For this reason there is not a stand-alone Ryanair Fatigue Risk Management System (FRMS), and the provisions of ORO.FTL.120, its associated AMC and GM are not applicable in this Manual.

7.6 Individual Flight Time Specification Scheme (IFTSS)

ORO.FTL.125

Ryanair has established, implemented and maintains this IFTSS, which is appropriate to its operation and complies with EU Regulations. This IFTSS is approved by the IAA and complies with EASA certification specifications. Ryanair currently has no deviations or derogations from EU regulations. Ryanair collects and analyses the data available in its IFTSS to continually review any effects on Fatigue. This process is described in greater depth in the SMM CH 12.

7.7 Ryanair Commercial Air Transport Operations (CAT): Applicability

The EASA Certification Specifications are applicable to Ryanair as a Commercial Air Transport Operator for scheduled and charter operations.

7.8 Home Base

ORO.FTL.200

Ryanair assigns each crew member a home base.

CS FTL.1.200

1. The home base is a single airport location assigned with a high degree of permanence.
2. In the case of a change of home base, the first recurrent extended recovery rest period prior to starting duty at the new home base is increased to 72 hours, including 3 local nights. Travelling time between the former home base and the new home base is positioning.
3. Ryanair maintains a record of each home base as assigned to each crew member.

Crew members are required to make arrangements for temporary accommodation closer to their home base if the travelling time from their residence to the reporting point in the home base usually exceeds 60 minutes. CS FTL.1.200.

High Degree of Permanence:

The reality of the Aviation Business dictates that bases open, close, expand and contract in response to commercial necessities. Moreover, the seasonality of our business may require varying the crewing levels in a Base for the duration of a particular season. All of the above must be managed within the confines of individual contractual agreements in place between Ryanair and its crew members.

Crew members may request a change of home base and Ryanair has no limit on the number of requests allowed during a crewmember's employment or service provision. Ryanair recognises that there are many reasons why a crew member would request a change of home base.

In the normal course base assignments are planned to be permanent until the crew member is assigned to another home base or the commercial/operational or contractual provisions alter this. In the normal course roster assignments are conducted in home Base, however Ryanair reserves the right to transfer or position a crew member to other locations for operational requirements.

Note: Home base: Travelling time

Crew members are required to make arrangements for temporary accommodation closer to their home base if the travelling time from their residence to the reporting point in the home base usually exceeds **60 minutes**. CS FTL.1.200

7.9 Flight Duty Period (FDP)

ORO.FTL.205

a. Flight Duty period:

ORO.FTL.205 (a)

1. Reporting Times.

Ryanair has established the following reporting times that have been demonstrated over many years to include sufficient time for ground duties, pre-flight preparation, commute to aircraft and pre-departure activities. ORO.FTL.110(c).

The following reporting times also take into account the scheduled nature of the operation, occasional charter operations, the size and type of aircraft and the reporting airport conditions. ORO.FTL.205.

Report Time	
Home Base operations	45 mins
Out of base operations	45 mins

Ryanair continuously reviews pre-flight tasks which must be completed by both flight and cabin crew, including any changes arising from regulatory change or change of company policy. All Bases are reviewed to ensure that from reporting at the reporting point in the crewroom briefings, provision of documentation, commute to aircraft parking and completion of on-board pre departure activities are achievable within specified report times. Crew members shall report recurring instances which may indicate that reporting time is insufficient. The NPFO reviews reporting times and may shorten or lengthen.

2. Commanders Discretion procedure: refer to [7.9\(f\)](#).

b. Basic Maximum Daily FDP

ORO.FTL.205(b)

- The maximum daily FDP (without the use of extensions) is in accordance with the following table for acclimatised crew members:

Table 2 Maximum daily FDP – Acclimatised crew members

Start of FDP at reference time	1–2 sectors	3 sectors	4 sectors	5 sectors	6 sectors	7 sectors	8 sectors	9 sectors	10 sectors
0600 – 1329	13:00	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00
1330 – 1359	12:45	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00
1400 – 1429	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00
1430 – 1459	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00
1500 – 1529	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00
1530 – 1559	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00	09:00
1600 – 1629	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00	09:00
1630 – 1659	11:15	10:45	10:15	09:45	09:15	09:00	09:00	09:00	09:00
1700 – 0459	11:00	10:30	10:00	09:30	09:00	09:00	09:00	09:00	09:00
0500 – 0514	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00	09:00
0515 – 0529	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00	09:00
0530 – 0544	12:30	12:00	11:30	11:00	10:30	10:00	09:30	09:00	09:00
0545 – 0559	12:45	12:15	11:45	11:15	10:45	10:15	09:45	09:15	09:00

Note: Flight Duty Period (FDP) Reference time:

The start time of the FDP in the table refers to the ‘reference time’. That means, to the local time of the point of departure, if this point of departure is within a 2-hour wide time zone band around the local time where a crew member is acclimatised. ORO.FTL.205.

2. The Ryanair commercial schedule would not normally result in a crew member being in an unknown state of acclimatisation. This can occur on delivery flights or ad hoc VIP charter flights and the table below addresses the max FDP when a crew member is in an unknown state of acclimatisation.

Table 3 Crew Members in an Unknown State of Acclimatisation

Maximum Daily FDP According to Sectors						
1–2	3	4	5	6	7	8
11:00	10:30	10:00	09:30	09:00	09:00	09:00

c. FDP with different reporting times for flight crew and cabin crew.

ORO.FTL.205 (c)

Ryanair flight and cabin crew have the same reporting times

d. Max daily FDP for acclimatised crew members with the use of extensions without in-flight rest ORO.FTL.205 (d)

1. The maximum daily FDP may be extended by up to 1 hour, not more than twice in any 7 consecutive days. In this case the minimum pre-flight and post-flight rest periods are increased by 2 hours or the post flight rest period is increased by 4 hours.
2. When extensions are used for consecutive FDPs the additional pre-and post-flight rest between the two extended FDPs required above shall be provided consecutively
3. The use of the extension is planned in advance and is limited to a maximum of:
 - i. Five (5) sectors when the WOCL is not encroached, or
 - ii. Four (4) sectors when the WOCL is encroached by 2 hours or less, or
 - iii. Two (2) sectors, when the WOCL is encroached by more than 2 hours.
4. Extension of the maximum basic daily FDP without in-flight rest cannot be combined with extensions due to split duty in the same duty period.

5. The limits for extensions of the maximum basic daily FDP in accordance with the certification specifications applicable in this chapter, taking into account the number of sectors flown and WOCL encroachment are as detailed in 7.10 (b): CS FTL.1.205(b)

Table 4

Starting time of FDP	1–2 sectors (in hours)	3 sectors (in hours)	4 sectors (in hours)	5 sectors (in hours)
0600 – 0614	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0615 – 0629	13:15	12:45	12:15	11:45
0630 – 0644	13:30	13:00	12:30	12:00
0645 – 0659	13:45	13:15	12:45	12:15
0700 – 1329	14:00	13:30	13:00	12:30
1330 – 1359	13:45	13:15	12:45	Not Allowed
1400 – 1429	13:30	13:00	12:30	Not Allowed
1430 – 1459	13:15	12:45	12:15	Not Allowed
1500 – 1529	13:00	12:30	12:00	Not Allowed
1530 – 1559	12:45	Not Allowed	Not Allowed	Not Allowed
1600 – 1629	12:30	Not Allowed	Not Allowed	Not Allowed
1630 – 1659	12:15	Not Allowed	Not Allowed	Not Allowed
1700 – 1729	12:00	Not Allowed	Not Allowed	Not Allowed
1730 – 1759	11:45	Not Allowed	Not Allowed	Not Allowed
1800 – 1829	11:30	Not Allowed	Not Allowed	Not Allowed
1830 – 1859	11:15	Not Allowed	Not Allowed	Not Allowed
1900 – 0359	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0400 – 0414	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0415 – 0429	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0430 – 0444	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0445 – 0459	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0500 – 0514	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0515 – 0529	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0530 – 0544	Not Allowed	Not Allowed	Not Allowed	Not Allowed
0545 – 0559	Not Allowed	Not Allowed	Not Allowed	Not Allowed

Rostered extensions do not require submission of an eCDR when such assignments are completed in the max FDP using planned extensions.

e. In-flight rest: N/A RYR

ORO.FTL.205(e)

f. **Unforeseen Circumstances in Flight Operations – Commander’s Discretion.**

ORO.FTL.205 (f)

It is Ryanair policy that the commander shall, in case of special circumstances which could lead to severe fatigue, and after consultation with the crew members concerned on their alertness levels, reduce the actual FDP and/or increase the rest period in order to eliminate any detrimental effect on flight safety.

1. **The Commander shall communicate his decision to Ryanair Operations enabling Operations to complete the alternative arrangements required.**
2. **The Commander shall file an ASR (Fatigue & ECDR) indicating the unforeseen circumstances leading to his decisions.**
3. **The Commander shall inform Ryanair Operations when the duty may be continued on the basis that the levels of alertness are acceptable to complete the duty, unless the affected crew member(s) are stood down.**
4. **Crew members affected shall have sufficient rest after this duty to assure acceptable levels of alertness to complete the remaining roster period and sufficient OFF days (RERRP) thereafter to increase alertness levels to as high as reasonably practicable prior to the next duty period.**
5. **Ryanair Operations shall make the necessary arrangements to change crew or if this is not practicable enable the levels of alertness to be increased to acceptable levels prior to any subsequent operations by the crew members affected and thereafter to achieve levels of alertness as high as reasonably practicable prior to the next rostered duty period.**

Commander’s discretion developed in the industry as a service to passengers to enable flights to be completed safely in unforeseen circumstances. The exercise or non-exercise of commander’s discretion is now a regulated procedure with rules determining how it may be used safely, including fatigue management, and to prevent any misuse.

Only the Commander shall make the decision to exercise Commander’s discretion. Ryanair accepts its shared responsibility in the safe exercise, or non-exercise, of commanders discretion with Flight crew and cabin crew. The exercise of Commander’s discretion is considered exceptional and shall be avoided at home base where stand-by or airport duty crewmembers are available.

Ryanair regularly reviews every series of pairings where Commander’s discretion has been exercised in order to be aware of possible inconsistencies in scheduling or rostering. Ryanair has developed and

implemented an eCDR application to host this function electronically. The reports generated from this application are made available internally including to the SAG Meeting, and to the IAA.

The primary safety objective for Ryanair and the Commander is that the exercise of Commander's discretion is safe, having considered the factors below and the potential to avoid further disruption to our passengers. Exercise of Commander's discretion only arises in unforeseen circumstances occurring after reporting, especially in the case of an extended FDP or reduced rest, and the Commander shall take due consideration of additional factors that might decrease a crew member's alertness levels, such as: AMC1 ORO.FTL.205(f)

- WOCL encroachment;
- weather conditions;
- complexity of the operation and/or airport environment;
- aeroplane malfunctions or specifications;
- flight with training or supervisory duties;
- increased number of sectors;
- circadian disruption; and
- individual conditions of affected crew members (time since awake, sleep-related factor, workload, etc).

Rules for Exercise of Commander's Discretion

1. The conditions to modify the limits on flight duty, duty and rest periods by the Commander in the case of unforeseen circumstances in flight operations which start at or after the reporting are as follows:
 - i. the maximum daily FDP which results after applying Table 2 of this chapter or Split Duty may not be increased by more than **2 hours**.
 - ii. if on the final sector within an FDP the allowed increase is exceeded because of unforeseen circumstances after take-off, the flight may continue to the planned destination or alternate aerodrome, and
 - iii. the rest period following the FDP may be reduced but can never be less than 10 hours.
2. In case of unforeseen circumstances which could lead to severe fatigue, the Commander shall reduce the actual FDP and/or increase the rest period in order to eliminate any detrimental effect on flight safety.

3. The Commander shall consult all crew members on their alertness levels before deciding the modifications in subparagraphs 1 and 2 above.

As part of his shared responsibility and prior to the use of Commander's Discretion the Commander as a minimum shall establish:

1. If any crew member has a report time that would cause the planned use of discretion to exceed any legal limits.
2. If any crew member on that day has operated more sectors than the Captain.
3. If any crew member reported for duty with reduced rest (i.e. less than 12 hrs since the end of their last duty).
4. If any crew members are working a sixth consecutive day.
5. If there are there any other safety concerns to be considered prior to the decision to depart.

If the answer to all of the above questions is NO the alertness levels of the crew would indicate that the flight would dispatch. If the answer to any of the questions is YES the Commander should reassess what reduction in alertness, if any, is attributable to the use of Commander's discretion and what alternative measures are available.

4. The Commander shall submit a Commander's Discretion Report in accordance with established Ryanair procedures when an FDP is increased or a rest period is reduced at his or her discretion.
5. Where the increase of an FDP or reduction of a rest period exceeds 1 hour, a copy of the Commander's report, with Ryanair comments added, will be sent by Ryanair to the IAA, not later than 28 days after the event.
6. It is Ryanair policy that the Commander's discretion process is non-punitive when exercised in accordance with this section of the Operations Manual and the provisions of 'Just Culture' as described in OMA CH 11 and SMM, apply.
7. When the commander has elected to use Commanders Discretion and it is expected to exceed 1 hr and 30 mins the commander must confirm the latest airborne time with OCC to achieve arrival at the parking position and both engines shut down at the destination within the maximum cd available. Crew control will confirm that the use of this CD will not cause any crew member to exceed FT/FDT/FTL.210 hard limits. If the aircraft has not commenced the take-off roll by the latest airborne time the flight shall not depart.

Note: Flight Duty Period (FDP) Commander's Discretion

ORO.FTL.205

The Max Daily FDP for a duty planned with extensions is indicated in Table 4

For a two pilot extended FDP operation, the use of commander's discretion is always based on the maximum daily FDP table ORO.FTL.205 (b) (1). (Table 2)

If Commanders discretion will be considered on a duty planned with extensions, the max discretion is 2 hours but added to the Max Daily FDP as calculated from Table 2 (not Table 4) for the same duty.

g. Unforeseen circumstances in flight operations – Delayed Reporting

ORO.FTL.205(g)

Delayed reporting is used to notify a crewmember that the report time is delayed thereby avoiding a crewmember leaving their accommodation unnecessarily early. The restrictions below limit a delayed report being extended more than twice.

The delayed reporting procedures in the event of unforeseen circumstances are as follows: CS FTL.1.205(d)

The maximum notification time for delayed reporting is Report - 90 mins,

The minimum notification time for delayed reporting is Report -60 mins.

- The methods of contacting crew include the crewmember primary personal phone data in Crewlink, and/or email to EFB or personal email. Regardless of the communication used the crew member must confirm acknowledgement of the delayed report with Crewing including when electronic communication is used.

Communicating with crew during a rest period is as follows:

Electronic communications

Notification can be sent at any time to a crew member:

- IDP*
- Email
- SMS

Note: *In situations of delayed reporting and in order to maximise the opportunity for further rest, crewmembers should check their IDP before leaving home or suitable accommodation when away from home base.

Phone communications

Ryanair protects an 8 hr sleep opportunity during rest periods by restricting phone contact to the first or last 90 minutes of a planned rest period. Ryanair can contact a crewmember within 90 mins of the end of previous Duty Period as the crewmember is assumed to be awake. Ryanair can contact a crewmember in the 90 mins prior to the report time of the next FDP as the crewmember is assumed to be awake.

Additionally, for crew operating night duties (any portion of the duty 02.00–04.59), it is not permitted to call a crewmember before 90 minutes before report time. This restriction does not prevent Crew Control using IDP communications as a method of advising roster change and assigning duties acknowledged through the IDP. (Ref OMA CH 7.1. The operating crew and operations control should plan a sleep opportunity as close as practicable to report time and Ryanair will not contact crewmembers during this time.)

All instances of delayed reporting procedures used are documented by Ryanair.

The FDP in the case of delayed reporting is calculated as follows:

CS FTL.1.205(d)

- i. one notification of delayed reporting results in the calculation of the MAX FDP according to (iii) or (iv) below
- ii. if Ryanair amends the required reporting time for a second time, the FDP starts **1 hour** after the second notification or at the first delayed reporting time, if this is earlier.
- iii. when the delay is less than **4 hours**, the MAX FDP is calculated based on the original reporting time and the FDP starts counting at the delayed reporting time
- iv. when the delay is **4 hours** or more, the MAX FDP is calculated according to the more limiting of the original or delayed reporting time, but the FDP starts at the delayed reporting time
- v. As an exception to (i) and (ii) above, if Ryanair informs crew members of a delay of **10 hours** or more in reporting time and Ryanair does not further disturb the crew member, such delay of 10 hrs or more counts as a rest period.

7.10 Night Duties and Extensions: Certification Specifications applicable to Flight Duty Period (FDP) CS FTL.1.205

a. Night Duties.

CS FTL.1.205(a), ORO.FTL.205(b) and (d)

Ryanair does not normally roster night duties other than standby commencing before 0500 local time.

Ad Hoc VIP charter operations may include night duties. Night duties under the provisions of Table 3 of this chapter comply with the following: ORO.FTL.205(b) & (d)

1. When establishing the maximum FDP for consecutive night duties, the number of sectors is limited to **4 sectors** per duty.
2. Ryanair applies appropriate fatigue risk management to actively manage the fatiguing effect of night duties of more than **10 hours** in relation to the surrounding duties and rest periods.

Night duties – appropriate Fatigue Management

To optimise alertness on night duties, both Ryanair and the operating aircrew are aware that sleep opportunities prior to reporting are desirable particularly after a period of wakefulness after a rest period. The operating crew and operations control should plan a sleep opportunity as close as practicable to report time and Ryanair will not contact crewmembers during this time. This helps the crew member to adapt to being awake during the night. This is one strategy whereby practices leading to extended wakefulness before reporting for duties are avoided.

b. Night Duties In-Flight Rest: N/A Ryanair CS FTL.1.205

c. Extension of FDP without In-flight rest. Refer to 7.9 (d) CS FTL.1.205(b)

d. Extension of FDP due in-flight rest N/A RYR CS FTL.1.205(c)

7.11 Flight Times & Duty Periods

ORO.FTL.210

- a. The total **duty periods** to which Ryanair assigns a crew member does not exceed:
 1. **60 duty hours** in any **7 consecutive days**;
 2. **110 duty hours** in any **14 consecutive days**; and
 3. **190 duty hours** in any **28 consecutive days**, spread as evenly as practicable throughout that period.
- b. The total **flight time** of the sectors on which an individual crew member is assigned as an operating crew member does not exceed:
 1. **100 hours** of flight time in any **28 consecutive days**;

2. **900 hours** of flight time in **any calendar year**; and
 3. **1,000 hours** of flight time in any **12 consecutive calendar months**.
- c. Post-flight duty counts as duty period, but not as FDP.

The allocated period for post-flight duties is **30 minutes**. AMC1 ORO.FTL.210(c)

Ryanair has assigned 30 mins post flight duty time which has proven resilient considering our aircraft size, commuting to crewrooms (where applicable), airport conditions (eg Shengen) and electronic completion of Electronic Flight Log/Paper Voyage Report/Journey Log data.

When any crew member has post –flight duties in excess of 30 mins the end of duty time shall be communicated to crew control and this time is entered in the Crew Management system and is used to calculate the subsequent rest period. The reason for the delay is noted on the Electronic Flight Log/Paper Voyage Report/Journey Log e.g. ‘awaiting SCP lift-off causing delay’.

7.12 Positioning

ORO.FTL.215

“Positioning”

Positioning means the transferring of a non-operating crew member from one place to another, at the behest of Ryanair, excluding:

- the time of travel from a private place of rest to the designated reporting place at home base and vice versa; and
- the time for local transfer from a place of rest to the commencement of duty and vice versa.

Each crewmember must know when to start the FDP/DP calculation. Each crewmember should always know the current MAX FDP (OMA CH 07 Table 3), including as circumstances change eg extra sector. Each crewmember should also calculate the length of the associated rest period when the current duty is completed. Unless the entire crew positions together there will be different start times for FDP/DP. The Commander must verify the start time of the FDP/DP for each crewmember to assure correct recording of FDP/DP, calculation of max FDP and subsequent rest periods. The Commander is responsible for actual times in EFL.

When positioning of crew is planned in the roster period it shall be indicated on the roster. If positioning is required in the crewing period the Crew Management System record will be amended accordingly. Positioning may be by any modes of transportation, including own transport.

The time required to commute from home base residence to home base is not DP, and the time to commute post DP from home base to home base residence is not DP.

7.12.1 Positioning Table

Rostering/Crew Control will assign ‘Ground Transport’ (GT) in Crew Management System in compliance with the positioning table below. The reporting time starts as indicated in the Reporting Time Outbound column in the table depending on the mode of transport (including flights) and is either duty time (positioning followed by rest period) or flight duty time (positioning followed by sector(s). Positioning is not a sector. The Reporting Time Return column indicates the time the duty ends.

Mode of Transport	Reporting point	Reporting Time Outbound: Rostered/Notified	End Time of Duty Period
RYR Group Airline	Departure Gate	STD – 20	STA + 20 or actual time at terminal exit
Other airline	Terminal Entrance	STD – 1 hr	STA + 20 or actual time at terminal exit
Taxi	Pick up point	Rostered Pick up time	Drop off time as rostered or actual time if later
Own Car	Home	Rostered time of commencement of GT	Rostered or actual time (if later) of completion of GT
Car Rental	Car rental desk	Rostered time of commencement of GT	Rostered or actual time (if later) of completion of GT



The crewmember must communicate the time of the end of the FDP/DP with Operations Control/Crew Control to ensure correct DT/FDT records and rest period calculations unless these changes are already recorded in the duty plan (EFB).

7.12.2 ‘Long Haul’ Positioning:

When positioning on flights outside the Ryanair Area of Operations (e.g. to Seattle) the reporting time is STD-60 or the time notified to Crew Control by the crewmember concerned. The DP starts at STD-60 or the time notified to Crew Control by the crewmember concerned and finishes at STA+30 minutes or

ATA+30 if later. This accounts for longer time at the departure gate (larger aircraft) and customs/immigration clearance before/after arrival at your destination.

7.12.3 Calculation of Rest Period

When a duty is longer than planned, the actual end time of the duty period and the end time of the rest period should be communicated and agreed with Crew Control, unless these are already recorded on the duty plan on the EFB.

7.12.4 Travelling other than as planned by Ryanair

All positioning is planned in accordance with the IFTSS requirements. Crewmembers are expected to travel on the positioning flights or other modes of transport as planned by Ryanair. Where a crewmember, in his/her OFF time, chooses to travel by any means of transportation to or from their operating location (RYP flight, other airline, train, boat etc.) this activity is not recorded or tracked in *Crew Management System*.

Crewmembers are required to report for duty fit to fly and on time.

7.13 Split Duty

ORO.FTL.220, CS FTL.1.220

A Split duty is a regulated process to extend the basic MAX FDP due to a break on the ground. The period spent on the ground is Flight Duty period (FDP). Split duty cannot follow reduced rest. Additionally, any increase of limits on flight duty using split duty complies with the following.

- a. The break on the ground has a minimum duration of **3 consecutive hours**
- b. The break **excludes** the time allowed for post and pre-flight duties and travelling.
- c. The maximum FDP specified in Table 2 of this chapter may be increased by up to **50%** of the break.
- d. Suitable accommodation is provided either for a break of **6 hours** or more or for a break that encroaches the **WOCL**
- e. In all other cases
 1. accommodation is provided
 2. any time of the actual break exceeding 6 hours or any time of the break that encroaches the WOCL does not count for the extension of the FDP

f. **Split Duty: Post, Pre-Flight Duty and travelling times** CS FTL.1.220

The commander will agree the time of the start of the break on the ground with Operations. This will be 30 mins after on blocks or as notified by the Captain.

After the break on the ground, 45 minutes report time is allocated after reporting at the designated reporting point to enable completion of the standard pre-flight preparations. The commander will agree the ‘on duty’ time after the break on the ground with Operations.

The minimum travelling time to the location of the break on the ground is 10 minutes. The minimum travelling time after the break on the ground is 15 minutes. When actual travelling times are greater, the actual times will be used as the DP/FDP record. These times are influenced by size of airport including security procedures, weather conditions, time of day, etc. The actual times must be communicated to Operations by the Commander to enable correct calculation of the max FDP.

7.14 **Airport Standby and Airport Duty, Home Standby:**

ORO.FTL.225, 235, 205(b), 205(d), CS FTL.1.225

Airport Standby	Airport Duty*	Home Standby
Rostered, with start and end times defined, 14 days in advance.	Rostered, with start and end times defined, 14 days in advance.	Rostered, with start and end times defined, 14 days in advance.
Duty period commences at time of reporting at the reporting point.	Duty period commences at time of reporting at the reporting point.	Home standby commences at rostered start time.
Counts in full as duty period if no FDP assigned.	Counts in full as duty period if no FDP assigned.	25% of time on home standby counts as duty time if no FDP assigned.
Max DP is 12 hours if no FDP assigned.	Max DP is 12 hours if no FDP assigned.	Max duration of home standby is 16 hours.
If a FDP is assigned during airport standby the FDP starts at the start of the assigned FDP minus the time on standby in excess of 4 hours.	If a FDP is assigned during airport duty the FDP starts at the time of reporting at the reporting point.	Home standby ceases when the crew member reports at the reporting point.
The maximum combined duration of airport standby and FDP is 16 hours.	The max combined airport duty and FDP assigned is the max FDP calculated from Table 2 starting at the time of reporting at the reporting point.	If home standby ceases within the first 6 hours the Max FDP counts from reporting. (1)

Airport Standby	Airport Duty*	Home Standby
N/A		If home standby ceases after the first 6 hours the Max FDP is reduced by the amount of home standby time exceeding 6 hours. (2)
		If the FDP is extended due to Split-Duty the 6 hours above is extended to 8 hours. (3)
		If the home standby starts between 2300 and 0700 the time between 2300 and 0700 does NOT count towards the reduction of the (1), (2) and (3) FDP calculations above until the crew member is contacted by Ryanair.
If no FDP is assigned, minimum rest of 12 hours in home base applies after airport standby ceases.	If no FDP is assigned, minimum rest of 12 hours in home base applies after airport duty ceases.	If no FDP is assigned, minimum rest of 12 hours in home base applies after home standby ceases. If away from home base and in suitable accommodation minimum rest of 10 hours applies after home standby ceases.
If a FDP is assigned, the rest period required is the greater of the previous duty period or 12 hours in home base or the greater of the previous duty period or 10 hours away from home base.	If a FDP is assigned, the rest period required is the greater of the previous duty period or 12 hours in home base or the greater of the previous duty period or 10 hours away from home base.	N/A
If airport standby initially assigned is reduced by Ryanair during a standby that does not lead to a FDP being assigned minimum rest in home base of 12 hours applies.	If airport duty initially assigned is reduced by Ryanair during an airport duty that does not lead to a FDP being assigned minimum rest in home base of 12 hours applies.	If Home standby initially assigned is reduced by Ryanair during a standby that does not lead to a FDP being assigned minimum rest in home base of 12 hours applies.
N/A		If minimum rest in home base (or away from base if this is the case) is provided before reporting for the duty assigned during the standby, this time period does not count as standby.

Airport Standby	Airport Duty*	Home Standby
N/A		If a crew member receives an assignment during home standby the actual reporting time at the designated reporting point is used for the purpose of rest periods.
		It is a Crew control procedure that notification of assigned duties during home standby avoids interference with sleep patterns of home standby crew where possible.
Confirm no awake time of more than 18 hours.	Confirm no awake time of more than 18 hours.	Confirm the combination of home standby and FDP does not lead to more than 18 hours awake time***.
Accommodation provided.	No accommodation provided.	Own accommodation provided.
N/A		Report at reporting point within 60 mins of notification.

Note: *Airport Duty means a duty carried out at the airport where a crew member is carrying out tasks for Ryanair during the airport duty, and is available for a flight duty assignment.

*** 18 hours awake time: the following assumptions apply.

Start time of SBY	Mandatory end time of combined SBY/FDP
2300–0700 Local	18 Hours from 0700 <u>OR</u> Time of callout + 18 hrs if earlier
0700–2000 Local	18 Hours from 1000 <u>OR</u> Time of callout + 18 hrs if earlier
Night SBY (2000–0600)	18 Hours from 1900

The Max FDP may be impacted by the time spent on airport standby depending on at least the following: ORO.FTL.225 (f)

- rest facilities provided,
- need for immediate readiness,
- interference of airport standby with sleep,

- sufficient notification to protect a sleep opportunity between the call for duty and the assigned FDP.

If any of the above applies the crew member shall notify the commander and crew control. The max FDP may be reduced and/or a subsequent rest period may be increased by the Commander (discretion) or crew control to achieve a satisfactory level of fatigue for the assigned FDP or subsequent duty assignments.

Crew members may be rostered for either standby at the airport (**airport standby**) or other duties at the airport (**airport duty**) or standby at home or in suitable accommodation (**Home Standby**) and the procedures indicated in the table above apply. The term ‘minimum rest’ or ‘min rest’ as used in the table includes all the provisions of 7.16, ‘Rest periods’. DP is duty period. FDP is flight duty period. During periods of disruption crew members may be assigned any of the standby duties in this section by Ryanair with sufficient notification to provide an opportunity to plan adequate rest. Crew members are considered to be on standby from the rostered start time to end time unless a FDP is assigned or Ryanair removes the crew member from standby.

Following a FDP If the subsequent duty period is home SBY the crewmember is contactable, including by phone, at the start of standby. If, as the result of a later than planned finish the revised Rest Period extends past the start time of the next rostered home SBY, the time at the end of the Rest Period becomes the start time of the home SBY. It is not necessary for the crew member to contact crew control to notify the new stby start time.

7.14.1 “Special Duty” (SD)

Special Duty means a period of duty other than a flying or Standby duty.

The lisline duty time entry 7 hours for each completed SD day.

The duty hours entered in lisline shall consist of the start time to the finish time.

7.15 Reserve

ORO.FTL.230, CS FTL.1.230

A crew member can be rostered for reserve duties, which means that the crew member is available to receive an assignment for a duty which could be a Flight Duty, Positioning or other Duty. Any such assignment is notified at least 10 hours in advance.

When Ryanair assigns crew members to reserve, the following requirements apply:

- Reserve assignments are rostered

- The maximum period of a rostered reserve duty is 16 hours to protect an 8-hour sleep opportunity, for each reserve day during which a crew member on reserve is not contacted by Ryanair. CS FTL.1.230(d)
- Not more than 7 consecutive reserve days may be assigned to a crew member in compliance with recurrent extended rest periods requirement. CS FTL.1.230(c)
- An assigned FDP counts from the reporting time.
- Reserve times do not count as duty period for the purpose of 7.11 ‘Flight time and duty periods’ and 7.16 ‘Rest periods’.

Additional requirements applicable to Reserve:

ORO.FTL.230, CS FTL.1.230

A reserve period that does not result in a duty period may not **retrospectively** be considered as part of a recurrent extended recovery rest period. The procedures for the notification of assigned duties during reserve avoid interference with **sleeping patterns** if possible. The 10 hour notification of an assignment for any duty and reporting for that duty during reserve may include the 8 hour sleep opportunity during which a crew member on reserve is not contacted by Ryanair. Recurrent extended recovery rest period (7.16) applies to a crew member on reserve, ie there must be a recurrent extended recovery rest period after a maximum of 168 hrs (7 days).

7.16

Rest Periods

ORO.FTL.235

a. Minimum Rest Period at HOME Base

1. The minimum rest period provided before undertaking an FDP starting at home base is at least as long as the preceding duty period, or 12 hours, whichever is greater.
2. If Ryanair provides hotel accommodation to a crew member in home base this 12 hour period may be reduced to 10 hrs. This arrangement might arise during widespread inclement weather for example. Ryanair may apply the minimum rest period away from home base during a rotation which includes a rest period at a crew member’s home base. This applies only if the crew member does not rest at his/her residence, or temporary accommodation, because Ryanair provides suitable accommodation. This type of roster is known as “back-to-back operation”.
3. Ryanair policy is not to disturb crewmembers during a rest period. However, circumstances may arise whereby it is necessary to call crewmembers during a rest period such as a security event, or a

health and safety event etc where there may be a risk to personnel or Company assets, e.g. a volcanic event whereby we may need to evacuate personnel and relocate assets.

Additionally as a last resort, and without prejudice to an 8 hour sleep opportunity, when a crewmember within 90 mins of report time has not responded to a duty change notified electronically, Ryanair may call crewmembers within 90 mins of a report time when a crewmember is considered to be awake preparing to report. A crew member is not obliged to answer their phone in this case, or even to have their phone available during a rest period.

b. Minimum rest period away from HOME base

The minimum rest period provided before undertaking an FDP starting away from home base is at least as long as the preceding duty period, or 10 hours, whichever is greater. This period includes an 8-hour sleep opportunity in addition to the time for travelling and physiological needs.

The time allowed for physiological needs is 1 hour. Consequently, if the travelling time to the suitable accommodation is more than 30 minutes, Ryanair will increase the rest period by twice the amount of difference of travelling time above 30 minutes. AMC1 ORO.FTL.235(b)

c. Reduced Rest Derogation (N/A RYR, no FRMS) CS FTL.1.235

d. Extended recovery rest periods

Recurrent extended recovery rest periods (RERRP) compensate for cumulative fatigue. The minimum recurrent extended recovery rest period is **36 hours**, including **2 local nights** and the time between the end of one recurrent extended recovery rest period and the start of the next extended recovery rest period is not be more than **168 hours**. The recurrent extended recovery rest period is increased to **2 local days** twice every month.

If a crewmember has 4 or more early starts/late finishes or night duties as determined by Early Disruptive Schedule, the RERRP is extended to 60 consecutive hours

e. Additional rest periods.

Additional rest periods are provided in 7.16.1. to compensate for:

- the effects of time zone differences and extensions of the FDP;
- additional cumulative fatigue due to disruptive schedules; and
- a change of home base.

7.16.1 Early Disruptive Schedule and Time Zone Difference CS FTL.1.235

a. Early Disruptive schedules

1. If a transition from a **late finish to an early start** is planned at home base, the rest period between the 2 FDPs includes 1 local night.

2. If a crew member performs **4 or more** night duties, early starts or late finishes between 2 extended recovery rest periods as defined in ORO.FTL.235(d) the second extended recovery rest period is extended to **60 hours**.

b. ‘Rotation’ and Time zone differences crossing 4 or more time zones

Current Ryanair scheduling does not have flights across 4 or more time zones. This scenario may arise on ad hoc VIP charters. The text below remains in this section to assist with planning rotations including ad hoc VIP charters.

Ryanair will monitor rotations and combinations of rotations in terms of their effect on crew member fatigue and make changes to crewing arrangements reflecting fatigue management principles.

The current Ryanair schedule does not have any pairings which cross 4 time zones in any direction. The time zone differences section below is included to enable the rest calculations when applicable to ad hoc VIP charter operations which may be planned and which could cross 4 time zones. Time zone differences are compensated by additional rest, as follows:

1. **At home base**, if a rotation involves a 4 hour time difference or more, the minimum rest is as specified in the following table. (This is rest after completion of a rotation).

Minimum Local Nights of Rest at Home Base to Compensate for Time Zone Differences

Maximum Time Difference (h) between reference time and local time where a crew member rests during a rotation	Time elapsed (h) since reporting for the first FDP in a rotation involving at least 4-hour time difference to the reference time			
	< 48	48 – 71:59	72 – 95:59	≥ 96
≤ 6	2	2	3	3
> 6 and ≤ 9	2	3	3	4
> 9 and ≤ 12	2	3	4	5

2. **Away from home base**, if an FDP involves a 4-hour time difference or more, the minimum rest following that FDP is at least as long as the preceding duty period, or 14 hours, whichever is greater.
3. In case of an Eastward-Westward or Westward-Eastward transition, at least 3 local nights of rest at home base are provided between alternating rotations.

4. The monitoring of combinations of rotations is conducted under the Ryanair SMS and an SRA is required prior to dispatch on any ad hoc VIP charter flight which crosses 4 time zones east or west. The SRA will inform Crew Control, Operations and operating crews of fatigue management principles and the significant differences in these operations.

7.16.2 Additional Provisions for Rest Periods

Rest Periods: Time elapsed since reporting CS FTL.1.235(b)(3)

The time elapsed since reporting for a rotation involving at least a 4-hour time difference to the reference time stops counting when the crew member returns to his/her home base for a rest period during which Ryanair is no longer responsible for the accommodation of the crew member.

Rest Periods – Rest Days S.I. No 507 of 2006

Mobile staff in civil aviation shall be given days free of all duty and standby, which are notified in advance, consisting of at least 96 local days in each calendar year, which may include any rest periods required by law, and at least 7 local days in each calendar month, which may include rest periods required by law.

7.16.3 WOFF out of Home Base

A crewmember may volunteer to operate a working day off (WOFF). Crew Management System legality check will establish if this WOFF is compliant with disruptive schedule and extended recovery rest requirements prior to assigning this WOFF. If the WOFF is operated at a location other than Home Base and no positioning occurs, positioning will not be indicated on the duty plan.

Example:

The crewmember Home Base is DUB and the crewmember is in Rome and volunteers to operate a WOFF from Rome. No positioning occurred and the WOFF happens in Rome. The Crew Management shall retain a file note of the circumstances for subsequent internal or external audit. (EASA FTL meeting 17 Jan 2018)

7.17 Nutrition

ORO.FTL.240, AMC1 ORO.FTL.240

Crew members are expected to report for duty well rested and nourished. Typically the first meal break will occur after 225 minutes of FDP as in the normal course people work 3 to 4 hours before a meal break.

Subsequent requested meal breaks are coordinated by the SCCM (in the cabin) and the commander (in the flight deck). These meal breaks should occur during normal meal times (Table 4) for the crew member and ideally be of 20 minutes duration to minimise the possibility of fatigue arising from nutritional needs of

individual crew members. Meal breaks should ideally take place on the ground for all crew but not in the case of cabin crew when passengers are embarking or disembarking. When taken during flight, meal breaks must not occur during critical phases of flight or during the first on board service in the case of cabin crew.

It is Ryanair policy to facilitate crew with meal break(s) during the FDP. In the normal course meal breaks will be taken after 225 minutes of FDP and during the next normal meal times (base local times) as set out in the table below. Meal breaks are an important element in fatigue management strategies for crew members. Exceptionally (e.g. high density, short sectors less than 60 minutes) a meal break may be less than 20 minutes but won't be planned for less than 10 minutes duration. Typically there will be 20 minutes of meal break in the first 6 hours of FDP. To maintain hydration during FDP, crew members are encouraged to take regular breaks to consume liquids.

Cabin Crew:

Cabin crew requiring a meal break should request it from the CSS who will co-ordinate meal breaks at the earliest opportunity while ensuring that there are sufficient crew available to discharge their duties. Meal breaks will be planned in accordance with the following guidelines.

- Not normally within the first 225 mins of FDP (as when reporting for duty cabin crew should, in accordance with their own fatigue management strategy, be well rested and nourished for the first 225 minutes of FDP).
- Meal breaks taken on the ground are not permitted during embarkation/disembarkation.
- Meal breaks inflight cannot be taken during the critical phases of flight (meaning the take-off run, the take-off flight path, the final approach, the missed approach, the landing, including the landing roll, and any other phases of flight as determined by the commander) or during the first service.
- A meal break duration may be dependent on sector duration and will be planned for a minimum of 10 minutes and will be no longer than 20 minutes.
- A meal break taken in the cruise or on the ground should be at a time when the cabin crew member is less likely to be interrupted by the needs of customers.
- Once a crew member has completed their 20 minutes meal break, they should not in the normal course require another break until at least 225 minutes later.

Cabin crew should ensure they take liquids regularly throughout their FDP to guard against dehydration.

Flight Crew:

A flight crew member taking a meal break shall coordinate with the remaining crew member(s), including TEM principles. In particular VHF communications, PLOC prevention and DALTA brief must be accomplished as appropriate, and both crew members must be aware of and actively manage the increased threats during this process.

Short sectors have lower cruising levels reducing the time to climb and descend and usually resulting in a 20 minutes cruise segment on these sectors and meal breaks as required should be taken during this time.

Meal breaks inflight cannot be taken during the critical phases of flight meaning the take-off run, the take-off flight path, the final approach, the missed approach, the landing, including the landing roll, and any other phases of flight as determined by the commander;

Flight crew should ensure they take liquids regularly throughout their FDP to guard against dehydration.

Table 4

Meal Opportunity	Home Base Local Time
Breakfast	0700 – 1000
Lunch	1200 – 1500
Dinner	1800 – 2100

7.18 Records of Home Base, Flight Times, Duty & Rest Periods
ORO.FTL.245

- a. For a period of 24 months Ryanair maintains
 1. individual records for each crew member including:
 - i. flight times;
 - ii. start, duration and end of each duty period and FDP;
 - iii. rest periods and days free of all duties; and
 - iv. assigned home base;
 2. reports on extended flight duty periods.
- b. Upon request, Ryanair will provide copies of individual records of flight times, duty periods and rest periods to:
 1. the crew member concerned; and

2. to another operator, in relation to a crew member who is or becomes a crew member of the operator concerned.
- c. Records for crew members who undertake duties for more than one operator will
 1. be provided to both operators to enable compliant rostering, and
 2. be kept for a period of 24 months.

7.18.1 Notification of Intention to Operate Outside the Ryanair FTL Scheme

Crew members are not permitted to engage in flying activities for hire or reward outside the Ryanair operation without written permission of the NPFO.

Any pilot intending to engage in recreational flying activities outside the Ryanair FTL Scheme must notify the NPFO using the form below.

Notification Form

Attention Nominated Person Flight Operations

Notification of intention to Operate Outside the IFTSS

I, _____ / of _____ Base, fly light aircraft for recreational purposes.

I am aware of the IFTSS restrictions and I undertake to abide by the duty and rest time restrictions detailed in [OM\(A\) Chapter 7](#).

My external flying activities will not impact on my ability to legally perform my RYR rostered duties.

I will maintain a record of my external flying activities for inclusion in my personal flight records.

The completed form shall be returned to your base captain who will forward it to the NPFO office for approval.

Note: Permission is granted only when the form is countersigned by the NPFO and returned to the pilot.

7.19 Fatigue Management Training

ORO.FTL.250

Ryanair provides initial and recurrent fatigue management training to crew members, personnel responsible for preparation and maintenance of crew rosters and management personnel concerned.

This training is in compliance with the Ryanair training programme as detailed in OM D. This training syllabus covers the possible causes and effects of fatigue and fatigue countermeasures, including:

- a. applicable regulatory requirements for flight, duty and rest;
- b. basics of fatigue including sleep fundamentals and the effects of disturbing the circadian rhythms;
- c. causes of fatigue, including medical conditions that may lead to fatigue;
- d. effect of fatigue on performance;
- e. fatigue countermeasures;
- f. influence of lifestyle, including nutrition, exercise, and family life, on fatigue;
- g. familiarity with sleep disorders and their possible treatments;
- h. where applicable, the effects of long range operations and heavy short range schedules on individuals;
- i. effect of operating through and within multiple time zones; and
- j. crew member responsibility for ensuring adequate rest and fitness for flight duty

Ryanair will host information modules on e-platforms including FRTV to include Sleep Science, Circadian Rhythms, Workload and guidance to crewmembers on sleep strategies before, during and after duty.

7.20 Training Assignments

Ryanair rosters training assignments. When training assignments are not in home base Ryanair plans positioning to/from such assignments including flights and Ground Transport (GT).

There is no regulatory requirement for minimum rest out of home base, or minimum rest in home base prior to a non-flight duty (training assignments/office duties etc). The fatigue management principles applied to training rostering include planning assignments such that

- Where the positioning logistics permit, at least a 12 hr rest period prior to the training assignment is planned in home base and at least 10 hours out of home base.
- A crewmember is planned to achieve at least an 8 hours sleep opportunity in suitable accommodation prior to a training assignment or positioning followed by a training assignment without an intervening rest period.
- Rostering will assess the training assignment, including positioning to/from the training location to ensure there is not more than 18 hours awake.

If the rostered positioning is disrupted and the guidelines above are not achieved the instructor/examiner shall decide whether or not to continue with the training assignment. If the decision is to continue it will be based on the confirmation by the crewmember that the reduced rest should not impact on the training objectives. If the decision is not to continue the crew member shall contact crew control at the earliest opportunity to enable alternative arrangements.

Instructors are expected to be properly rested prior to delivering instruction on any training assignment.