

Hazard	Risk	Potential cause	Reason	Mitigation
Lack of fuel	Flight diversion, crash	Longer ground distance	ATC rerouting, weather avoiding, longer SID/STAR	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics, weather check before flight&Fuel coach city pair statistics=> commander discretionary fuel. SID/STAR Planning: Planned rip fuel for takeoff and climb from aerodrome expected departure RWY elevation to initial cruising level/altitude, taking into account the longest expected departure routing Planned trip fuel from top of descent to the point where the approach is initiated, taking into account the longest arrival routing (STAR) for expected RWY most likely to be assigned for landing; Provided it is not possible to determine the expected RWY and/or SID and/or STAR the longest SID and/or STAR is selected for fuel planning. Fuel for anticipated delay shall be included in the Extra Fuel.
		Stronger headwind/ weaker tailwind	Inacurate forecast, different FL	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics, Fuel coach city pair statistics=> commander discretionary fuel
		Temperature difference	Higher temperature: aircraft not able to climb to planned FL, higher fuel consumption	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics
			Lower temperature: Fuel may reach freezing temperature -> Crew is forced to fly at higher speed/ lower FL	weather check before flight => operating procedures for fuel freezing&commander discretionary fuel, contingency fuel
		Faster cruise speed than planned	Operational reasons (Airport ops hours, Slot allocation, delay minimalization, traffic)	Commander right to refuse it if actual FOB is not sufficient, contingency fuel, flight schedule optimization based on crew reporting, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics
		Climb restrictons	ATC restrictions, performance restrictions, weather avoiding	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair statistics, weather check before flight@Fuel coach city pair statistics=> commander discretionary fuel
		Different cruise altitude /FL	ATC restrictions, performance restrictions, weather avoiding	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics, Fuel coach city pair statistics=> commander discretionary fuel
		Decsent restrictions	ATC restrictions, weather avoiding	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics, weather check before flight&Fuel coach city pair statistics=> commander discretionary fuel
		Holding	ATC restrictions, traffic, RWY condition	Contingency fuel, Fuel Consumption monitoring programme - extra fuel based on city pair and destination statistics, weather/traffic/RWY check before flight&Fuel coach city pair statistics=> commander discretionary fuel
		GW error	PAX show/no show, inaccurate PAX weight. More baggage or cargo than planned.	OPF calculation based on statistical weight, fuel correction guide per 1t of weight in OPF for ZFW deviation upto 2t which is considered as reasonable value plus operating procedures stating that crew shall adjust minimum FOB based on that guide considering the actual ZFW. The OPF shall be re-calculated for ZFW deviation above 2t based on operating procedures. The recalculation of OPF is recommended if TOW deviates of more than 2t. Procedures for specific passangers.
		Planned and actual fuel difference	More fuel than planned: CMD DISCR, excess of fuel from previous flight	no mitigation necessary
			Less fuel than planned: Crew or ground staff error	Procedures for crew and ground staff => fuel gauge check after fuel uplift, additional fuel uplift if necessary prior to flight, in-flight fuel checks
		Aircraft performance degradation	Higher fuel consumption because of aircraft fuselage higher drag or engine(s) parameter degradation	Periodic PF evaluation (APM), aircraft based monthly statistics
		MEL/CDL items	Higher consumption due to restrictions caused by MEL/CDL	MEL/CDL operations procedure requiring more planned fuel according to Boeing recommended values, plus MEL/CDL implementation into Skybreath; running statistics of MEL/CDL items that affect consumption with subsequent evaluation of the real burn and including the amount in the Extra Fuel
Diversion	Longer ground distance due to diversion (enroute/alternate)	Alternate fuel		
Technical problem	Fuel leakage, engine failure, failure on LDG or flaps	In-flight fuel management policy, emergency declaration procedures, QRH non-normal checklists and procedures, diversion		
Excess of Fuel	Overweight landing	Inaccurate/Overconservative Planning	Early return to departure destination	Accepted - Overweight Landing
			Uncorrect/Excess of tankering fuel	Periodic PF evaluation (APM), aircraft based monthly statistics for accurate Fuel Consumption calculation. Planning extra margins to perfomance limits on Destination aerodromes.