

# PRIMARY PROJECTS RISKS UPDATES

November 2015

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# INTRODUCTION

This document is introducing the recorded risks related to the Midfield Terminal Project.

If you are a risk owner, you are strongly encouraged to login to our intranet page and ensure your risk is accurately updated on a regular basis (see details on the next page).

The regular tracking of these risks ensures that everything is done to limit delays and extra costs related to this project as much as possible. It is every risk owner's responsibility to ensure that every risk logged in there reflects the reality at any point of time.

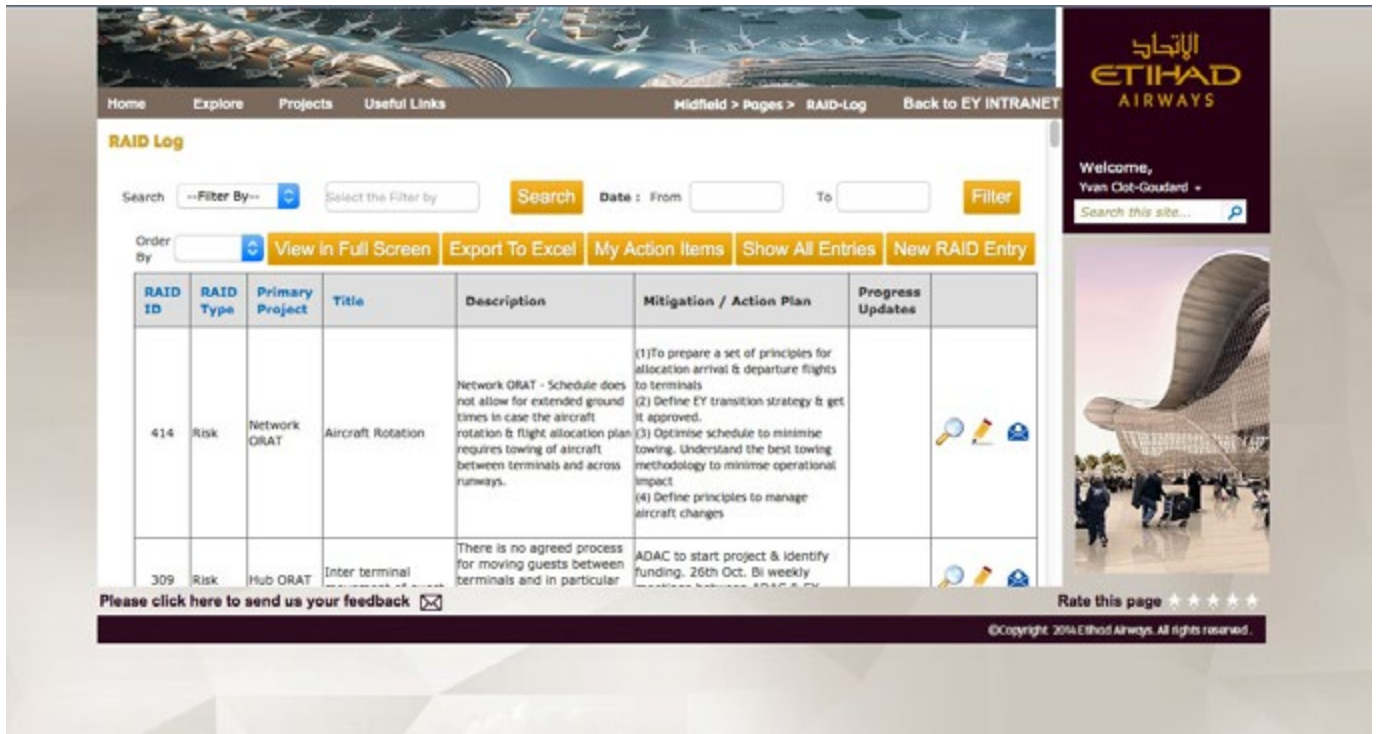
Let's all work together to make sure that best-in-class risk management practices are in place at all times in order to deliver a remarkable experience to our guest traveling via the Midfield Terminal of Abu Dhabi International Airport.

**Jörg Oppermann**  
Vice President Midfield Program



# KEY

The latest updates of the risks presented hereafter can be consulted on our Intranet page: <https://midfield.eyintranet.etihad.ae/Pages/RAID-Log.aspx>

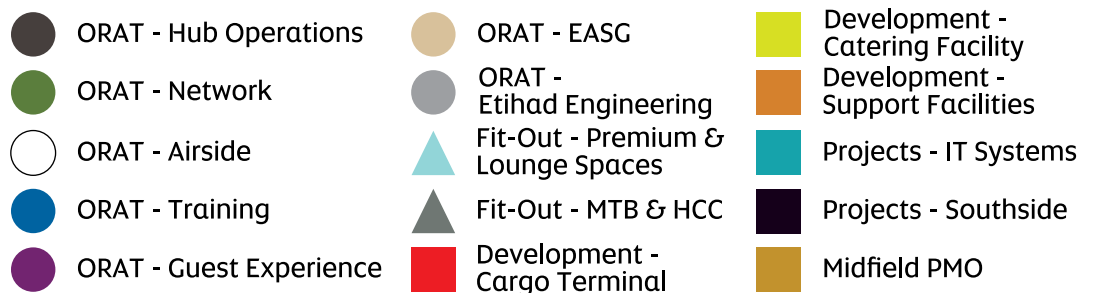


In order to get a full understanding of the risks presented on the following pages, please take a look at the legend below and the explanations on the next page.

## Risk Exposure



## Primary Project Colour Coding

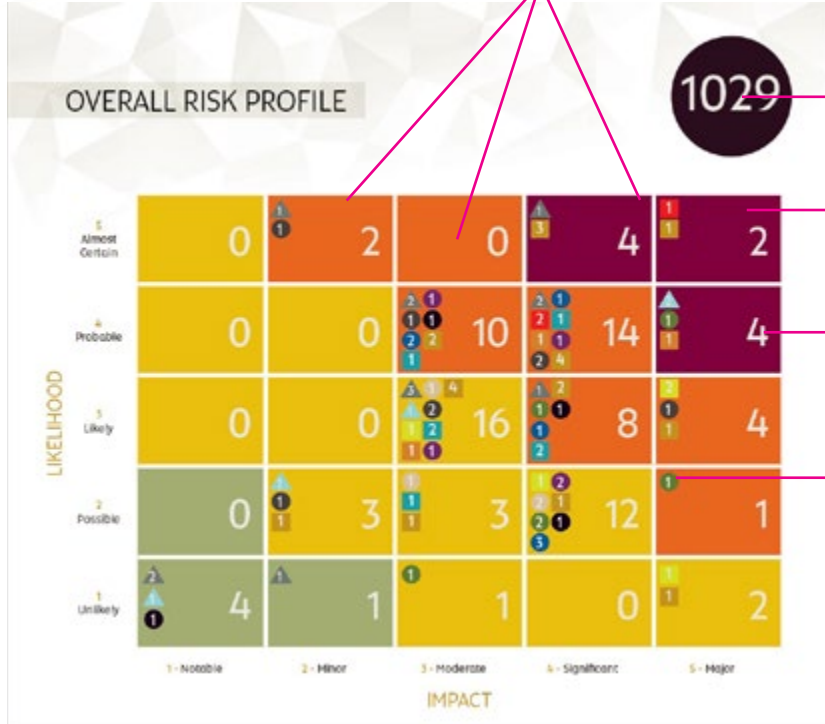


## Trending



RISKS matrix explained.

**For the overall RISK page**



Each matrix cell represent a specific score calculated:  $IMPACT \times LIKELIHOOD$

Overall RISKS score

Matrix cell colour: RISK exposure

Matrix cell number: number of RISKS in the category

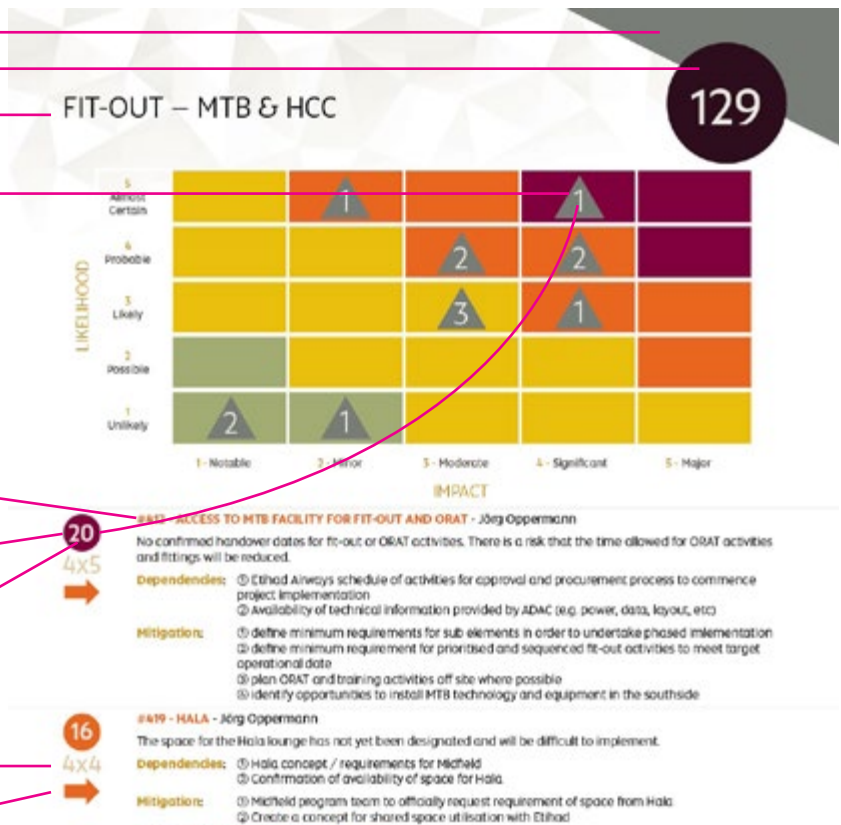
Coloured dots: coding for each primary project, the number in each dot representing the number of RISK for that primary project in that category

**For individual RISKS**

Colour coding of the primary project

Total score of the primary project

Name of the primary project



Coloured dots: coding for each primary project, the number in each dot representing the number of RISK for that primary project in that category

RISK number and title (from the RAID log)

Colour of the dot: refers to RISK exposure

Number in the dot: Score for this specific RISK, calculated:  $IMPACT \times LIKELIHOOD$

IMPACT x LIKELIHOOD

Arrow: trending of the RISK

# OVERALL RISK PROFILE

855



## QUARTERLY EVOLUTION

	Aug 15	Nov 15
# of Risks	91	81
Total Exposure	1029	855

## EXTREME RISKS

- Schedule does not allow for extended ground times in case the aircraft rotation and flight allocation plan requires towing of aircraft between terminals and across runways.
- Flight allocation (inbound and outbound) for multi-terminal operations not decided.
- ▲ No confirmed handover dates for fit-out or ORAT activities. There is a risk that the time allowed for ORAT activities and fittings will be reduced.
- ▲ Security agencies have expressed misgivings with cargo being located on the East Midfield site. This issue presents a significant risk to the commissioning of the cargo terminal in Q4-17. Any change in site will result in redesign, infrastructure enablers etc and could delay the project.
- ▲ The master plan will define all plot locations (shape and size) and approval of the master plan is delayed beyond the dates required for the plot locations
- No agreed commercial terms on rental rates. Potential major impact on Etihad Airways financials and operational model.

LIKELIHOOD	5 Almost Certain					
	4 Probable			1	1	
	3 Likely			2	1	
	2 Possible		3		1	
	1 Unlikely			1		
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

16  
4x4  
➔

**#383 - US CBP - Anthony Batchelor**

Preferred operational process for the MTB guest and baggage connectivity to US CBP might not be approved by ADAC and control authorities (e.g. transportation of unscreened departing guests airside)

**Dependencies:** ① Commencement of ADAC project to assess baggage options in MTB

**Mitigation:** ① To document the desired process in sufficient detail to submit to the appropriate authorities for approval  
② Present concept to ADAC COO

**Progress:** 26-Nov-15: ADAC have now put in place regular meeting to discuss the operational and infrastructure impact of adopting our Con Ops for US OB guests and bags

12  
3x4  
➔

**#382 - GUEST EXPERIENCE DESIGN FOR MTB - Jörg Oppermann**

Midfield Guest Experience vision development may create initiatives which will be difficult to implement by Midfield Opening

**Dependencies:** ① Development of Etihad Airways initiatives based on Guest Experience Vision

**Mitigation:** ① Incorporate current knowledge in the design discussions with ADAC  
② Categorize any known initiative by implementation date in order to manage Etihad Airways expectations  
③ Develop a Guest Experience design brief for the satellite development  
④ Create an impact assessment on time and money for all mandatory initiatives

**Progress:** 13-Dec-15: Structure for the translation of the guest experience vision into ConOps

12  
4x3  
➔

**#309 - INTER TERMINAL MOVEMENT OF GUEST - Anthony Batchelor**

Currently there is no ADAC sponsored project to identify and resolve how US bound guests that come from MTB enter US CBP from the apron.

**Dependencies:** none

**Mitigation:** ADAC to start project & identify funding.

**Progress:** 26-Oct-15: Bi weekly meetings between ADAC and Etihad Airways started to review USCBP ConOps

9

3x3



**#384 - GUEST TRANSPORTATION - Ng Hock Thye**

Responsibility for guest transportation in a multi-terminal airport is undecided.

**Dependencies:** The decision on the allocation of airlines to MTB and south-side terminals (terminal usage) will be the determining factor to providing the scale of inter-terminal shuttle bus transportation both on the airside and landside.

**Mitigation:** ① Provide ADAC with guest transport projections  
② Internal guidance from Etihad Airways management

**Progress:** 01-Nov-15: a. Guest numbers (past historical data and projected numbers) are currently being collated for ADAC's planning.  
b. Proposed bus operations at MTB L1.0 had been sent to ADAC for consideration.  
Please refer to RAID #284.

9

3x3



**#388 - SPECIAL HANDLING - Thomas Nolan**

We have not quantified the impact of the numbers of passenger with restricted mobility connecting to USCBP.

**Dependencies:** ① Data on number of wheelchairs requested  
② Number and type of transportation provided

**Mitigation:** ① Provide ADAC with PRM numbers and assess operation impact

**Progress:** 13-Dec-15: 1. PRM numbers for US flights average 100 per day; 98% of which are transfer pax. Hub is sending the breakdown between the three categories WCHR; WCHC; WCHS  
2. ADAC to confirm who will be responsible for shuttle transportation between terminals and the vehicles to be used.  
3. Consideration will need to be made for the transportation of PRMs and lifts as required  
4. Further connectivity meetings to be arranged beginning Jan 2016

8

4x2



**#389 - ORAT - Jörg Oppermann**

No KPIs have been defined for Midfield Operations and hence no capability of continuously assessing quality of operations.

**Dependencies:** ① Hub and EASG operational concept in multi terminal environment

**Mitigation:** ① Review the operational concept and extract all relevant performance indicators  
② Identify measurement methods in current operation and review capabilities at Midfield  
③ Develop a holistic concept for quality and KPI measurement and reporting at Midfield.

**Progress:** 13-Dec-15: A performance framework for Ground Operations has been drafted and is currently under internal review. ADAC has been approached and is willing to convert the performance framework into a Midfield Operations report.

8

4x2



**#380 - TRANSITION SCHEDULE FOR HCC - Anthony Batchelor**

Transition schedule not in place.

**Dependencies:** ① Scope and delivery plan for Interim HCC

**Mitigation:** ① Develop ConOps for Interim HCC  
② Develop transition schedule for Interim

**Progress:** 13-Dec-15: Con Ops for 2020 HCC has been approved by Network Operations BU Con Ops for Interim HCC based on the 2020 vision & technologies available in 2016 defining the relationship with NOC, AMC & other control rooms has been drafted

4

2x2



**#115 - LIMO STAGING IN ECC CAR PARK - Ng Hock Thye**

120 spaces requested - not yet provided by ADAC

**Dependencies:** none

**Mitigation:** none





**#387 - EMPLOYEE LOGISTICS - Salem Salah Alshamsi**

We have not gauged the complexities of multi terminal operations and employee allocation.

**Dependencies:** ① Develop of staff productivity measurement  
② Hub operational concept in multi terminal environment

**Mitigation:** ① Define traffic split between Terminals  
② Define minimum and operational staffing requirements.  
③ Identify staffing strategy in terms of dedicated and flexible teams  
④ Optimize staff planning with automated tool  
⑤ Provide staff transportation between the terminals

**Progress:** 13-Dec-15: Change of Action Ownership to Salem



**#498 - STAFFING OF HALA OPERATIONS - Attila Peter Sagi**

There is no decision on the staffing of Hala operations in Midfield, including group management, desk staffing, kerbside management etc. Expectations and subsequent resourcing may vary between business units (Hub expects Hala to staff their operations, Hala expects Hub to continue like today).

**Dependencies:** none

**Mitigation:** ① Engage Hala and Hub management to define a service delivery strategy.

**Progress:** 14-Dec-15: Both HALA and Hub Management are engaged in the GE ORAT and will be aligned via the ConOps.



LIKELIHOOD	5 Almost Certain				1	
	4 Probable	1				1
	3 Likely			1	1	
	2 Possible	1			1	
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

20

5x4



#### #414 - AIRCRAFT ROTATION - Anthony Batchelor

Schedule does not allow for extended ground times in case the aircraft rotation and flight allocation plan requires towing of aircraft between terminals and across runways.

**Dependencies:** ① Flight allocation plan  
② Aircraft rotation schedule

**Mitigation:** ① To prepare a set of principles for allocation arrival and departure flights to terminals  
② Define Etihad Airways transition strategy and get it approved.  
③ Optimise schedule to minimise towing. Understand the best towing methodology to minimise operational impact  
④ Define principles to manage aircraft changes

**Progress:** 25-Nov-15: Having run the 2018 & 2025 schedules we now understand the extent of the ground time issue. Our next task is to produce a recommendation of flight allocation to terminal, and then co-ordinate with Etihad Airways scheduling to adjust rotations for multi terminal operation.

20

4x5



#### #385 - FLIGHT ALLOCATION - Anthony Batchelor

Flight allocation (inbound and outbound) for multi-terminal operations not decided.

**Dependencies:** ① MTB opening date(s) or phased opening(s)

**Mitigation:** ① Produce flight allocation plan to be based on S18/2020/2015 schedule.

**Progress:** 25-Nov-15: S18 & S2025 schedules run against gate capacity, to understand allocation options. Next step is to assess outputs against KPIs to develop recommendation.

12

4x3



#### #487 - ALIGNMENT OF NEW HCC FUNCTIONALITY WITH DISRUPTION PLANS - Jan Hendrik Braasch

The new HCC functionality/responsibility laid out in the 2020 vision ConOps and, partially, in the Interim ConOps may not be supported by the existing disruption management plans. This will reduce the effectiveness of HCC in situations when the new functionality has the potential to improve conditions most.

**Dependencies:** (MFT-internal risk until discussed with John Wright)

**Mitigation:** ① Revision of HCC processes and disruption management plans to ensure coherence:  
a. Prior to opening of Interim  
b. Prior to opening of Midfield  
c. 2020  
d. Any change of HCC capabilities/functions/role in the meantime



#### #413 - AIRLINE ALLOCATION - Anthony Batchelor

Risk that OAL are allocated to Midfield. Potential impact of allocation of equity partners to the SS, etc. Etihad Airways have not yet defined a transition strategy to midfield.

**Dependencies:** ① Formal confirmation of MTB exclusive use for Etihad Airways

**Mitigation:** ① To prepare a set of principles for allocation arrival and departure flights to terminals  
② Define Etihad Airways transition strategy and get it approved.

**Progress:** 25-Nov-15: The analysis for this risk is part of the ORAT work stream and the recommendation is due by the end of Jun-16. Included in the final report will be the timelines associated with airline/ flights to terminal.



#### #386 - MTB TRANSITION STRATEGY 2020? - Anthony Batchelor

No strategy for utilisation of MTB capacity between opening of MTB and opening of satellite.

**Dependencies:** ① Readiness of satellite (additional capacity)

**Mitigation:** ① Draft a strategy based on flight allocation plan and relevant terminal capacities  
② Network Planning review of proposed strategy in respect to commercial impact and potential impact on growth strategy  
③ Engage with ADAC and review impact on ADAC's commercial plans

**Progress:** 13-Dec-15: Network Connectivity workstream is established Topic has been raised during last top-to-top meeting



#### #310 - MTB TO US SHORT CONNECTS - Anthony Batchelor

The journey time for US bound guest and bag will be impacted by the MTB stand they arrive onto.

**Dependencies:** none

**Mitigation:** ① Investigate with Network planning the impact of planning short connection flights to gates that have shortest guest route to coaching gates. We plan to run some connection scenarios against flight schedules in the next meeting of this ORAT work stream. We should be able to quantify impact by end of Dec-15

**Progress:** 13-Dec-15: Investigate with Network planning the impact of planning short connection flights to gates that have shortest guest route to coaching gates. We plan to run some connection scenarios against flight schedules in the next meeting of this ORAT work stream. We should be able to quantify impact by end of December



#### #311 - HOW TO IDENTIFY AND TRACK SHORT CONNECT GUESTS TO US CBP - Jan Hendrik Braasch

On the IB flight we need to identify which guests have a short connection and track them and their bags to the US CBP. Although this was identified in the US bound guest Con Ops, the solution should apply to any short connecting guests/bags.

**Dependencies:** none

**Mitigation:** ① Review the available technologies and produce a recommendation for those that meet our requirements.

**Progress:** 13-Dec-15: The transfer product will include a Transfer Team that meets short-connecting guests upon disembarkation and expedites them through the terminal. This process is part of the following ConOps: Transfer Security & Immigration It will also apply to US CBP guests. Recommend keeping the item open to ensure US CBP remains current as a use case for the Transfer Team.

LIKELIHOOD	5 Almost Certain					
	4 Probable			1	1	
	3 Likely					
	2 Possible			1	1	
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

16  
4x4  
↗

#453 - AIRFIELD INFRASTRUCTURE UPGRADES - Guy John Allison

Airfield Projects - Airfield infrastructure upgrades do not deliver required taxiway and stand capacity requirements

**Dependencies:** ① Infrastructure gets delivered to published time scales  
② Unforeseen issues with current infrastructure does not impact project timescales

**Mitigation:** ① Closely monitoring progress by ADAC P&D.  
② Improving collaborative working with stakeholders & influencing wherever possible.  
③ Senior Etihad Management on ALCMS Project Board.  
④ ALCMS upgrade delivers increased capacity / operational efficiency.  
⑤ Identify capacity requirements, and verify against projected ADAC capacity statement.  
⑥ identify necessary solutions and escalate if required

**Progress:** 26-Nov-15: Taxiways C & D now open. ALCMS infrastructure work has now commenced. It is vital that lessons learned from Project 25 are applied to future infrastructure projects to ensure successful delivery.

12  
3x4  
→

#454 - AIRFIELD SYSTEMS - Guy John Allison

Airfield Projects - New systems e.g. ACDM, and upgrades to current systems e.g. ALCMS, ASMGCS and EFPS are not fully operational within required timescales

**Dependencies:** ① Individual projects deliver as required  
② Associated infrastructure and procedures in place by all stakeholders

**Mitigation:** ① Closely monitoring progress by ADAC, GAL and consultants.  
② Improving collaborative working with stakeholders and influencing wherever possible.  
③ Senior Etihad Management on ALCMS Project Board

**Progress:** 26-Nov-15: ALCMS draft user requirements have been presented, final document due 6-Dec-15 which will allow progress with contracting supplier. ALCMS infrastructure works have commenced. A-CDM, EFPS and ASMGCS upgrade workshops have started and are ongoing.

8  
4x2  
↘

#452 - AIRSPACE CAPACITY RESTRICTIONS - Guy John Allison

Airfield Projects - Airspace capacity restrictions cannot deliver the demand requirements of the airfield.

**Dependencies:** ① Airspace redesign to facilitate parallel mixed runway operation by ADAC and GCAA  
② AMAN implementation

**Mitigation:** ① Closely monitoring progress by ADAC, GAL and SZC.  
② Improving collaborative working with stakeholders & influencing wherever possible.  
③ Implementation of Independent Parallel Operations by end of Q2 2016.  
④ Future airspace design concepts as proposed by MITRE and Airbus ProSky.

**Progress:** 26-Nov-15: Airbus ProSky workshops on Phase 2 airspace re-design continue, nextset due early Dec. Phase 3 airspace re-design (implementatin phase) scope has now been drafted. Agreed to set up workshop with GAL ANS to discuss initiatives and work in progress to improve airspace capacity. IPO now delayed - new due date late Q2-16.





**#455 - AIRFIELD PROCEDURES AND ASSOCIATED REGULATORY REQUIREMENTS** - Guy John Allison

Airfield Projects - Procedures are not developed, implemented and/or approved by the regulator

**Dependencies:** ① Procedures developed by appropriate stakeholders in line with agreed schedules  
② Effective implementation plan delivered across the operation  
③ Early engagement with GCAA and ongoing dialogue

**Mitigation:** ① Closely monitoring progress by ADAC, GAL, SZC and GCAA.  
② Review of all ConOps as they are made available▲

**Progress:** 26-Nov-15: Vital that lessons learned from Project 25 are applied to ensure success. Workshop agreed with GAL ANS to understand initiatives underway and planned to enhance airfield capacity. Third party consultants secured by ADAC to support procedure development.

LIKELIHOOD	5 Almost Certain					
	4 Probable			1	1	
	3 Likely			1	1	
	2 Possible				3	
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

16

4x4



### #441 - MAGNITUDE OF TRAINING TASK - Graham Stevenson

Underestimation of the scale and impact of the training required

**Dependencies:** ① Appoint L&D Technical Advisor to MPT in 2015.

**Mitigation:** ① Carry out training needs analysis as early as possible  
② Develop detailed training plans

**Progress:** 30-Nov-15: L&D ConOps under development, due for draft completion end of 2015.

12

4x3



### #440 - TRAINING CONTENT AND TRAINEES - Graham Stevenson

Not accurately identifying who needs what training.

**Dependencies:** ① Ineco training plans for ADAC to be shared with Etihad Airways  
② Obtain KPF services handbook

**Mitigation:** ① Aligning appropriate training content with the relevant training participants

**Progress:** 30-Nov-15: L&D ConOps under development, due for draft completion end of 2015.

12

3x4



### #442 - TRAINING MATERIAL SUITABILITY - Graham Stevenson

Training material provided by external contractors is often not fit for purpose.

**Dependencies:** ① Etihad Airways receiving training material from 3rd parties

**Mitigation:** ① Etihad Airways to clearly set out training needs and quality of the training materials  
② Staged reviews with training material providers  
③ Training material from 3rd parties reviewed by the relevant Etihad Airways business units in advance of the training

**Progress:** 30-Nov-15: L&D ConOps under development, due for draft completion end of 2015.

9

3x3



### #439 - TRAINEE AVAILABILITY - Graham Stevenson

Staff being released from day to day operational activities in order to be available to attend required training courses.

**Dependencies:** ① Early visibility on training schedule, aligned to operational staffing plans and shift patterns.

**Mitigation:** ① Agreed training plan signed off with business units

**Progress:** 30-Nov-15: L&D ConOps due for draft completion end of 2015.

8

4X2



**#426 - TRANSITION SCHEDULE - Graham Stevenson**

Transition schedule not in place

**Dependencies:** ① Etihad Airways flight allocation plan  
② Confirmation of ADAC's ORAT and handover schedule

**Mitigation:** ① Transition schedule to be developed by MFT

**Progress:** 30-Nov-15: L&D ConOps under development, due for draft completion end of 2015.

8

4X2



**#427 - TRAINING STRUCTURE - Graham Stevenson**

Etihad Airways training structure for training ground staff is not mature. Currently some essential training is undertaken via courses e.g. customer service, while other skills are learned on the job e.g. check-in.

**Dependencies:** ① Technical Advisor L&D to be appointed  
② Availability of training material

**Mitigation:** ① Development of a centralized training program that encompasses the following types of training:  
▶ Systems (vendor)  
▶ Staff (by discipline)  
▶ Orientation and Familiarization (all Etihad Airways stakeholders)  
▶ Process and Procedures (job specific)  
② Assign responsibility to appropriate business units (business as usual operations)  
③ Ensure that sufficient training resources available to attend vendor (train the trainer) courses

**Progress:** 30-Nov-15: Acting Technical Advisor L&D appointed

8

4X2



**#428 - AVAILABILITY OF TRAINERS AND TRAINEES - Graham Stevenson**

Availability of trainers to provide the training and availability of staff to attend training.

**Dependencies:** ① Technical Advisor L&D to be appointed

**Mitigation:** ① Establishing the Etihad Airways training plan incl. resources and facilities required  
② Ensure availability of multiple languages

**Progress:** 30-Nov-15: Acting Technical Advisor L&D appointed

LIKELIHOOD	5 Almost Certain					
	4 Probable			1		
	3 Likely			1		
	2 Possible				2	
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

12

3x4



## #444 - REQUIREMENTS IMPLEMENTATION - Attila Peter Sagi

Uncertainty whether some of the requirements formulated will be implementable in practice.

**Dependencies:** ① Availability of Etihad Airways's Guest Experience strategy in line with ADAC project requirements and dependencies

**Mitigation:** ① MFT representative to be engaged in Guest Experience strategy formation in order to advise what is practically possible as early in the process as possible

**Progress:** 14-Dec-15: Etihad Airways GE Strategy presented too and endorsed by ADAC. GE ORAT and ConOps to define which aspects of the vision are able to be delivered at opening or by 2020. Note: GE are aware of time constraints and construction progress and there effect on delivering the vision.

9

3x3



## #445 - GUEST EXPERIENCE ALIGNMENT - Attila Peter Sagi

Aligning the envisaged Guest Experience of Etihad and the one of ADAC

**Dependencies:** ① Confirmation of Etihad Airways's Guest Experience vision/strategy  
② Confirmation of ADAC's Guest Experience vision/strategy

**Mitigation:** ① Early engagement between Etihad Airways Guest Experience and ADAC  
② Finalisation of Etihad Airways's Guest Experience strategy in line with ADAC project requirements and dependencies

**Progress:** 14-Dec-15: ADAC is supportive of Etihad Airways GE Vision for MFT. Refer to RAID Log #444 for future updates.

8

4x2



## #443 - TRANSITION SCHEDULE - Attila Peter Sagi

Transition schedule not in place

**Dependencies:** ① Confirmation of ADAC's ORAT and handover schedule

**Mitigation:** ① Transition schedule to be developed by MFT

**Progress:** 14-Dec-15: Transition schedule to be captured within the GE ORAT, which is a joint Etihad Airways/ ADAC Steering Group.





#### #485 - FREQUENT FLYER PRODUCT STRATEGY - Jan Hendrik Braasch

There is no formulated strategy on the future differentiations of the Frequent Flyer product from both economy and premium product.

**Dependencies:** ① Adding of Global Loyalty Company (EY subsidiary) to the Raid Log (individuals: Yasser al Yousuf and Zaheer Jawani), and transferral of the risk to them.

**Mitigation:** ① Develop a strategy and requirements document detailing the Frequent Flyer vision at the Hub, including among others:

- Experience at touchpoints (Check-in, security, boarding, lounges etc)
- IT integration, App
- Baggage services
- Typical Frequent Flyer journey log book (Departing, Transfer, Arriving)



LIKELIHOOD	5 Almost Certain					
	4 Probable					
	3 Likely			1		
	2 Possible			1	2	
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

9  
3x3  
➔

**#378 - LOW EMISSION VEHICLES AROUND MTB - Thomas Nolan**

Potential mandate to have an all electric fleet of vehicles within the baggage facility. Risk of increased costs/ prolonged procurement times.

**Dependencies:** ① Clear ADAC/government mandates in relation to low emission vehicles

**Mitigation:** ① Identify vehicle type to be used in baggage hall  
② Phasing strategy to comply with emission mandates

**Progress:** 13-Dec-15: 1. the 'mandate' for electrical vehicles in the baggage hall was a request from ADAS (c2008)  
2. there is no ADAC or Governmental mandate for electrical vehicles on any other part of the airfield (only the bag hall)  
3. The ADAC airside working group has been tasked with establishing the number, position and power details for charging points, especially in the baggage hall. 3-phase power is required.  
4. EASG, in conjunction with MUC Aeroground and Fraport consultants, will determine number of electrical baggage tugs required, along with a recommendation on model/type. This is expected mid-2016

8  
4x2  
➔

**#377 - TRANSITION SCHEDULE - Thomas Nolan**

Transition schedule not in place.

**Dependencies:** ① Decision by Network Planning on flight departure planning strategy across the terminals  
② Phased or big bang transition

**Mitigation:** ① Start of the ramp logistics consultants work

**Progress:** 13-Dec-15: 1. MUC aeroground presented the first deliverable of their scope of work with a gap analysis on 5-Sep-15  
2. further deliverables including ConOps and manpower estimates are due Q1-16

8  
4x2  
➔

**#379 - OPERATIONAL MODEL - Thomas Nolan**

EASG operational strategy (processes, equipment and staff) for multiple terminal operations not in place.

**Dependencies:** ① Decision by Network Planning on flight departure planning strategy across the terminals  
② Phased or big bang transition

**Mitigation:** ① Start of the ramp logistics consultants work  
② ORAT workstream output  
③ Towing operational concept development as it has great impact on aircraft rotations

**Progress:** 13-Dec-15: 1. MUC aeroground commenced their scope of work in Jul-15  
2. ORAT workstreams commenced late Aug 2015 and are on-going  
3. Fraport will have a kick-off conference cal, 15 Dec and are expected to on the ground Jan-16. Fraport will offer consultancy on EASG maintenance and workshops



**#307 - TRANSPORT OF ULDS FROM MTB TO US BAG FACILITY - Anthony Batchelor**

If we use the MTB BHS to build bulk containers for US bound bags we will need to transport them to US bag facility, this could have an impact on EASG resources.

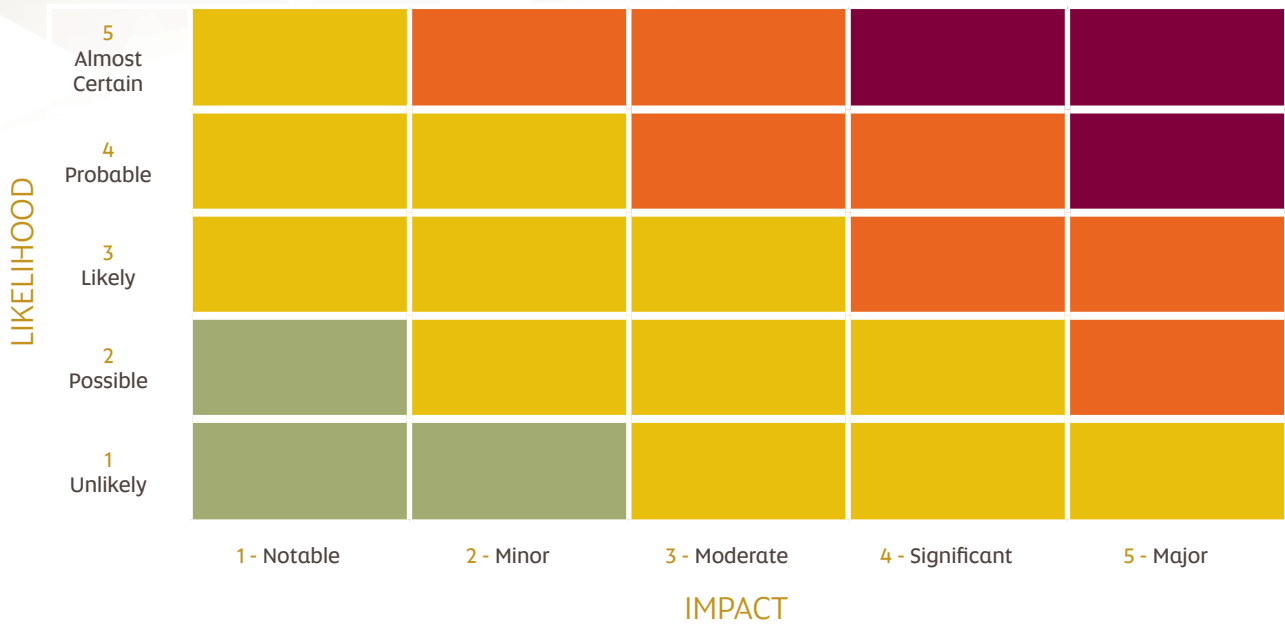
**Dependencies:** ① The decision to use MTB BHS for sortation and build of US bags

**Mitigation:** ① Combine with long connects to southside terminals to minimise number of journeys or move offpeak when lower demand would minimise impact to EASG resources.

**Progress:** 26-Nov-15: We should develop the performce KPIs for scenario assessment by end of Dec-15, which will inform this work stream of the preferred model.

# ORAT – ETIHAD ENGINEERING

0

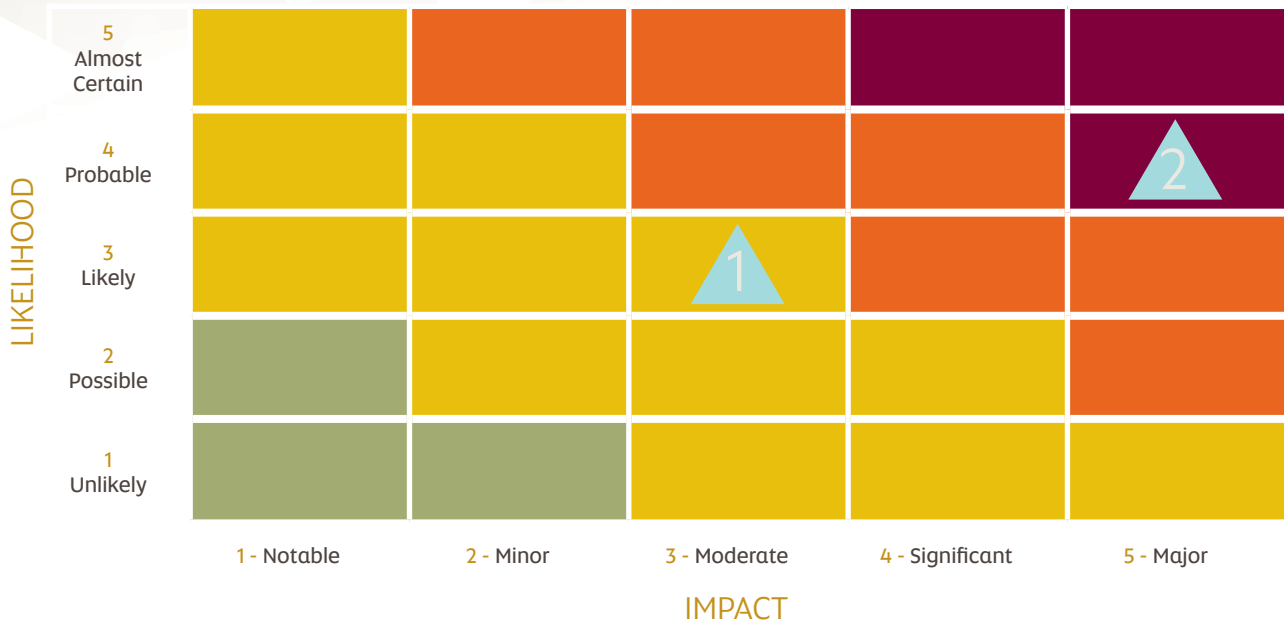


No risk has been recorded for ORAT - Etihad Engineering so far.



# FIT-OUT – PREMIUM AND LOUNGE SPACES

49



20

5x4



## #374 - LOUNGES AND PREMIUM FIT-OUT - Olivia Eleonora Bulzan

Lounge spaces - Fit-Out access dates have been confirmed by ADAC as 19-Nov-16 for Level 2.0 and above and the piers and 31-Jul-17 for all other areas. If access to these areas is later than the confirmed dates, the delivery program for the Etihad Lounges and Premium Spaces Program is at risk in respect to the opening date of 2-Dec-17.

**Dependencies:** ① Etihad Airways design process  
② Etihad Airways procurement of contractor process

**Mitigation:** ① (1) Develop detailed EY project plans  
② Track EY design and procurement process  
③ Align with ADAC fit-out strategy and technical building services requirements  
④ Write to ADAC and inform when we plan to have access and sequence of lounge development  
⑤ Develop detailed delivery programs for individual spaces

**Progress:** 13-Dec-15: The risk description and mitigation plan have been updated.

20

5x4



## #471 - APPOINTMENT OF FIT-OUT CONTRACTOR - Jörg Oppermann

Based on the latest Etihad Airways project delivery schedule, the fit-out contractor will not be appointed before the current ADAC target access date of 19-Nov-16

**Dependencies:** ① Etihad Airways design process  
② Etihad Airways procurement of contractor process

**Mitigation:** ① maintain detailed Etihad Airways project plans  
② seek opportunities to fast track internal approval processes  
③ track Etihad Airways design and procurement process closely  
④ ADAC to provide official confirmation of lounge access dates

**Progress:** 26-Nov-15: Mitigation plan ④ has been provided by ADAC. Access dates for 19-Nov-16 and 31-Jul-17 confirmed in top-to-top meeting Nov-15

9

3x3



## #473- PHASED OPENING OF LOUNGES - Mohammed Al-Falasi

Etihad Airways are proposing a phased opening of the various MTB lounges, over several years, based on expected future demand figures. ADAC's position is that all publicly visible areas will need to be completed to an acceptable level of finish prior to opening of the terminal. ADAC will not accept construction hoardings closing off unfitted areas for several years of occupancy.

**Dependencies:** ① Approved space development by business unit and finance  
② Availability of commercial and contractual lease terms and conditions

**Mitigation:** ① Negotiate lease agreements with ADAC in accordance of the approve space utilization plan  
② Identify with ADAC details of "to acceptable level of finish"

**Progress:** 26-Nov-15: Updated risk dependencies and mitigation action

LIKELIHOOD	5 Almost Certain			1		
	4 Probable		1	1		
	3 Likely	1	3			
	2 Possible					
	1 Unlikely	1	1	1		
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

20

4x5



**#412 - ACCESS TO MTB FACILITY FOR FIT-OUT AND ORAT - Ng Hock Thye**

No confirmed handover dates for fit-out or ORAT activities. There is a risk that the time allowed for ORAT activities and fittings will be reduced.

**Dependencies:** ① Etihad Airways schedule of activities for approval and procurement process to commence project implementation  
② Availability of technical information provided by ADAC (e.g. power, data, layout, etc)

**Mitigation:** ① define minimum requirements for sub elements in order to undertake phased implementation  
② define minimum requirement for prioritised and sequenced fit-out activities to meet target operational date  
③ plan ORAT and training activities off site where possible  
④ identify opportunities to install MTB technology and equipment in the southside

16

4x4



**#423 - RATES AND LEASE AGREEMENTS - Graham Stevenson**

No agreed commercial terms regarding the cost of renting Etihad Airways spaces in the MTB.

**Dependencies:** ① Etihad Airways schedule of activities for approval and procurement process to commence implementation  
② End user concepts/requirements for Midfield fit-outs  
③ Confirmation of availability of spaces for fit-out  
④ ADAC Commercial proposed sched of tariffs

**Mitigation:** ① Agreements need to be in place, before we can start any fit-out  
② Request from Etihad Airways Head of Commercial Real Estate Leasing to ADAC on 08/04/15 for them to provide updates and appropriate dates for the Midfield Terminal Agreements  
③ Prepare operational forecast costs for Etihad Airways business units (Financial controllers of EASG, Guest Services etc)  
④ Concept of operation and minimum space requirements

**Progress:** 30-Nov-15: Commercial terms and rental rates from ADAC still pending. A top to top meeting to be arranged by ADAC CCO between ADAC and Etihad Airways senior management with regard to rates and tariffs..

12

3x4



**#415 - HANDOVER PROCESS - Rajini George**

There is a lack of clarity regarding the practices for the handover of the facility for fit-out from the JV to ADAC and then from ADAC to Etihad Airways.

**Dependencies:** ① Government agency (ADM, Civil Defence, ADDC, UPC) certification process

**Mitigation:** ① Etihad Airways Property define the requirements for information from ADAC  
② Align minimum requirements from government authorities with ADAC P&D to accept space  
③ Align with ADAC commercial and Duty Free fit-out  
④ define the partial completion certificate handover process

9

3X3



**#422 - END USERS RESOURCES** - Ng Hock Thye

Project managers have not been identified and assigned by the end users.

**Dependencies:** ① Etihad Airways schedule of activities for approval and procurement process to commence project implementation.

**Mitigation:** ① ORAT workstream nominees  
② Ensure that ORAT kick-off meetings include space allocation responsibility

**Progress:** 8-Sep-15: ORAT chairpersons identified and space allocation included as an agenda item for all relevant ORAT workstreams

9

3X3



**#424 - HCC** - Anthony Batchelor

Identification of new technology and impact of interim HCC are risks.

**Dependencies:** ① Identification and procurement of a HCC management system  
② Produce concept of operation for HCC

**Mitigation:** ① Early supplier engagement will help identify what is needed for HCC that could impact fit-out  
② Lessons learnt from Interim will be fed into new design

**Progress:** 26-Nov-15: ConOps for Interim & 2020 HCC have been drafted; interim planned to be finalised by 31-Dec-15

9

3X3



**#425 - MANAGING CHANGE REQUESTS** - Graham Stevenson

Require an aligned systematic approach to deal with all the fit-out change requests from the various end users.

**Dependencies:** ① Line maintenance fit-out space is current pilot study. Incurred costs and time impacts associated with these proposed fit-out changes will determine whether changes to fit-out spaces will be a viable option.

**Mitigation:** ① Midfield PMO to develop a Change Management Plan to define process  
② Etihad Airways scope definition and cost review by Etihad Airways property department  
③ Financial mechanism (payment plan) to manage costs of the change

**Progress:** 13-Dec-15: Lessons learned from EY Line Maintenance fit-out space to be reviewed.

6

2X3



**#418 - FIT-OUT PROCESS** - Rajini George

The fit-out process is not defined and there are no guidelines currently available, and the space will not be 100% completed when the area is made available.

**Dependencies:** ① Internal availability of resources from Etihad Airways Property

**Mitigation:** ① Etihad Airways to define its own fit-out manual and submit to ADAC for approval

**Progress:** 13-Dec-15: ADAC and Etihad Airways have engaged, however many details are still to be clarified

3

3X1



**#419 - HALA** - Attila Peter Sagi

The space for the Hala lounge has not yet been designated and will be difficult to implement.

**Dependencies:** ① Hala concept / requirements for Midfield  
② Confirmation of availability of space for Hala

**Mitigation:** ① Midfield program team to officially request requirement of space from Hala  
② Create a concept for shared space utilisation with Etihad

**Progress:** 13-Dec-15: ADAC has approved Etihad Premium space request subject to agreement on commercial terms and conditions EY has to conclude internal discussions on the product offering by Hala

2

2x1



**#466 - TIMEFRAME FOR MIDFIELD HCC DEVELOPMENT - Saad Sakir**

There is little visibility of the projected durations for process steps necessary in order to complete the Midfield HCC on time.

**Dependencies:** none

**Mitigation:** ① Identify responsible individuals in support units (Property, Procurement), identify opportunities for streamlining the steps and identify best-guess durations.  
② Ensure commitment to these dates by Property, Procurement and Network Operations in order to establish an agreed project schedule

**Progress:** 06-Dec-15: Midfield HCC Fit-Out detailed schedule has been developed together with Midfield Property (represented by Frank Lunney). Projected facility go-live date is Apr 2017. Schedule submitted to Head of Midfield Property on 16-Nov for approval to baseline.

1

1x1



**#421 - PROPERTY MANPOWER - Ng Hock Thye**

Lack of visibility on the availability of dedicated manpower from the Property Department to support the various Midfield projects.

**Dependencies:** ① Etihad Airways schedule of activities for approval and procurement process to commence project implementation.

**Mitigation:** ① Midfield program team to officially request recruitment progress from property department.

**Progress:** 30-Nov-15: A number of new joiners have joined the Etihad Airways Property team specifically to work on the various Midfield projects. These resources will be supplemented further by additional resources included in Etihad Airways Property Departments 2016 budget plan.

# DEVELOPMENT – CARGO TERMINAL

LIKELIHOOD	5 Almost Certain					1
	4 Probable				1	
	3 Likely			1		
	2 Possible					
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

25  
5x5  
➔

## #317 - SECURITY RISKS AROUND EMF SITE - Naresh Ranganathan

Security agencies have expressed misgivings with cargo being located on the East Midfield site. This issue presents a significant risk to the commissioning of the cargo terminal in Q4-17. Any change in site will result in redesign, infrastructure enablers etc and could delay the project.

**Dependencies:** none

- Mitigation:**
- ① Presentation of a security concept - securing the building and site. - Status Completed
  - ② ADAC presentation on site protection - Status Completed 06-May-15
  - ③ Discussions with State Security ongoing; ADAC to provide additional information before 28-May-15
  - ④ Issue will be discussed during top-to-top meeting
  - ⑤ Etihad Airways and ADAC have developed jointly a site risk assessment and submitted to ADAC CEO and Etihad Airways PCEO for consideration
  - ⑥ report to be translated into Arabic by 01-Oct and presented to SS for feedback

**Progress:** 13-Dec-15: Given the most recent growth reforecasts the cargo terminal needs to be commissioned in Q3 or Q4-20 and not Q4-17 as previously forecast. However given the overall design and construction program duration, the approval/decision of the EMF site is still urgently required in order to meet the revised commissioning date.

16  
4x4  
➔

## #518 - LEASE AGREEMENTS PRE-REQUISITE FOR APPOINTING CONSULTANTS - Naresh Ranganathan

There is a requirement to handle the Forward Cargo Facility project as a separate entity to ensure commissioning in line with MTB in 2017. Consultants need to be appointed to ensure that the design is reviewed in line with current forecasts and security requirements. Cargo CFC insist that the lease agreement be signed off prior appointment of any consultants to mitigate any financial risks from future site issues.

**Dependencies:** ① Readiness of ADAC on Musataha drafts

- Mitigation:**
- ① Agree with finance that lease agreement is not required until appointment of contractor
  - ② Followup with ADAC / Etihad Airways Leasing departments for early release of lease drafts

9  
3x3  
➔

## #463 - CARGO - Naresh Ranganatha

Introduction of 100% cargo screening. Represents a risk as a carrier operating with Cargo.

**Dependencies:** ① Government or industry mandate for 100% screening

- Mitigation:**
- ① Reserve land adjacent to Cargo that could be retrofitted for screening

**Progress:** 6-Dec-15: Design of New Terminal takes into account possibility of 100% screening and has a separate level for same. ULD screening to be evaluated as current technology is not TSA approved. New design for the QRT facility will account for some screening capabilities



# DEVELOPMENT – CATERING FACILITY

41

LIKELIHOOD	5 Almost Certain					
	4 Probable					
	3 Likely			1		1
	2 Possible				1	
	1 Unlikely				1	1
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

15

5X3



## #301 - ETIHAD AIRWAYS PROCUREMENT APPROVAL PROCESS - Olivia Eleonora Bulzan

Extended consortium approval process (based on contract value) will delay construction commencement of New CF by approx. 6 months

**Dependencies:** none

**Mitigation:** ① Schedule revised to reflect extended (worst case) approval process  
② Need to investigate ways of fast tracking this process

**Progress:** 24-Nov-15: The New Catering Facility project schedule has been updated to reflect the new construction delivery approach: a TA is appointed to deliver the concept design, followed by a Lead Designer who will produce the full design and a Contractor that will deliver the construction. The Design & Build approach is now being replaced by Traditional. In the absence of a plot confirmation, the Traditional approach will considerably reduce the financial risk (due to potential abortive costs).

9

3X3



## #302 - REGULATORY AUTHORITY APPROVALS - Olivia Eleonora Bulzan

Regulatory approvals required from ADM, CivilDefence, ADDC, Police, Customs, Food Control Authority, Centre for waste management, ADTA Liquor Licensing section and HAADetc prior to Business License Release

**Dependencies:** none

**Mitigation:** ① Approvals processes and associated timeline to be included in detailed schedule

**Progress:** 24-Nov-15: The authority approvals are gradually incorporated in all development schedules. These are initially defined with the project manager(s) and updated throughout the project lifecycle, as the consultants/contractors responsible to obtain the respective authority approvals are on-boarded

8

4X2



## #449 - SECURITY - Graham Stevenson

Approved security programs are required for all Etihad Airways facilities. The new CBC is the only Etihad Airways facility that has an approved security program.

**Dependencies:** none

**Mitigation:** ① Early engagement with key internal (Corporate and Aviation Security) and external (ADAC and State security) stakeholders

**Progress:** 30-Nov-15: ① As part of the New Catering Facility project the current tenancy security program developed for the Southside Catering facility has been provided to the catering consultants(IO). A similar document for the New Catering Facility project needs to be developed.  
② Comprehensive report on both East Midfield and Southside cargo plots highlighting financial impacts and operational risks presented to State Security for feedback. State Security has no objection to present the paper to GSEC for decision making



### #300 - NEW CATERING FACILITY (NCF) PLOT DEFINITION - Jörg Oppermann

Confirmation required from ADAC on NCF plot location, configuration and associated plot limits by mid-May.

**Dependencies:** none

**Mitigation:**

- ① Etihad Airways requesting confirmation from ADAC at the highest level (CEO to CEO). Next top to top meeting is scheduled for 02-Jun-15 and the catering plot is on the agenda
- ② ADAC has assigned a plot in Al Fallah to EAS Catering subject to approval of the Airport Master Plan by DOT
- ③ Etihad Airways to provide the elevation profile of the planned facilities for the plot:
- ④ Etihad Airways to collaborate with ADAC to define the best layout for the airside road linking the Al Fallah support facilities to the MTB airside area;
- ⑤ Etihad Airways to inquire from ADAC when the site will be available for development by Etihad, ADAC to deliver extensive site preparation works

**Progress:** Tentative plot coordinates received from ADAC in a letter dated 16-Aug-15; The plot includes an airside/landside boundary



### #303 - ISSUANCE OF RFP'S FOR NEW CATERING FACILITY - Graham Stevenson

Expedite issuance of various RFP's for NCF consultants/contractors

**Dependencies:** ① Confirmation of plot for the new catering facility

**Mitigation:** ① Ensure bidder's lists and RFP documentation is prepared for various contracts and ready to be released immediately subsequent to the NCF plot confirmation.

**Progress:** 30-Nov-15: Tender Board for TA appointment on 25-Nov-15  
PMCC appointment to be deferred until after the TA has been appointed. Separate recommendations are to be made for PM and CC. This will then be retendered.  
RFP for Geotech contractors to be issued by 15-Dec-15  
Concept design submission from IO (S&E Consultant) expected 6-Dec-15



LIKELIHOOD	5 Almost Certain					
	4 Probable			1		
	3 Likely			1		
	2 Possible					
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

16

4x4



**#375 - ETIHAD AIRWAYS PLOT COORDINATES /ALLOCATION** - Graham Stevenson

The geographical coordinates for the various Etihad Airways plots identified in the ADAC Master Plan are not available.

**Dependencies:** ① Confirmation of ADAC's Master Plan

**Mitigation:** ① Develop detailed Etihad Airways project plans  
 ② Track Etihad Airways design and procurement process  
 ③ Identify the CAPEX investment plan and operational needs analysis for each of these facilities  
 ④ Request required from Etihad Airways Midfield Program team to ADAC for them to provide geographical coordinates for all Etihad Airways proposed plots

**Progress:** 13-Dec-15: A letter requesting geographical coordinates for these plots to be submitted to ADAC by the end of year 2015.

9

3x3



**#376 - DEFINITION OF END USER REQUIREMENTS** - Graham Stevenson

Design brief required from the end user.

**Dependencies:** ① Etihad Airways schedule of activities for approval and procurement process to commence project implementation

**Mitigation:** ① End users to develop an NPA with CAPEX overview  
 ② Develop with end users a project plan with design brief  
 ③ Operational needs analysis defining required operational date of the facility

**Progress:** 13-Dec-15: End user requirements currently being documented; deadline is May-16.

# PROJECTS – IT SYSTEMS

LIKELIHOOD	5 Almost Certain					
	4 Probable			1	1	
	3 Likely			2	4	
	2 Possible					
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

16  
4x4  
➔

**#434 - ADAC IT INFRASTRUCTURE - Eberhard Walter Beucke**

ADAC is designing and providing the airport wide network backbone, however Etihad has not established the operational and business model requirements.

**Dependencies:** ① Dependent on the project plan and time schedule from ADAC P&D  
 ② Functionality and Innovation is dependent on decisions by ADAC P&D  
 ③ Late requirement changes or additional changes will lead to Change Orders which might be rejected by the Project because causing delays

**Mitigation:** ① Liaise with ADAC P&D on what is being planned in regards to the IT infrastructure and backbone for T1/T3 and MTB  
 ② Align with Etihad Airways IT and Etihad Airways Operations on what is needed to support and secure our internal plans (technology, development and operations)

**Progress:** 23-Nov-15: - Internal meetings have started with Etihad T&I to prepare Etihad stakeholders for meetings with ADAC on the planned MTB backbone. Several meetings and discussions with Etihad T&I Architecture team were held to discuss Etihad plans on the future integration with ADAC AOS (Airport Operational Systems). It was agreed with T&I to raise an NPA to investigate the needed Etihad Airways integration platform and requirements. NPA is targeted to be finished by Dec-15

12  
4x3  
➔

**#435 - ETIHAD AIRWAYS IT REQUIREMENTS - Eberhard Walter Beucke**

Etihad Airways IT requirements are not fully defined

**Dependencies:** ① Dependent on Etihad Airways Ops and Etihad Airways IT finalising requirements  
 ② Dependent on the future operational plan/model in various areas (Airline OPs, Etihad Airways Airport OPs, Ground Handling)

**Mitigation:** ① Etihad Airways Operations and Etihad Airways IT to define which systems will be used and data needed (mid- and long term) to ensure and secure the future plans and operations

**Progress:** 23-Nov-15 - Prioritization was internally agreed to the following: Start with Sabre OPs, followed by AIMS, BMS, FIS, Hermes, Workbridge at the beginning. Sabre meeting was conducted on 10-Nov-15. and a follow-up meeting is planned for the 29-Nov-15 where Sabre team will provide their requirements.



#### #446 - IT SETUP FOR TRIALS - Eberhard Walter Beucke

Readiness of IT so that they can allow trials to be carried out. Also the systems and equipment available 9 months before opening

**Dependencies:** ① All MTB areas in operational readiness state  
② Project Time Schedule, when trials are really starting  
③ Delivery time of the new equipment  
④ Warranty issues as equipment will be used 9 month before real commercial operations starts  
⑤ Support staff available trained and familiarized already for trials

**Mitigation:** ① Early definition of trial areas and required equipment (staged approach)  
② Timely procurement of the required equipment (target date is trial operations which is 9 month before planned opening date of the Airport)  
③ Etihad Airways IT to develop a plan to ensure internal operational IT and maintenance knowledge during trials

**Progress:** 24-Nov-15: First 2 ORAT IT Workstream meetings were held. The first covered the overall idea and approach of the IT Workstream meetings. The second meeting was dedicated to Sabre OPs system where MFP IT Team presented ORAT, ADAC and MTB timelines and discussed with the Sabre Team their future requirements. Sabre OPs Team will come back with detail requirements in the next meeting scheduled for 29-Nov-15.  
AIMS meeting was planned but had to be shifted. New date approx. 8-Dec-15



#### #436 - SCOPE OF REQUIREMENTS - Eberhard Walter Beucke

Lack of future ICD definitions therefore it is not yet clear what Etihad Airways should receive/deliver with the airport.

**Dependencies:** ① Clarity from Etihad Airways on which interfaces and data sharing are required  
② What ADAC are planning in terms of technology, systems and data  
③ Ensure all Etihad Airways interfaces are part of the current contracts of ADAC sub-contractors

**Mitigation:** ① Define clear needs of data exchange and connection technology from Etihad Airways perspective  
② Coordinate with ADAC P&D and their contractors and define Interface Control Documents (ICD's) which have to be agreed and signed off by all parties

**Progress:** 24-Nov-15: Meetings with ADAC were held on how and when end-user requirement capturing meetings by ADAC will start. ADAC CPC requested that Etihad should give their requirements to ADAC for consideration. Etihad MFP IT Team highlighted that at first we need to know what ADAC's new systems will/can provide before we can define what we need. ADAC CPC will discuss it internally and will come back to us.



#### #429 - TRANSITION FROM WORKBRIDGE TO SABRE AIRCENTRE - Attila Peter Sagi

Aircentre is unproven in this area of application (staff and equipment allocation)

**Dependencies:** ① (1) EASG team information migration  
② Functionality of new product (fit for purpose)  
③ On time delivery with full functionality  
④ Divisional decision on whether staff allocation is centralised

**Mitigation:** ① To use Workbridge, have it available as a fall back (invest in it)  
② To monitor and get EASG in Aircentre implementation for above the wing

**Progress:** 22-Oct-15: Meetings initiated with Etihad Airways sabre business to begin defining requirements for Sabre AirCenter below the wing (Workbridge replacement)



#### #50 - IT STRATEGY - Eberhard Walter Beucke

No visibility in relation to the IT systems/technology ADAC plan to implement in the terminals (e.g. self-service technology)

**Dependencies:** ① Infrastructure and technology is being planned and delivered by ADAC and the Project

**Mitigation:** ① Etihad Airways Midfield IT team has initiated a discovery phase about IT applications in Midfield in cooperation with TCS; Final report available by 30-Sep-15; Definition of an overall action plan in respect to Midfield and how this plan is coordinated with the Network Operations IT projects

**Progress:** 24-Nov-15: Please also refer to RAID ID 434



**#433 - PROPOSED ADAC IT SYSTEMS/TECHNOLOGY - Mohannad Walid Ahmad Al Ramahi**

No visibility in relation to the IT systems/technology ADAC plan to implement in the terminals (e.g. self-service technology)

**Dependencies:** ① Infrastructure and technology is being planned and delivered by ADAC and the Project

**Mitigation:** ① Liaise with ADAC to find out what is currently available  
② Discuss with ADAC what are the future technology plans for T1/T3 and MTB

**Progress:** 22-Oct-15 ① Arrange a periodic meeting with Caroline from ADAC CPC to request updates about ADAC Airport IT projects including future systems , interfaces and any enhancements to existing systems (first week of November)  
② Start periodic meetings with Catherine from ADAC to get updates on ongoing projects from functional perspective (End of Oct-15)  
③ IT Issue list is being put together by MTC program technical advisors and could be reviewed with ADAC during those meetings and will be communicated internally within Etihad for the responsible stakeholders



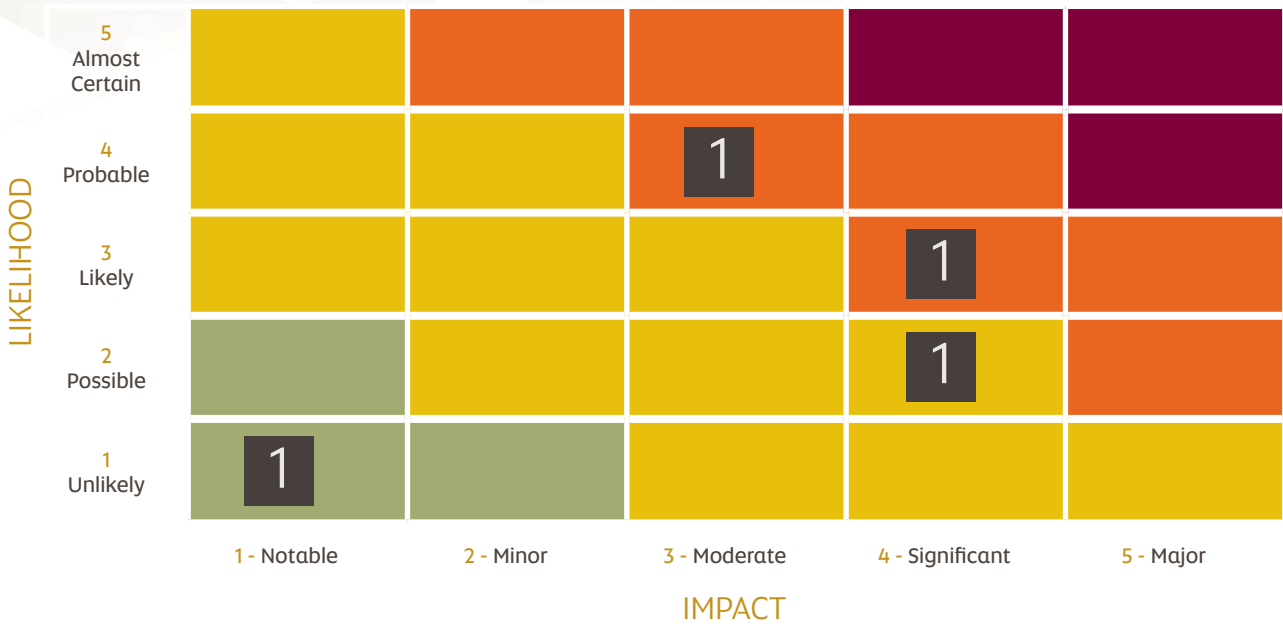
**#438 - MOBILE ASSET MANAGEMENT - Mohamed Noohu Sabu**

No protocol in place to account for the asset tracking, return, charging, maintenance and replacement of mobile devices

**Dependencies:** ① Procurement of the devices for training and familiarization  
② Operability of the systems in required areas; Wi-Fi coverage in all airport operational areas (inside and outside the terminals)  
③ Alternative operational modes like GPRS, GMS if Wi-Fi is not available

**Mitigation:** ① Define the systems which will support mobile devices  
② Evaluate the number of devices that are needed to support the operations (including spares)  
③ Define/create a clear operation/service/maintenance plan for the mobile devices

**Progress:** 14-Dec-15: There is an ongoing project to implement an asset tracking tool at the airport (Innotas ID 849340393). Etihad CFC and T&I currently use an asset management system by HardCat. It has been decided to extend the scope of this system to include assets at the Hub (PTT devices, iPads, vests, tetra radios). The project is managed by Steve Roughsedge and is currently in P2-scoping phase, planned to go-live 25-Feb-16. It is also worthy to mention that as part of project ROBIN, all IT assets will be supplied by IBM going forward and IBM might be providing their own asset tracking tool. This needs to be further investigated to identify the covered asset classes, timelines of implementing the tool, functionality overlap and asset segregation between Hardcat and the expected IBM tool.



12

3X4



**#459 - SUBFREEZING AIR T3 - Thomas Nolan**

Wide bodies (A380s in particular) won't be cool enough in the Summer months

**Dependencies:** ① Available Airbus approved technology to deliver subfreezing air  
② Decision on permanent infrastructure (power and chiller) or mobile solution

**Mitigation:** ① Carry out A380 trial of mobile solution  
② Constant use of the APU

**Progress:** 13-Dec-15: 1. Trials using a sub-freezing unit connected to a regular ACU were conducted during 2015 and are deemed sufficient for the southside A380 operations 2. ADAC have advised that sub-freezing air will be available on all contact stands in the MTB, supplied by Guinault LeBrun.

12

4X3



**#447 - BAGGAGE IMPACT OF T1 INLINE + T3 CAROUSEL CAPACITY - Anthony Batchelor**

Both projects have similar timelines that negatively impact baggage capacity

**Dependencies:** ① ADAC and contractor project plan that shows time based impact on baggage operation

**Mitigation:** ① EASC input into ADAC project plan to minimise operational disruption - done  
② Hold regular project reviews on site to discuss impact on operation and mitigations/work arounds

**Progress:** 26-Nov-15: T1 project update from ADAC PM shows some slippage but not expected to cause change to completion date of 31-Mar-15

8

4X2



**#431 - TRANSFER BAGGAGE CAPACITY - Anthony Batchelor**

Southside Projects - RISK that STEP project will not sufficiently provide for Etihad Airways's baggage processing demand

**Dependencies:** ① Etihad flight plan for 2016/17  
② ADAC and Etihad Airways budget approvals

**Mitigation:** ① Review ADAC P&D simulation to assess demand/capacity gap  
② To convince ADAC to implement Transfer baggage Enhancement Plan  
③ Implementation, configuration, training and rollout of Etihad Airways BMS  
④ Improve EASC's Command and Control structure  
⑤ implementation of 100% BRS

**Progress:** 13-Dec-15: First meeting of Project Board was on 10-Dec-15 (originally scheduled for 26-Nov-15) and project was approved for stage gates A & B. The next steps are to finalise detailed design



**#125 - MTB COACHING GATE DESIGN AND OPERATION - Thomas Nolan**

To understand how the current coaching gate design supports the remote stand operation and US outbound guest movement to US CBP

**Dependencies:** none

**Mitigation:** ① Review design with ADAC and EASC to understand design and operational product.

**Progress:** 16-Nov-15: Discussion of possible infrastructure changes to T3 had commenced with ADAC.

LIKELIHOOD	5 Almost Certain				1	1
	4 Probable				1	1
	3 Likely		1	2	1	
	2 Possible			1		1
	1 Unlikely					
		1 - Notable	2 - Minor	3 - Moderate	4 - Significant	5 - Major
		IMPACT				

25

5x5



**#461 - MASTER PLAN CONFIRMATION - Jörg Oppermann**

The master plan will define all plot locations (shape and size) and approval of the master plan is delayed beyond the dates required for the plot locations

**Dependencies:** ① Approval of the master plan  
② Certain elements of the master plan can be approved in advance of the overall master plan (e.g. catering, GSE warehouse, etc)

**Mitigation:** ① Decoupling of key Etihad Airways plot locations (Catering, GSE warehouse, fuel station, distribution warehouse) from the master plan  
② Evaluate alternative locations outside the master plan remit  
③ Expand existing facilities

**Progress:** 24-Nov-15: ① plot details delivered to Etihad Airways for GSE workshop in EMF of 21,068sqm. Design will be scope for Fraport, due to start Dec-15 to Apr-18.  
② area for refuelling station in EMF also unveiled. ADAC consultants Rocindo to work on size/volumes

20

5x4



**#448 - RATES AND LEASE AGREEMENTS - Graham Stevenson**

No agreed commercial terms on rental rates. Potential major impact on Etihad Airways financials and operational model.

**Dependencies:** ① Obtaining commercial terms and rental rates from ADAC

**Mitigation:** ① Request from Etihad Airways Head of Commercial Real Estate Leasing to ADAC on 08-Apr-15 for them to provide dates that commercial terms and rental rates for Midfield Terminal Agreements will be available

**Progress:** 30-Nov-15: Commercial terms and rental rates from ADAC still pending. A top to top meeting to be arranged by ADAC CCO between ADAC and Etihad Airways senior management with regard to rates and tariffs.

20

4x5



**#416 - TRIALS - Jörg Oppermann**

Project does not allow sufficient time for commissioning testing and operational trials to be conducted in sequence, dictating the need for beneficial use of the facility prior to handover by the JV.

**Dependencies:** ① MTB handover  
② Politically determined opening date

**Mitigation:** ① Developing a detailed trial plan, defining system and infrastructure requirements  
② Communicating and promoting the trial plan to the development team early  
③ Identifying opportunities to deliver system and process changes in the existing operations



16

4x4



**#451 - ORAT - Graham Stevenson**

ADAC ORAT plan not robust and not aligned to Etihad Airways and other key stakeholders operational requirements

- Dependencies:** ① Understanding of ADAC ORAT workstreams  
 ② Confirmation of ADAC's ORAT and handover schedule  
 ③ ADAC timelines for ORAT preparation and activities

**Mitigation:** ① Overall ORAT plan incorporating operational readiness assessment/review, commissioning plan and transition to operations plan to be developed by MFT and end users.

**Progress:** 30-Nov-15: Invitations have been extended both by Etihad Airways to ADAC and vice-versa to attend the ongoing ORAT working groups.

12

4x3



**#456- PRE MTC OPERATION - Guy John Allison**

Airfield Projects - During development of all MTC requirements the existing operation is impacted to an unacceptable level

- Dependencies:** ① Solid understanding by all stakeholders of the impact of airfield upgrades on current capacity against current demand

**Mitigation:** ① Developing an overarching roadmap/schedule in order to identify issues early  
 ② Airside Works Approval Committee established to oversee works requests

**Progress:** 26-Nov-15: establishment of Airside Works Approval Committee is a big step forward in ensuring works are completed in a safely and timely manner and with all operational impacts considered; this process is still evolving but positive progress to date. It is important that lessons learned from Project 25 are applied as works continue to ensure operational impact is fully understood and kept to an acceptable level.

10

5x2



**#430 - AUTHORITY APPROVALS FOR ALL ETIHAD AIRWAYS INFRASTRUCTURE - Rajini George**

Time period insufficient or approvals not forthcoming (ADAC, State Security, ADM, Civil Defense, DOT, Police, Customs, ADDC, Food Control Authority, Centre for Waste Management, ADTA, HAAD, etc)

- Dependencies:** ① ADAC delivery schedules  
 ② Timely submissions to and subsequent approvals from relevant authorities

**Mitigation:** ① Early engagement and submission of appropriate documentation  
 ② Being aware of all authority requirements through SME's or consultancies  
 ③ Centralised contacts and regular meetings

**Progress:** 13-Dec-15: Initial discussions with ADAC conducted EY has engaged the design consultants for lounge project, which also have the scope to prepare the necessary approvals.

9

3x3



**#450 - MANAGING CHANGE REQUESTS - Graham Stevenson**

Require an aligned systematic approach to deal with all the fit-out change requests from the various end users.

- Dependencies:** ① Line maintenance fit-out space is current pilot study. Incurred costs associated with these proposed fit-out changes will determine whether changes to fit-out spaces will be a viable option.

**Mitigation:** ① Midfield PMO to develop a Change Management Plan to define process

**Progress:** 13-Dec-15: User requirements for the various end users' spaces are currently being documented. Following this, the change management plan will be signed-off and implemented.

9

3x3



**#460 - ORAT (APPLICABLE TO ALL ORAT WORKSTREAM) - Jörg Oppermann**

Alignment of Etihad Airways ORAT with ADAC's ORAT

- Dependencies:** ① Visibility of ADAC ORAT operational concepts, output and schedule

**Mitigation:** ① Joint ORAT workshops  
 ② Information sharing  
 ③ Align processes and SOPs

6

2x3



**#417 - COST OF TRIALS - Jörg Oppermann**

Non alignment and availability of the required trials budget between Etihad Airways and ADAC.

- Dependencies:** ① Early availability of the ADAC trial plan

**Mitigation:** ① Define requirements share with ADAC

6

2x3



#### #420 - AIRSPACE AND AIRSIDE FLOW - Jörg Oppermann

Time delay in the delivery of runway and stand capacity against the communicated capacity roadmap.

**Dependencies:** ① Airspace redesign to facilitate parallel mixed runway operation by ADAC and GCAA  
② Delivery of the ADAC ASGMCS Level 4 infrastructure and system according to project schedule  
③ Availability of trained staff delivering the operation

**Mitigation:** ① Having senior Etihad Airways management being nominated to the boards of dependencies 1 and 2  
② Nominating a PM to participate in the project steering groups  
③ Maintain dedicated risk register and involve corporate strategy in quarterly reviews

**Progress:** 13-Dec-15: Etihad Airways has signed strategic framework agreement with ADAC and is nominated to the various project boards dealing with capacity enhancements.