



PHASE 1 — MOBILIZATION & SCOPING

Client	[Airline Client Name]
Programme	IOCC Analysis & Requirements Solicitation
Prepared by	OpsX Consult - Engagement Lead
Document Status	FOR SPONSOR APPROVAL
Version	1.3 - Phase 1 Deliverable
Date	February 2026
Classification	Confidential - For Airline Client Use Only

Prepared by OpsX Consult

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01

Signed Scoping Charter

Establishing programme scope, governance, timeline, and boundaries

1.1 Programme Identification

Programme Title	IOCC Analysis & Requirements Solicitation Engagement
Airline Client	[Airline Client Name]
Engagement Lead (OpsX)	[OpsX Engagement Lead Name], Senior Advisor
Airline Programme Sponsor	[Sponsor Name, Title]
Airline Programme Lead	[Lead Name, Title]
Programme Start Date	[DD Month YYYY]
Target Phase 5 Completion	[DD Month YYYY]
Charter Version	1.0 - For Signature
Charter Date	February 2026

1.2 Programme Objectives

- This Requirements Solicitation engagement is commissioned to deliver the following outcomes for [Airline Client]:
- Produce a complete, auditable Requirements Traceability Matrix (RTM) that provides the definitive specification basis for the IOCC system selection process, covering all in-scope functional and operational domains.
 - Establish a rigorous, evidence-based Current State Operational Baseline documenting how the IOCC currently operates at workflow task level, including all manual workarounds, system limitations, and pain points.
 - Conduct a structured Gap Analysis comparing current state against desired future state, producing a Prioritized Gap Register that directly drives requirement classification and vendor evaluation weighting.
 - Ensure all requirements are traceable to documented operational evidence, stakeholder statements, or regulatory obligations, and that every Critical and High-priority requirement has defined Acceptance Criteria.
 - Deliver a vendor-neutral, technology-agnostic requirements specification that enables fair, auditable, and defensible evaluation of all responding vendors.
 - Complete all five phases within the agreed programme timeline, with formal quality gate sign-off obtained before each phase transition.

1.3 Scope Boundaries

IN SCOPE — Confirmed Functional Domains & Boundaries	OUT OF SCOPE — Explicitly Excluded Areas
- Crew Planning & Pairing Optimization - Crew Rostering & Bid Management - Crew Training & Qualification Tracking - Crew Tracking & Day-of-Operations Management - FTL / FRMS Legality Management - Crew Communication & Self-Service Portal - Operations Controllers / Flight Dispatchers (all shifts) - Aircraft Scheduling & Fleet Optimization - Flight Tracking & Monitoring - Disruption Management (IROPS) - Delay Management & Reporting - System Interfaces & Data Integrations (Crew/Aircraft ↔ OCC ↔ External) - All crew bases operated by [Airline Client] at programme commencement - Regulatory frameworks: [Applicable CAA / FTL Regulation, e.g. EU-OPS, CAR-OPS, GCAA, etc.]	- Revenue Management & Network Planning Systems - Ground Handling & Ramp Operations Systems - Passenger Services & Check-In Systems - Maintenance, Repair & Overhaul (MRO) Systems (except data interface requirements) - Cargo Operations - Catering & Ancillary Services - Fleet Acquisition or Financing Decisions - HR / Payroll Systems (except data interface requirements) - Any airline subsidiary or code-share partner operations not explicitly agreed in writing

SCOPE CHANGE PROTOCOL

Any request to extend scope beyond the boundaries defined in this Charter must be submitted in writing to the OpsX Engagement Lead and the Airline Programme Sponsor. A formal Scope Change Request will be raised, assessed for timeline and resource impact, and must receive written approval from the Airline Programme Sponsor before any additional work commences.

1.4 Programme Governance

Role	Name / Organization	Responsibilities
Airline Programme Sponsor	[Sponsor Name]	Provides executive authority, escalation endpoint, and final sign-off at Phase 5
Airline Programme Lead	[Lead Name]	Day-to-day coordination, stakeholder access management, and document approval
OpsX Engagement Lead	[OpsX Lead Name]	Leads all elicitation, analysis, and documentation; accountable for deliverable quality
OpsX Senior Advisor	[OpsX Advisor Name]	Quality assurance, peer review of all requirements; independent challenge function
IOCC Domain Leads	[Names by domain]	Subject matter authority for each IOCC functional domain; approve domain-specific outputs
IT / Systems Lead	[IT Lead Name]	Technical authority for interface inventory, architecture, and non-functional constraints
Regulatory & Compliance Lead	[Compliance Lead Name]	Authority on applicable FTL, CAA, and data protection obligations

1.4.1 Escalation & Decision Protocol

- Operational decisions (interview scheduling, document requests, minor scope clarifications): resolved between OpsX Engagement Lead and Airline Programme Lead within 48 hours.
- Scope or timeline decisions: escalated to Airline Programme Sponsor. Response required within 5 business days.
- Stakeholder non-participation or access disputes: escalated immediately to Airline Programme Sponsor for resolution.
- Phase gate approval delays: OpsX will issue a formal written notice after 5 business days. Continued delay beyond 10 business days will trigger a programme timeline review.

1.5 Programme Timeline & Key Milestones

#	Phase	Duration	Planned Start	Planned End	Gate Milestone
1	Mobilization & Scoping	1–2 weeks	[Start Date]	[End Date]	Scoping Charter Signed
2	Current State Discovery	2–4 weeks	[Start Date]	[End Date]	Baseline Report Approved
3	Gap Analysis	1–2 weeks	[Start Date]	[End Date]	Gap Register Approved
4	Requirements Elicitation & Documentation	2–4 weeks	[Start Date]	[End Date]	Draft RTM Completed
5	Validation & Sign-Off	1 week	[Start Date]	[End Date]	RTM Baselined & Signed

1.6 Deliverable Register

Deliverable	Phase	Target Date	Approval Authority
Signed Scoping Charter	1	[DD MMM YY]	Airline Programme Sponsor
Stakeholder Map & Interview Schedule	1	[DD MMM YY]	Airline Programme Lead
Document Review Log	1	[DD MMM YY]	OpsX Engagement Lead
Domain-Specific Interview Guides	1	[DD MMM YY]	OpsX Engagement Lead + IOCC Domain Leads
Phase 1 Completion Sign-Off	1	[DD MMM YY]	Airline Programme Sponsor
Current State Operational Baseline Report	2	[DD MMM YY]	Airline Programme Lead
Workflow Process Maps	2	[DD MMM YY]	Airline Programme Lead
Pain Point & Workaround Catalogue	2	[DD MMM YY]	OpsX Engagement Lead
System & Interface Inventory	2	[DD MMM YY]	IT / Systems Lead
Prioritized Gap Register	3	[DD MMM YY]	IOCC Director
Desired State Definition Document	3	[DD MMM YY]	IOCC Director
Draft Requirements Traceability Matrix (RTM)	4	[DD MMM YY]	OpsX Engagement Lead
Validated & Baselined RTM	5	[DD MMM YY]	All Phase 5 Signatories

1.7 Assumptions & Dependencies

- The Airline Client will designate a Programme Lead who has the authority to schedule stakeholder interviews and confirm document access within 5 business days of this Charter being signed.
- All stakeholders identified in the Stakeholder Map will be made available for interviews within the agreed engagement window. OpsX will provide a minimum of 5 business days' notice for all scheduled sessions.
- The Airline Client will provide OpsX with access to all relevant operational documents, system documentation, and regulatory correspondence listed in the Document Review Log within 10 business days of Charter signature.
- OpsX's role is that of an independent, technology-neutral advisor. No commercial relationship exists between OpsX and any IOCC system vendor. This independence must not be compromised by airline requests for vendor-specific guidance during the requirements process.
- Stakeholder interview recordings will be retained by OpsX in a secure environment for the duration of the engagement and deleted no later than 12 months post-programme completion, unless a longer retention period is required by contract.
- All programme documents produced by OpsX are the intellectual property of [Airline Client] upon final payment and programme completion. OpsX retains the right to use anonymized methodological learnings for internal quality improvement purposes.

1.8 Charter Sign-Off

CHARTER APPROVAL — PHASE 1 GATE CRITERION

By signing below, the Airline Programme Sponsor confirms that the programme scope, boundaries, governance structure, timeline, and deliverable register documented in this Charter are agreed and that OpsX Consult is authorized to proceed to Phase 2 fieldwork upon completion of all Phase 1 activities.

AIRLINE PROGRAMME SPONSOR		OPSX ENGAGEMENT LEAD	
Name:		Name:	
Title / Organization:		Title / Organization:	
Signature:		Signature:	
Date:		Date:	

02

Stakeholder Map

Contact details, roles, domain focus, and confirmed interview schedule

The Stakeholder Map is the single most important planning output of Phase 1. It identifies every individual whose operational knowledge, decision-making authority, or system dependency makes them a material contributor to the requirements process. All stakeholder interviews must be confirmed before Phase 1 gate sign-off.

PRIORITY KEY

Interview Priority Classification: P1 = Critical - must be interviewed before Phase 2 fieldwork commences. P2 = Important - must be interviewed within Phase 2.

All P1 interviews must be confirmed with dates before the Phase 1 gate sign-off is issued.

ID	Name & Title	Department	Domain Focus	Format	Priority	Date	OpsX Lead	Key Focus Areas
SH-001	[IOCC Director / Head of Operations] IOCC Director	Operations	All Domains	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Executive framing session - strategic priorities, ROI expectations, regulatory pressures
SH-002	[Senior Operations Controller] Senior Operations Controller	OCC	OCC — IROPS / Flight Tracking	Individual — 90 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	IROPS decision workflow, delay coding, manual workarounds in live ops
SH-003	[Flight Dispatcher A] Flight Dispatcher	OCC	OCC — Flight Planning	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Flight release processes, weather decision tools, fuel management workflow
SH-004	[Flight Dispatcher B] Flight Dispatcher	OCC	OCC — Flight Planning	Individual — 60 min	P2	[DD MMM] [HH:MM]	[OpsX Advisor]	Night shift operations, reduced-staff workflow differences
SH-005	[Crew Planning Manager] Manager — Crew Planning	Crew	Crew Planning & Pairings	Individual — 90 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Long-haul pairing logic, CBA rule sets, optimisation horizon, roster quality metrics
SH-006	[Crew Rostering Lead] Crew Rostering Supervisor	Crew	Crew Rostering & Bid Management	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Bid round process, fairness rules, exception handling, crew preference management
SH-007	[Crew Tracking Supervisor A] Crew Tracking Supervisor	Crew	Crew Tracking — Day-of-Ops	Individual + Observation	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Day-of-ops crew replacement workflow, sign-

ID	Name & Title	Department	Domain Focus	Format	Priority	Date	OpsX Lead	Key Focus Areas
	Crew Tracking Supervisor							in/out procedures, legality check processes
SH-008	[Crew Tracking Supervisor B] Crew Tracking Supervisor	Crew	Crew Tracking — Day-of-Ops	Individual + Observation	P1	[DD MMM] [HH:MM]	[OpsX Advisor]	Weekend/bank holiday crew management, fatigue call-out handling
SH-009	[Crew Training Coordinator] Crew Training Coordinator	Crew Training	Crew Training & Qualification Tracking	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Qualification expiry management, simulator scheduling, regulatory training reporting
SH-010	[FTL / FRMS Compliance Officer] FTL Compliance Officer	Safety & Compliance	FTL / FRMS — All Domains	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	FTL rule enforcement, FRMS approval status, near-miss reporting, regulatory correspondence
SH-011	[IT Systems Administrator] IOCC Systems Administrator	IT / Technology	All — Technical	Technical Workshop — 2–3 hrs	P1	[DD MMM] [HH:MM]	[OpsX Lead]	System architecture, interface inventory, API landscape, data flows, performance constraints
SH-012	[Finance / Commercial Analyst] Commercial Analyst	Finance	All — Commercial	Individual — 45 min	P2	[DD MMM] [HH:MM]	[OpsX Advisor]	Delay cost models, crew cost parameters, overtime rules, financial KPIs
SH-013	[Regulatory & Compliance Manager] Regulatory Affairs Manager	Safety & Compliance	All — Regulatory	Individual — 60 min	P1	[DD MMM] [HH:MM]	[OpsX Lead]	CAA obligations, data protection requirements, SMS data needs, audit trail obligations
SH-014	[Crew Self-Service Champion / Rep] Crew Representative	Crew Operations	Crew — Self-Service	Individual — 45 min	P2	[DD MMM] [HH:MM]	[OpsX Advisor]	Crew-facing portal usability, swap request workflow, notification preferences
SH-015	[IROPS Focus Group] Multi-stakeholder Group	OCC + Crew	Cross-domain — IROPS	Focus Group Workshop — 2–3 hrs	P1	[DD MMM] [HH:MM]	[OpsX Lead]	Cross-departmental IROPS workflow, data handoff, decision authority, communication protocols

2.2 Interview Schedule Summary

Session Type	Count	Total Hours (Est.)	Phase Target	Scheduling Status
Individual Stakeholder Interviews (60 min)	10	10.0 hrs	Phase 1–2	Scheduling in progress — all to be confirmed before Phase 1 gate
Individual Stakeholder Interviews (90 min)	3	4.5 hrs	Phase 2	Scheduling in progress
Individual Stakeholder Interviews (45 min)	2	1.5 hrs	Phase 2	Scheduling in progress
Technical Workshop (IT / Architecture)	1	2.5 hrs	Phase 2	To be confirmed
IROPS Cross-Domain Focus Group Workshop	1	2.5 hrs	Phase 2	To be confirmed — max 8 participants
IOCC Process Observation (Gemba) Sessions	2	4.0 hrs	Phase 2	Requires IOCC access approval
TOTAL	19 sessions	~25 hours	Phases 1–2	All P1 sessions to be confirmed at Phase 1 gate

03

Document Review Log

Complete inventory of reviewed documentation with gap analysis and Phase 2 actions

All documentation collected prior to Phase 2 fieldwork is catalogued below. Each document has been reviewed by OpsX against its completeness for requirements elicitation purposes. Identified documentation gaps are recorded and translated into specific actions for Phase 2 stakeholder interviews. The completeness assessment uses three classifications: **Complete**: document is current and sufficient; **Partial**: document exists but contains material gaps; **Incomplete**: document is absent, severely outdated, or insufficient to serve as a requirements source.

Doc ID	Document Name	Document Type	Date Reviewed	Domain Coverage	Completeness	Gaps Identified	Phase 2 Action Required
DOC-001	IOCC Standard Operating Procedures — Crew Tracking	SOP	[DD MMM]	Crew Tracking	Partial	Section 4 (crew replacement escalation) is missing. No documented process for fatigue call-out management. Last updated [Year] — does not reflect current FTL amendment.	Gaps to be addressed in SH-007 and SH-008 interview guides
DOC-002	IOCC Standard Operating Procedures — Operations Control	SOP	[DD MMM]	OCC — IROPS / Flight Tracking	Partial	IROPS decision tree references legacy system screen names that no longer exist. No documented delay reason code taxonomy. Section on aircraft swap approval authority is absent.	Gaps to be addressed in SH-002, SH-003 interview guides and IROPS focus group
DOC-003	Crew Planning System — User Guide (v[X])	System User Guide	[DD MMM]	Crew Planning & Pairings	Incomplete	Optimisation parameter documentation is absent. Rostering module user guide not included. API documentation not provided — required for interface requirements.	Request API documentation; gaps addressed in SH-005 and SH-011 sessions
DOC-004	Operations Control System — User Guide (v[X])	System User Guide	[DD MMM]	OCC — All Functions	Partial	Real-time flight tracking module documentation is version [X-2] — does not reflect current deployment. Integration documentation with crew system is absent.	Request updated documentation; gap to be addressed in SH-011 technical workshop

Doc ID	Document Name	Document Type	Date Reviewed	Domain Coverage	Completeness	Gaps Identified	Phase 2 Action Required
DOC-005	IT System Architecture Diagram (IOCC) — [Version]	Technical Architecture	[DD MMM]	All — Technical	Partial	Diagram does not show data flow direction or payload specifications. External system interfaces (Airport AODB, MET service, ACARS) are noted but not documented. No disaster recovery architecture shown.	Complete interface inventory during SH-011 technical workshop
DOC-006	Delay & Disruption Post-Mortem Reports (12 months)	Operational Reports	[DD MMM]	OCC — All; Crew Tracking	Complete	Reports confirm recurring manual workaround for crew legality check (reported 23 times in 12 months). No structured root cause categorization applied — limits gap analysis traceability.	Use as primary evidence for process and functional gap identification in Phase 3
DOC-007	Collective Bargaining Agreement (CBA) — Pilot Group [Year]	Regulatory / Contractual	[DD MMM]	Crew Planning / Rostering	Complete	CBA contains 47 specific scheduling rules. Unclear which are currently enforced by system vs. manually monitored. Mapping to system capability required.	Develop CBA rule inventory; address in SH-005 and SH-006 sessions
DOC-008	Flight Time Limitation (FTL) Regulatory Framework — [CAA]	Regulatory Document	[DD MMM]	All Crew Domains; FRMS	Complete	Regulation references FRMS approval requirements — current system's FRMS approval status not confirmed in documentation. Reporting obligation schedules not mapped to system capability.	Address in SH-010 and SH-013 sessions; confirm FRMS approval status
DOC-009	Existing SLA Performance Records — System Availability (12 mths)	Performance Records	[DD MMM]	All — Technical	Partial	SLA data shows 3 unplanned outage events exceeding 2 hours in the review period. No documented RTO or RPO targets found. Planned maintenance downtime not segregated from unplanned.	Use to inform availability and resilience non-functional requirements
DOC-010	Data Protection & Privacy Assessment (GDPR / [Local])	Compliance Document	[DD MMM]	All — Data	Incomplete	Assessment predates current system deployment. Crew personal data handling obligations not mapped to system data fields. Data residency requirements for cloud deployment not documented.	Address in SH-013 session; may generate interface and non-functional requirements

Doc ID	Document Name	Document Type	Date Reviewed	Domain Coverage	Completeness	Gaps Identified	Phase 2 Action Required
DOC-011	Organizational Chart — IOCC Functions & Reporting Lines	Organizational	[DD MMM]	All	Complete	Chart is current. Authority matrix for IROPS decision-making is not shown — will be explored in SH-002 and focus group sessions.	Use to validate stakeholder map coverage; no further action required
DOC-012	CAA / Safety Management System (SMS) Requirements	Regulatory Document	[DD MMM]	All — Safety	Partial	SMS manual references data collection requirements that may necessitate specific IOCC system output formats. Requirements not currently documented.	Address in SH-013 session; likely to generate specific interface requirements

3.2 Documentation Gap Summary

Completeness Category	Count	Required Action Before Phase 2
Complete — No material gaps	2 documents	No action required. Use as primary Phase 2 evidence source.
Partial — Material gaps identified	8 documents	Gaps must be addressed through targeted interview questions in the relevant domain interview guides. All partial documents are cross-referenced in interview guide preparation.
Incomplete — Not sufficient as requirements source	2 documents	Escalate to Airline Programme Lead to obtain current versions or confirm unavailability. If unavailable, mark as evidence gap in Phase 2 baseline report.

3.3 Outstanding Document Requests

The following documents have been formally requested from the Airline Client and are pending receipt. Phase 2 fieldwork may commence in non-dependent domains while these are awaited; however, all documents must be received before the relevant domain interview sessions are conducted.

Document Requested	Requested From	Date Requested	Status
Crew Planning System — API Documentation	IT Systems Administrator	[DD MMM]	Awaited
FRMS Approval Certificate ([CAA])	FTL Compliance Officer	[DD MMM]	Awaited
Updated Operations Control System User Guide (current version)	IT Systems Administrator	[DD MMM]	Awaited
Current Data Protection Impact Assessment (DPIA)	Regulatory Affairs Manager	[DD MMM]	Awaited
Delay Reason Code Taxonomy / Codebook	OCC Manager	[DD MMM]	Awaited

04

Domain-Specific Interview Guides

Reviewed and approved elicitation toolkits for each stakeholder group

Each interview guide has been developed for a specific stakeholder group and domain of the IOCC. Guides are structured in six sections following the OpsX structured interview methodology: Context Setting, Current State Mapping, Pain Points & Workarounds, Future State Aspirations, Regulatory & Compliance Probing, and Closing & Validation. Interviewers follow the guide as a structured framework but are trained to pursue operationally significant threads that emerge beyond the listed questions.

GUIDE APPROVAL PROTOCOL

All interview guides must be reviewed and approved by the OpsX Engagement Lead before use. Guides must not be shared with stakeholders in advance of their interview session. Post-interview, completed notes and any supplementary questions added in session must be filed against the guide reference ID within 24 hours.

Guide ID	Stakeholder Group	Domain	Format	Prepared By	Approved By
IG-OCC-001	Operations Controllers & Flight Dispatchers	Operations Control — IROPS, Flight Tracking, Delay Management	Individual (60–90 min) + IROPS Focus Group	[OpsX Lead]	[Approval Sign]
IG-CREW-001	Crew Planning Managers	Crew Planning & Pairing Optimisation, Rostering & Bid Management	Individual (90 min)	[OpsX Lead]	[Approval Sign]
IG-CREW-002	Crew Tracking Supervisors & Administrators	Crew Tracking — Day-of-Operations, FTL Legality, Crew Communication	Individual (90 min) + Process Observation (Gemba Session)	[OpsX Lead]	[Approval Sign]
IG-CREW-003	Crew Training Coordinators	Crew Training & Qualification Tracking, Regulatory Training Reporting	Individual (60 min)	[OpsX Lead]	[Approval Sign]
IG-TECH-001	IT / Systems Administrators	System Architecture, Interface Inventory, Non-Functional Requirements	Technical Workshop (2–3 hours)	[OpsX Lead]	[Approval Sign]

IG-OCC-001 | Interview Guide

Operations Controllers & Flight Dispatchers

Operations Control — IROPS, Flight Tracking, Delay Management

Applicable Stakeholders	SH-002, SH-003, SH-004
Interview Format & Duration	Individual (60–90 min) + IROPS Focus Group
Approval Status	APPROVED - [OpsX Engagement Lead] [DD Month YYYY]

INTERVIEWER GUIDANCE

Discovery Rule: Never accept a description of how the system should work as a description of how it does work. Always probe for the actual step-by-step process, and always ask: 'And what do you do when the system cannot do that?'

A — Context Setting & Role Orientation

1. Please describe your role and your primary responsibilities within the IOCC - what are the first things you look at when you start a shift?
2. How long have you been in this role? Have you worked with different systems or at other carriers? If so, what were the most significant differences?
3. On a typical day, what are the three or four most time-consuming tasks you perform, and which systems are involved at each step?
4. Who do you interact with most frequently during your shift - both within the IOCC and externally - and through what channels?

B — Current State Workflow Mapping

5. Walk me through your standard process from the moment you identify a potential flight delay to the point at which a final decision is communicated to all affected parties. What systems do you touch at each step?
6. When an aircraft goes AOG, describe the exact sequence of actions you take in the first 15 minutes. Which system or person provides the initial notification?
7. How do you assess crew legality for a replacement assignment during a disruption? What information do you need, where do you get it, and how long does the check typically take?
8. Describe your process for aircraft swapping during a disruption - what data inputs do you require, who has authority to approve, and what does that approval process look like in the system?
9. How do you manage communication with inbound and outbound crews during an IROPS event? What tools do you use, and where are the gaps in that communication chain?
10. Describe your end-of-shift handover process. What information must be transferred, how is it captured, and what is the risk if a handover is incomplete?

C — Pain Points, Workarounds & System Limitations

11. What is the single most time-consuming manual task you perform that you believe should be automated? Walk me through exactly what that manual process involves.
12. When does the current system fail you most critically during a live disruption? What do you do when it cannot provide what you need?
13. Do you rely on spreadsheets, whiteboards, printed documents, or phone calls to perform tasks that you would expect the system to handle? If so, describe each workaround.

14. Have there been instances in the past 12 months where a system failure or data inaccuracy directly caused a delay to be extended, a crew legality breach to occur, or a significant operational decision to be delayed?
15. What data is consistently missing, late, or inaccurate in your current system view that most affects your ability to make decisions quickly?
16. How does the system perform during peak disruption scenarios (e.g., weather events, major fleet technical issues)? Does it slow down, produce errors, or require manual override?

D — Future State Aspirations

17. If you could redesign the IROPS decision workflow in an ideal system, what would the first screen you see during a disruption show, and what actions would it enable with a single click?
18. What automation would have the most immediate positive impact on your workload during a disruption? Be as specific as possible about what the system should do automatically versus what should remain a controller decision.
19. What information from other parts of the operation - crew, ground handling, engineering, airport - do you most need in real-time but currently cannot access directly from your workstation?
20. How would you want the system to support collaborative decision-making with crew planning, ground operations, and airport authorities during a major IROPS event?

E — Regulatory & Compliance Probing

21. Which FTL rules does the current system enforce automatically, and which require you to manually check crew duty and rest records?
22. Have you ever experienced a situation where a crew assignment was made that later proved to be non-compliant with FTL requirements? If so, at what point was the breach identified, and what happened as a result?
23. What delay reason codes does the system provide, and do they align with the codes required by your regulatory authority for reporting purposes?
24. Are you aware of any audit findings or regulatory correspondence related to IOCC system compliance in the last three years? If so, what were the key issues?

F — Closing & Validation

25. Are there any aspects of your workflow or your system frustrations that we have not covered that you consider important for us to understand?
26. Of all the issues we have discussed today, which three would your priorities for immediate system improvement if you had to choose?
27. We will produce a summary of today's session for your review. Are you willing to validate that summary when it is circulated?
28. Are you available to participate in a validation session in the final phase of the programme to review the requirements as they have been documented?

POST-SESSION — INTERVIEWER CHECKLIST

Session recorded (with consent confirmed)	☐ Yes ☐ No
Notes reviewed and filed within 24 hours	☐ Completed by: _____ Date: _____
Key findings flagged for follow-up	☐ Follow-up items listed on reverse
Stakeholder availability confirmed for Phase 5 validation	☐ Confirmed ☐ TBC
Summary circulated to stakeholder for validation	☐ Date sent: _____

IG-CREW-001 | Interview Guide

Crew Planning Managers*Crew Planning & Pairing Optimisation, Rostering & Bid Management*

Applicable Stakeholders	SH-005, SH-006
Interview Format & Duration	Individual (90 min)
Approval Status	APPROVED - [OpsX Engagement Lead] [DD Month YYYY]

INTERVIEWER GUIDANCE

Discovery Rule: Never accept a description of how the system should work as a description of how it does work. Always probe for the actual step-by-step process, and always ask: 'And what do you do when the system cannot do that?'

A — Context Setting & Role Orientation

1. Describe your planning cycle - from the start of a planning period to the point at which crew rosters are published. What are the major phases and how long does each take?
2. What is your current planning horizon for long-haul pairings, short-haul pairings, and rosters respectively? What drives these horizons?
3. How many crew members, fleet types, and bases does your planning process cover, and does complexity differ materially between fleets?
4. Who are the key internal and external stakeholders you interact with during the planning process, and at what stage does each become involved?

B — Current State Workflow Mapping

5. Walk me through the pairing generation process step by step - from the receipt of an updated flying programme to the point at which legal, optimised pairings are ready for the rostering team. What does the system do, and what do you do manually?
6. How are CBA scheduling rules encoded in the current system? Are all rules active and enforced by the system, or do some require manual checking? Can you identify which rules are manually monitored?
7. Describe the bid round process - how are crew preferences collected, how are they weighted, and how does the system assign duties? At what point does manual intervention become necessary?
8. How does the current system handle irregular operations that require re-planning mid-cycle? Can it re-optimize from a live roster state, and if so, how long does that process take?
9. How does qualification and training data feed into the planning process? If a crew member is scheduled for training or has an expiring qualification, how does the system surface this during pairing or rostering?

C — Pain Points, Workarounds & System Limitations

10. What aspects of the current planning system require the most manual effort or judgment that you believe should be handled automatically by the system?
11. How often does the optimiser produce legally compliant but operationally undesirable pairings, and what do you do when this occurs? What is the typical volume of manual interventions required?
12. Describe any known optimisation limitations of the current system - are there objective functions, constraints, or crew groups it cannot handle correctly?

13. Does the system provide you with adequate tools to model the impact of different planning scenarios, such as fleet changes, base additions, or CBA amendments, before you commit to a plan?
14. What reporting and analytics capability does the current system provide for planning quality KPIs, and where are the gaps?

D — Future State Aspirations

15. If you could specify an ideal pairing optimisation engine, what objective functions and constraints would you want it to optimise simultaneously, and how would you want to set the relative weights?
16. How would you like the system to support continuous re-optimisation as the operating day unfolds, balancing forward-plan stability with real-time operational recovery?
17. What self-service capability do you believe crew members should have in the new system, and how should the system manage the interaction between crew preferences and planning constraints?
18. Describe the ideal integration between crew planning and crew tracking - what data should flow in real-time between the two functions, and what automated alerts should the system generate?

E — Regulatory & Compliance Probing

19. How many distinct FTL rule sets does your planning process need to enforce across your crew groups, and does the current system handle all of them within a single planning environment?
20. What is your FRMS approval status with the relevant regulatory authority, and how does the current system support FRMS monitoring and reporting obligations?
21. Are there any known gaps between the FTL rules the system enforces and the full regulatory requirement that result in manual compliance checks?
22. What audit trail does the system provide for pairing and rostering decisions, and is this sufficient to satisfy regulatory inspection requirements?

F — Closing & Validation

23. Are there any planning challenges, system limitations, or regulatory obligations we have not discussed that you consider material for the requirements process?
24. If you ranked the top three system improvements by operational impact, what would they be?
25. Are you willing to review and validate the session summary when circulated, and to participate in the Phase 5 requirements validation workshop?

POST-SESSION — INTERVIEWER CHECKLIST	
Session recorded (with consent confirmed)	☐ Yes ☐ No
Notes reviewed and filed within 24 hours	☐ Completed by: _____ Date: _____
Key findings flagged for follow-up	☐ Follow-up items listed on reverse
Stakeholder availability confirmed for Phase 5 validation	☐ Confirmed ☐ TBC
Summary circulated to stakeholder for validation	☐ Date sent: _____

IG-CREW-002 | Interview Guide

Crew Tracking Supervisors & Administrators

Crew Tracking — Day-of-Operations, FTL Legality, Crew Communication

Applicable Stakeholders	SH-007, SH-008
Interview Format & Duration	Individual (90 min) + Process Observation (Gemba Session)
Approval Status	APPROVED — [OpsX Engagement Lead] [DD Month YYYY]

INTERVIEWER GUIDANCE

Discovery Rule: Never accept a description of how the system should work as a description of how it does work. Always probe for the actual step-by-step process, and always ask: 'And what do you do when the system cannot do that?'

A — Context Setting & Role Orientation

1. Describe your typical shift structure and the volume of crew events - sign-ins, sign-outs, replacements, fatigue calls, you typically manage per shift.
2. What are the primary systems you interact with, and what is the sequence in which you use them as a shift unfolds?
3. Who do you coordinate with most frequently during day-of-operations, and how do you communicate with them (system message, phone, radio, etc.)?

B — Current State Workflow Mapping

4. Walk me through your process from the moment you receive a crew fatigue call-out to the point at which a legal replacement has been found, assigned, and communicated to all relevant parties. Include every system interaction and phone call.
5. How does the system identify available legal standby or reserve crew for a specific disrupted duty? What data does it show you, and what do you have to calculate or verify manually?
6. Describe your FTL legality check process for a potential replacement assignment. What information do you review, and how long does that check typically take in the current system?
7. How do crew members communicate their availability, illness, or flight arrival status to the crew tracking team? What happens when communications fail or are delayed?
8. Describe your shift handover process - what must be formally transferred, and how is it documented in the system?

C — Pain Points, Workarounds & System Limitations

9. What is the most time-consuming manual task in your day-of-operations role, and what impact does it have on your ability to manage other concurrent crew events?
10. At what point in a crew replacement workflow does the current system most commonly fail you, and what do you do to compensate?
11. Do you maintain any offline records e.g., spreadsheets, whiteboards, physical logs, to track information that the system should be providing? If so, describe them.
12. How accurate and timely is the crew sign-in/sign-out data in the system? Are there regular discrepancies, and what causes them?
13. How does the system handle situations where a replacement crew member is on standby at a different base? Can it show cross-base legality and logistics simultaneously?

D — Future State Aspirations

14. Describe the ideal crew tracking workflow screen for managing a disruption event with five simultaneous crew vacancies. What information would it display, what actions would it enable, and what would it do automatically?
15. What automated alerts or decision support would have the greatest impact on your ability to manage crew events quickly and accurately?
16. How should the new system facilitate real-time communication between crew trackers, operations controllers, and crew members during a disruption?

E — Regulatory & Compliance

17. Which FTL limits are checked automatically by the current system before a replacement assignment is confirmed, and which require you to manually verify crew duty and rest records?
18. Has the current system ever failed to flag a legality breach during a live assignment? If so, how was the breach identified?
19. How does the system document the basis for each crew replacement decision, and is this sufficient for regulatory audit purposes?

F — Closing & Validation

20. Are there any crew tracking challenges or system limitations we have not discussed that are important for the requirements process?
21. What are your top three system improvements, ranked by operational impact?
22. Are you willing to review and validate the session summary and participate in Phase 5 validation?

POST-SESSION — INTERVIEWER CHECKLIST

Session recorded (with consent confirmed)	☐ Yes ☐ No
Notes reviewed and filed within 24 hours	☐ Completed by: _____ Date: _____
Key findings flagged for follow-up	☐ Follow-up items listed on reverse
Stakeholder availability confirmed for Phase 5 validation	☐ Confirmed ☐ TBC
Summary circulated to stakeholder for validation	☐ Date sent: _____

IG-CREW-003 | Interview Guide

Crew Training Coordinators

Crew Training & Qualification Tracking, Regulatory Training Reporting

Applicable Stakeholders	SH-009
Interview Format & Duration	Individual (60 min)
Approval Status	APPROVED — [OpsX Engagement Lead] [DD Month YYYY]

INTERVIEWER GUIDANCE

Discovery Rule: Never accept a description of how the system should work as a description of how it does work. Always probe for the actual step-by-step process, and always ask: 'And what do you do when the system cannot do that?'

A — Context Setting & Role Orientation

1. Describe your role and the scope of crew qualifications, recurrency events, and training programmes you are responsible for managing.
2. How many distinct qualification types, regulatory training events, and simulator programmes does your training schedule cover?
3. What are the regulatory reporting obligations for training records, and to which authority is these reported?

B — Current State Workflow Mapping

4. How does the current system identify crew members with expiring qualifications, and what is the workflow from identification to scheduling resolution?
5. Describe how training events are scheduled in the current system i.e., how does training scheduling interact with rostering to avoid roster disruption, and where does this integration break down?
6. How are training completion records entered into the system, and how quickly does a qualification record update after a training event occurs?
7. What happens in the system when a crew member's qualification expires unexpectedly before a scheduled training event? How is this surfaced and escalated?

C — Pain Points, Workarounds & System Limitations

8. What qualification types or training events does the current system fail to track correctly, requiring you to maintain separate records?
9. How much manual effort is involved in producing regulatory training reports? Describe the process and the volume of data manipulation required.
10. How does the system handle crew members who hold qualifications on multiple aircraft types? Are there known issues with multi-type tracking?
11. What is the most common error or omission in training records, and how are they detected and corrected?

D — Future State Aspirations

12. Describe your ideal automated qualification expiry management process - what should the system do, when should it act, and what should it escalate to a human decision?
13. How should training scheduling integrate with crew rostering and tracking in the new system, and what real-time visibility would you want across all three functions?
14. What regulatory reporting capability would you want from the new system - format, frequency, and content?

E — Regulatory & Compliance

15. Which regulatory training reporting obligations does the current system currently fail to support natively?
16. Are there any open findings from regulatory training audits that relate to system capability gaps?

F — Closing & Validation

17. Are there any training coordination challenges or system limitations we have not covered?
18. What are your top three priority improvements for training and qualification management?
19. Are you available for session summary review and Phase 5 validation participation?

POST-SESSION — INTERVIEWER CHECKLIST

Session recorded (with consent confirmed)	☐ Yes ☐ No
Notes reviewed and filed within 24 hours	☐ Completed by: _____ Date: _____
Key findings flagged for follow-up	☐ Follow-up items listed on reverse
Stakeholder availability confirmed for Phase 5 validation	☐ Confirmed ☐ TBC
Summary circulated to stakeholder for validation	☐ Date sent: _____

IG-TECH-001 | Interview Guide

IT / Systems Administrators

System Architecture, Interface Inventory, Non-Functional Requirements

Applicable Stakeholders	SH-011
Interview Format & Duration	Technical Workshop (2–3 hours)
Approval Status	APPROVED — [OpsX Engagement Lead] [DD Month YYYY]

INTERVIEWER GUIDANCE

Discovery Rule: Never accept a description of how the system should work as a description of how it does work. Always probe for the actual step-by-step process, and always ask: 'And what do you do when the system cannot do that?'

A — Current System Landscape Overview

1. Please provide an overview of every system currently in use within the IOCC environment - including system name, vendor, version, deployment model (on-premise / cloud / hybrid), primary user group, and approximate age of the current deployment.
2. Which systems are considered primary (i.e., operational decision-making relies on them in real-time) versus secondary (reporting, analytics, reference)?
3. What is the current licensing model for each primary system, and when does each contract expire?

B — Integration & Interface Inventory

4. Please describe every interface between the IOCC systems and external systems. For each interface, identify: the systems connected, the data exchanged, the direction of flow, the frequency / trigger, the protocol (API, SFTP, messaging, etc.), and the current reliability and latency of that interface.
5. Which external systems does the IOCC receive data from in real-time, and which operate on batch or manual data exchange? Where are the real-time gaps most operationally significant?
6. Are there any interface dependencies between the current IOCC systems and systems outside the scope of this engagement (e.g., MRO, HR payroll) that a new IOCC system would need to replicate?
7. Are there ACARS, AODB, airport messaging, or meteorological service integrations in scope? What protocol and data standards are used?

C — Performance, Availability & Resilience

8. What are the documented uptime SLA targets for each primary IOCC system, and what has actual availability been over the past 12 months?
9. What are the defined Recovery Time Objective (RTO) and Recovery Point Objective (RPO) for each primary system? Are these formally documented and tested?
10. How does the system perform during peak concurrent user periods - for example, during a major weather event where all controllers and planners are active simultaneously? Are there known performance degradation patterns?
11. What scheduled maintenance windows are currently required, and how are they managed relative to operational requirements?
12. Has the current system experienced any data loss events or corruption incidents? If so, describe what occurred and how it was resolved.

D — Security, Access & Data Governance

13. What user authentication and authorization model does the current system use? Is role-based access control in place, and how is it managed?
14. Where is the crew and operational data stored: on-premise, cloud, or hybrid? Are there documented data residency requirements that constrain future deployment options?
15. What data encryption standards are applied at rest and in transit for current IOCC systems?
16. What audit logging capability does the current system provide: what user actions are recorded, how long are logs retained, and can they be exported for regulatory review?

E — Future State Technical Constraints & Preferences

17. Are there any corporate IT architecture standards, cloud provider preferences, or security frameworks that a replacement IOCC system must conform to?
18. What internal IT resources would be available to support a system implementation - project management, data migration, integration development, user acceptance testing?
19. Are there any planned changes to the airline's IT infrastructure in the next 24 months that could affect the IOCC system selection or implementation (e.g., ERP replacement, network upgrades, cloud migration)?
20. What are the airline's minimum requirements for system documentation, training support, and vendor maintenance and support response times?

F — Closing & Validation

21. Are there any technical constraints, architectural dependencies, or infrastructure limitations we have not covered that are material for the requirements process?
22. Are you available to review the interface inventory and non-functional requirements sections of the RTM in Phase 4, and to participate in the Phase 5 validation workshop?

POST-SESSION — INTERVIEWER CHECKLIST

Session recorded (with consent confirmed)	☐ Yes ☐ No
Notes reviewed and filed within 24 hours	☐ Completed by: _____ Date: _____
Key findings flagged for follow-up	☐ Follow-up items listed on reverse
Stakeholder availability confirmed for Phase 5 validation	☐ Confirmed ☐ TBC
Summary circulated to stakeholder for validation	☐ Date sent: _____

05

Phase 1 Completion Sign-Off

Formal gate approval from the Airline Programme Sponsor to proceed to Phase 2

PHASE 1 GATE CRITERION — GATE 1 (Phase 1 → Phase 2)

Gate 1 Criterion: Before proceeding to Phase 2 Current State Discovery, the Scoping Charter must be formally approved by the Airline Programme Sponsor, all P1 stakeholder interviews must be confirmed with agreed dates, interview guides must be reviewed and approved, and the Document Review Log must be completed. This sign-off document serves as the formal record that all Gate 1 criteria have been met.

5.1 Phase 1 Completion Checklist

The following gate criteria must be verified as complete before Phase 1 sign-off is issued. Any criterion rated Incomplete or Pending must be resolved before the sign-off is granted. The OpsX Engagement Lead is responsible for completing this checklist and presenting it to the Airline Programme Sponsor at the Phase 1 gate review meeting.

Ref	Gate Criterion	Evidence / Documentation Reference	Status
GC-1.1	Scoping Charter formally completed, signed, and countersigned by the Airline Programme Sponsor and OpsX Engagement Lead.	Signed Scoping Charter — Document Reference: [SC-001]	COMPLETE
GC-1.2	All stakeholders identified and mapped against domain, role, interview format, and priority classification (P1 / P2).	Stakeholder Map — Document Reference: [SM-001]	COMPLETE
GC-1.3	All P1 (Critical) stakeholder interviews confirmed with agreed dates, times, interviewers, and session formats.	Interview schedule embedded in Stakeholder Map — all P1 sessions confirmed.	COMPLETE
GC-1.4	Document Review Log completed with all collected documentation reviewed, completeness assessed, and gaps recorded.	Document Review Log — Document Reference: [DRL-001]	COMPLETE
GC-1.5	Outstanding document requests formally issued to Airline Programme Lead with deadlines confirmed.	Outstanding Documents Register — see Document Review Log Section 3.3	COMPLETE
GC-1.6	Domain-specific Interview Guides prepared for all stakeholder groups and reviewed and approved by the OpsX Engagement Lead.	Interview Guides — Documents IG-OCC-001, IG-CREW-001, IG-CREW-002, IG-CREW-003, IG-TECH-001	COMPLETE
GC-1.7	Programme governance structure, communication protocol, and escalation pathway confirmed and documented in Scoping Charter.	Scoping Charter — Section 1.4	COMPLETE
GC-1.8	Deliverable register with target dates accepted by Airline Programme Lead.	Scoping Charter — Section 1.6	COMPLETE
GC-1.9	OpsX engagement team roles assigned and confirmed. All consultants briefed on programme objectives, stakeholder sensitivities, and quality standards.	Programme setup confirmed internally by OpsX Engagement Lead — [Date]	COMPLETE
GC-1.10	No unresolved scope disputes, access restrictions, or resource availability issues that would prevent Phase 2 fieldwork commencing on the planned date.	Confirmed by Airline Programme Sponsor at sign-off meeting — [Date]	COMPLETE

5.2 Phase 1 Summary Statement

Phase 1 Completion Assessment — OpsX Engagement Lead Statement

All ten Gate 1 criteria have been met. The programme scope is formally agreed and documented in the signed Scoping Charter. A complete Stakeholder Map has been produced identifying fifteen stakeholders across all in-scope IOCC functional domains, with all P1 sessions confirmed. The Document Review Log records twelve documents reviewed, with material gaps identified and translated into targeted interview guide questions. Five domain-specific Interview Guides have been prepared, reviewed, and approved for use in Phase 2 fieldwork. Outstanding document requests have been formally submitted with confirmed deadlines.

OpsX Consult is ready to proceed to Phase 2 Current State Discovery.
Phase 2 fieldwork is planned to commence on [DD Month YYYY].

5.3 Risk & Issues Register — Phase 1

Ref	Risk / Issue	Category	Severity	Mitigation / Action
R-1.1	Five documents remain outstanding at Phase 1 gate. Continued non-receipt may delay domain-specific interview sessions in Phase 2.	Resource Access	Medium	Airline Programme Lead to escalate to document owners. OpsX will proceed with non-dependent domain interviews while awaiting outstanding materials. Formal escalation to Programme Sponsor if not received within 5 business days of Phase 2 commencement.
R-1.2	IOCC process observation (Gemba) sessions are subject to operational access approval. Peak disruption periods may limit observer access.	Operational	Low–Medium	OpsX to agree observation scheduling protocol with IOCC Director. Alternative: video recording of live operations sessions with consent.
R-1.3	One P2 stakeholder (Crew Self-Service Representative, SH-014) has not yet confirmed interview availability.	Stakeholder	Low	Airline Programme Lead to confirm availability within the first week of Phase 2. If unavailable, a crew member survey will be used as a supplementary elicitation tool.
R-1.4	FRMS approval status with the relevant CAA is unconfirmed. This may materially affect the scope of FTL and FRMS requirements.	Regulatory	High	FTL Compliance Officer to provide written confirmation of FRMS status before SH-010 session. This is a critical pre-requisite for the regulatory requirements domain.

5.4 Phase 1 Formal Sign-Off

By signing below, the Airline Programme Sponsor formally confirms that all Gate 1 criteria have been reviewed and are satisfied; that OpsX Consult is authorized to proceed to Phase 2 Current State Discovery on the planned start date; and that all commitments made in the Scoping Charter regarding stakeholder access, document availability, and resource allocation remain in place.

AIRLINE PROGRAMME SPONSOR - SIGN-OFF	OPSX ENGAGEMENT LEAD - SIGN-OFF
Name:	Name:
Title / Organization:	Title / Organization:
Signature:	Signature:
Date Signed:	Date Signed:

Phase 1 — Mobilization & Scoping | COMPLETED

Authorized to proceed to Phase 2 — Current State Discovery