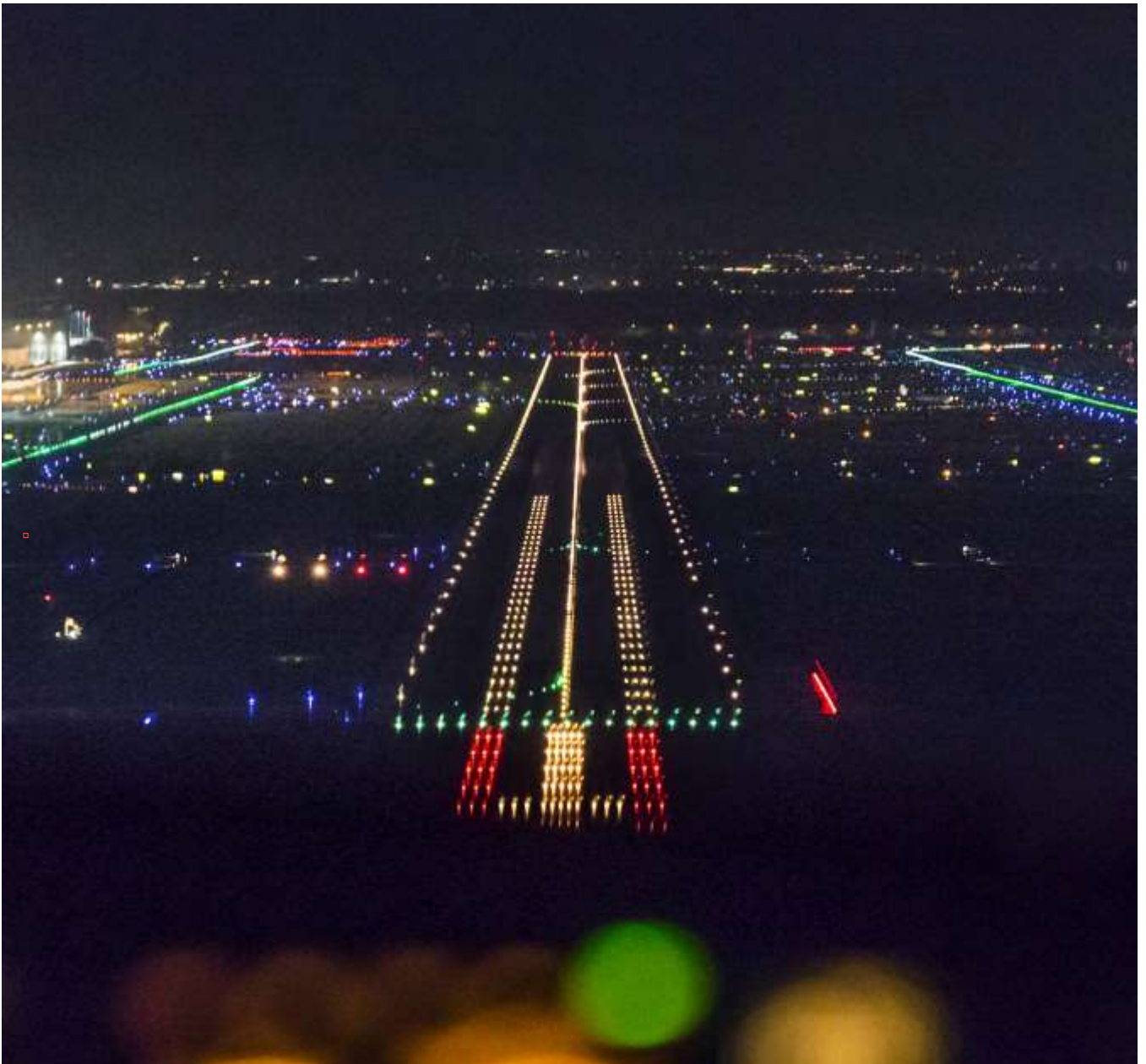




ART France – Mission de suivi économique et financier des aéroports

2023





1. Propos liminaires

Les discussions sur les aspects économiques et financiers des aéroports en France ont souvent lieu dans les Commissions Consultatives Economiques. Un nombre très limité de compagnies aériennes et associations sont conviés à ces commissions. IATA – à titre d'exemple – n'a pas le droit d'assister aux réunions en dehors de ceux pour Paris et Nice et dans la majorité des aéroports régulés – les compagnies non-Européennes ne sont pas invitées. Le travail de l'Autorité est capital pour informer toutes les branches du gouvernement, les usagers et le grand public de ce qui se passe dans le paysage aéroportuaire. Ce n'est que par le biais de ce travail que la performance financière et économique des aéroports sera mieux connue.

Le document 9082 de l'OACI qui fournit le cadre pour les redevances aéroportuaires au niveau mondial insiste sur l'importance de la transparence dans les discussions sur le sujet. Il existe effectivement une asymétrie d'information systématique entre les aéroports et leurs usagers. En France, les aéroports font l'objet de contrats de concessions et de cahiers des charges pour la fourniture des services publics aéroportuaires. Il est normal que la communauté – passagers, clients cargo et compagnies aériennes – puisse avoir de la visibilité de la situation économique et financière des aéroports.

A ce titre, nous attachons à notre réponse à cette consultation notre position sur la question de la transparence. Nous incluons aussi un document spécifique à l'Europe avec notre interprétation des informations qui devraient être communiqués par les aéroports. Nos prises de position actualisées sont téléchargeables depuis www.iata.org/airport-charges ou www.iata.org/airport-development. Nous remercions l'Autorité d'avoir lancé cette consultation publique sur un sujet très important.

2. Réponses aux questions de l'Autorité

2.1. Dans une démarche d'amélioration continue, quelles remarques et/ou propositions relatives au contenu et à la forme de la première édition souhaiteriez-vous porter à la connaissance de l'Autorité ? Afin de faciliter votre réponse, vous pouvez directement remplir le tableau ci-après :

Le rapport fournit un bon aperçu du marché aéroportuaire en France. Nous considérons que certains éléments pourraient en effet être étoffés, notamment s'agissant des investissements, la qualité de service et l'efficacité économique des aéroports. Le rapport devait comprendre un aperçu des infrastructures disponibles dans un aéroport (les pistes, terminaux, etc.) nécessaire pour mettre en perspective les performances relatives.

Nous considérons que la technologie moderne disponible permettrait à l'Autorité de compléter son rapport plutôt statique avec une plateforme en ligne qui permet aux lecteurs d'explorer les données eux-mêmes. Suivant l'exemple du FAA CATS mais aussi des systèmes de collecte d'informations IATA ou ACI, l'ART pourrait permettre la transmission standardisée électronique de l'information par les aéroports. L'Autorité pourrait libérer ses ressources pour se concentrer davantage sur l'analyse des résultats et les fiches thématiques.

L'analyse de l'Autorité se focalise sur les marchés directement desservis depuis les aéroports – sans prendre en compte suffisamment le lieu d'origine/destination finale. En termes économiques, il n'est pas pertinent de desservir certaines destinations car les volumes ne le justifient pas et des correspondances s'imposent. A cette fin, il faut intégrer davantage le concept d'origine-destination dans l'analyse de l'Autorité. De manière générale, l'Autorité pourrait étoffer davantage l'analyse sur la performance des aéroports – les entités régulés – possiblement en adaptant l'analyse détaillé de l'offre des compagnies aériennes.

Chapitre	Satisfaction générale	Éléments qui pourraient être ajoutés	Éléments qui pourraient être supprimés (ou simplifiés)
1 – Panorama du secteur aéroportuaire français	4	Intégration des informations sur les flux de passagers et cargo avec les lieux d'origine et destination finale.	<p>Un certain nombre de graphiques pourraient être plus utiles sous la forme d'une plateforme interactive et/ou n'ont pas besoin de commentaires pour être compris.</p> <p>Les informations sur la structure capitalistique pourraient être expliqués dans un simple tableau avec un commentaire uniquement pour les changements récents</p>
2 – Etat des lieux de l'activité aéroportuaire sur le périmètre de régulation de l'Autorité	3.5	<p>Information sur les infrastructures et la capacité des aéroports. (Pistes, sous-systèmes des terminaux passagers, analyse des <i>heures de pointe</i> au sens du manuel ADRM) et une comparaison avec l'utilisation des ressources.</p> <p>Intégration des informations sur les flux de passagers et cargo avec les lieux d'origine et destination finale. A titre d'exemple, dans la Figure 31, LYS présente un indice HHI de 1.00 pour l'Outre-Mer, car une seule compagnie aérienne opère des vols directs depuis LYS. Cependant ces vols ne représentent que 16% du marché – le reste étant réparti sur des correspondances sur plusieurs compagnies.¹</p>	<p>Un certain nombre de graphiques pourraient être plus utiles sous la forme d'une plateforme interactive et/ou n'ont pas besoin de commentaires pour être compris.</p> <p>Nous considérons que le partage de l'offre aérienne, en isolant les compagnies « bas coûts », est intéressante mais pas strictement nécessaire pour les besoins de la régulation économique. Ceci</p>

¹ Source: IATA DDS

Chapitre	Satisfaction générale	Éléments qui pourraient être ajoutés	Éléments qui pourraient être supprimés (ou simplifiés)
3 – Résultats financiers des sociétés aéroportuaires entrant dans le périmètre de l'Autorité		<p>Des informations sur le marché d'assistance en escale pourraient être pertinentes vu qu'en France plusieurs aéroports limitent le nombre d'assistants sur les plateformes.</p> <p>Des informations sur les activités non-aéronautiques (commerciales) seraient pertinentes pour l'ensemble des aéroports, peu importe le modèle de caisse</p>	<p>pourrait faire partie des aspects à mettre en seconde priorité</p>
		<p>Afin de pouvoir effectuer des comparaisons de la performance financière ou des analyses, l'Autorité devrait présenter :</p> <ul style="list-style-type: none"> • Une comparaison des recettes par mouvement (important pour le faisceau cargo) et des mesures des charges en fonction d'autres aspects tel des surfaces des terminaux, nombre de pistes, nombre de personnel • Des informations sur les investissements des aéroports (par catégorie, y compris le non-régulé) avec leur évolution • Une analyse plus poussée des sous-catégories des charges (personnel, énergie, sous-traitance, etc...), leur évolution, l'élasticité par rapport à la demande et la comparaison aux indices statistiques pertinents • Une analyse des coûts énergétiques, séparant les effets des prix et de la consommation • Davantage d'information sur l'endettement (typologie des dettes, lignes de crédit disponibles, maturité des 	<p>Nous considérons que les aspects environnementaux sont suffisamment importants pour être traité dans une section séparée du rapport.</p> <p>Un nombre important des graphiques, avec les données sous-jacentes pourraient être mises à disposition via une plateforme analytique</p>

Chapitre	Satisfaction générale	Eléments qui pourraient être ajoutés	Eléments qui pourraient être supprimés (ou simplifiés)
		<p>obligations, taux d'intérêts moyens, isolement des intérêts payés et reçus)</p> <ul style="list-style-type: none"> • Des ordres de grandeur de l'allocation des recettes, charges et actifs entre le périmètre régulé et non-régulé • Une comparaison de l'évolution de la qualité de service vs. les charges (e.g. corrélation entre le nombre de pannes vs. les dépenses de maintenance et le retour sur investissement des systèmes/méthodologies de gestion de la maintenance) • Une analyse de l'impact du modèle de caisse sur le marché (augmentation du niveau des redevances du fait d'aménagement de la caisse et conséquences sur les passagers) 	
Fiches Thématiques	3	<p>L'impact des modulations devrait être évalué par l'Autorité – autrement dit de vérifier que les objectifs poursuivis par la modulation se réalisent.</p> <p>L'impact négatif de la caisse double/hybride aurait dû être présenté</p>	



2.2. La démarche envisagée par l'Autorité, visant notamment à scinder sa mission de suivi en deux types de publication, appelle-t-elle des commentaires de votre part ?

Le travail effectué par l'Autorité est absolument critique pour l'industrie. Les consultations aéroportuaires en France étant fermées à la majorité des compagnies aériennes, cette publication est leur seule source d'information. La publication régulière dans un format stable permet d'accroître la transparence dans le marché.

Plutôt qu'une publication annuelle, une plateforme moderne mettant les informations à disposition des lecteurs serait potentiellement moins onéreuse pour l'Autorité à maintenir. Similairement, l'analyse des résultats pourrait être échelonnée sur l'année afin de réduire la charge de l'Autorité. (On pourrait imaginer une publication des articles trimestrielle avec des focus sur des thèmes particuliers) Dans cette logique, des rapports d'analyses et fiches thématiques pourraient être publiés au rythme qui convient à l'Autorité.

2.3. Question 3 – Qualité de Service

2.3.1 Quelles sont vos attentes relatives aux enjeux de qualité de service du point de vue des passagers ? Quels indicateurs mériteraient d'être plus particulièrement suivis par l'Autorité ?

La qualité de service doit effectivement prendre en compte les points de vue du passager et des compagnies aériennes qui sont – par rapport aux services aéroportuaires – généralement alignés. La prise de position *Airport Service Quality Frameworks* téléchargeable sur www.iata.org/airport-development contient les exemples d'indicateurs que l'Autorité devrait demander aux aéroports de transmettre.

IATA est à la disposition de l'Autorité pour discuter des indicateurs potentiels en détail.

2.3.2 L'étude ASQ réalisée par le représentant des aéroports, l'Airport Council International, peut-elle utilement, selon vous, constituer pour l'Autorité la base de suivi de la qualité de service du point de vue des passagers ? Mériterait-elle, le cas échéant, d'être complétée ? Si oui, de quelle façon ?

Le sondage ASQ est un produit commercial de l'ACI. Il peut en effet être utile à l'Autorité de se référer à ce sondage et partager les résultats, d'autant plus que ces résultats ne sont pas souvent mis à la disposition des usagers avec la comparaison entre aéroports.

Nous avons une préférence pour la mesure de la qualité – y compris vis-à-vis des passagers – basé sur des éléments factuels et objectifs. Les temps d'attente et la disponibilité des équipements font partie des indicateurs pertinents. Les sondages qualitatifs sont pertinents mais ont parfois des problèmes d'échantillonnage. Le parcours passager, le profil du passager et le temps disponible de celui-ci dans un aéroport peut limiter la disponibilité de certains types de passagers. De plus, en fonction des destinations, les passagers risquent de ne pas nécessairement avoir une perspective pour permettre la comparaison entre plateformes. Les réponses d'un voyageur assidu connaissant 30 aéroports seront différentes du passager qui prend l'avion une fois par an vers la même destination.

L'Autorité pourrait envisager de compléter le questionnaire de deux manières :

- Atteindre une population plus large en demandant aux autres acteurs de la chaîne de valeur (compagnies aériennes, par exemple) s'ils exploitent des sondages à des moments différents du voyage
- Demander le rajout des questions par rapport au rapport qualité-prix et la conscience des passagers du prix des services aéroportuaires dans les questionnaires. (Une grande majorité des passagers ignore la part importante des recettes des compagnies aériennes consacrées aux redevances – estimé à 15% au niveau mondial et 20% en Europe en 2019)



2.4. Question 4

2.4.1 Quelles sont vos attentes relatives aux enjeux de qualité de service du point de vue des usagers ?

Voir la réponse à la question 3.a. (section 2.3.1)

2.4.2 Quels seraient les indicateurs de qualité de service les plus pertinents à recueillir pour en assurer la mesure et le suivi ? Quels écueils sont à éviter lors de leur collecte puis de leur analyse ? Quelles difficultés pratiques anticipez-vous ?

Pour les indicateurs pertinents, nous renvoyons vers la section 2.3.1. En termes pratiques, différents exploitants aéroportuaires sont à des niveaux de maturité et ont des priorités différentes en termes de surveillance. Par exemple, un petit aéroport n'a potentiellement pas les moyens financiers de suivre la disponibilité de chaque actif en temps réel et l'investissement serait superflu. L'Autorité doit travailler avec les exploitants pour trouver un socle commun et raisonnable.

Nous mettons en garde contre une obligation générale pour les exploitants de fournir des données détaillées pour l'ensemble des indicateurs que nous citons. Dans bon nombre de cas, l'effort nécessaire pour collecter les données peut dépasser leur valeur dans le cadre de la mission de suivi. L'Autorité pourrait demander aux exploitants de travailler dans le cadre des CoCoEco et aussi dans le cadre d'une consultation publique spécifique pour trouver le juste milieu. Certaines données pourraient également être à la main des organismes tel qu'Eurocontrol ou la DGAC.

L'Autorité doit de se focaliser sur le suivi de la qualité de service aéroportuaire, distinguant la qualité des services des compagnies aériennes. Les passagers choisissent les compagnies prenant en compte la qualité de service parmi de nombreux autres facteurs. Si une compagnie ne fournit pas un niveau de service adéquat – les passagers l'abandonneront. Cependant pour la grande majorité des cas, les passagers ne choisissent pas l'aéroport depuis lequel ils partent et/ou celui à proximité de leur destination finale donc le marché ne peut pas réagir de la même manière.

2.5. Question 5

2.5.1 Quelles sont vos attentes relatives aux enjeux environnementaux des plateformes aéroportuaires ?

Il y a des marges importantes pour l'amélioration de la performance environnementale des infrastructures existantes ainsi que des nouvelles infrastructures. L'impact environnemental des choix de conception des aérodromes peut avoir des effets très importants sur, par exemple, les émissions CO₂. On oublie parfois que la construction des bâtiments et le béton représentent une partie importante des émissions.

L'attente des compagnies aériennes est que les exploitants prennent des mesures pour que leurs investissements soient durables et prennent des mesures pour que l'exploitation des compagnies au sol puisse minimiser l'impact environnemental. Ceci peut passer par des mesures simples tel qu'une refonte du processus d'alimentation en eau ou l'enlèvement des déchets – ou par des changements plus structurels afin de réduire, par exemple, le temps de roulage au sol.

Nous rappelons que tout investissement ou changement au niveau de l'exploitation devrait faire l'objet d'une consultation avec les usagers dès la phase de conception. L'analyse de rentabilité vis-à-vis des enjeux environnementaux doit être faite ensemble pour s'assurer que les meilleurs investissements soient faits en priorité, surtout car ce n'est pas aux compagnies aériennes seuls d'assumer le coût des investissements dans ce domaine.

IATA soutient les efforts effectifs de décarbonisation et n'est pas favorable aux modulations liées au émissions CO₂ des compagnies aériennes. Les aéroports doivent prioriser leurs propres émissions ou les changements

sur la plateforme qui permettent une diminution effective des émissions plutôt que de mener des actions qui ne réduisent pas les émissions. Les accords trouvés au niveau international sur la réduction des émissions CO2 sont le fruit de nombreuses années de négociation. Nous constatons que malgré nos arguments, l'Autorité a autorisé des modulations de ce type en France. Nous suggérons à l'Autorité d'utiliser le prochain rapport afin de présenter – sur l'intégralité des modulations environnementales - un bilan de l'impact des mesures pour s'assurer que l'incitation est vraiment efficace.

2.5.2 Quels seraient les indicateurs environnementaux les plus pertinents à recueillir pour en assurer la mesure et le suivi ? Quels écueils sont à éviter lors de leur collecte puis de leur analyse ?

La liste proposée par l'Autorité constitue une bonne base. L'Autorité pourrait également se pencher sur les émissions CO2 des scope 1 et 2 des aéroports. Le CO2 émis par les bâtiments et infrastructures aéronautiques lors de la construction et pendant leur vie est non-négligeable.

Nous conseillons la lecture du document *Airport Environmental Sustainability Policies* sur le site www.iata.org/airport-development pour des suggestions d'aspects que l'Autorité pourrait suivre dans les domaines suivants :

- La conception des aéroports pour optimiser les infrastructures
- La configuration des pistes et pistes de roulage afin de réduire les temps de roulage / d'attente en seuil de piste
- L'énergie utilisée par l'aéroport
- La gestion des ressources (eau, déchets, etc.)
- L'accès aux plateformes
- Les impacts sur la communauté locale
- Le carburant d'aviation durable

L'Autorité indique dans son commentaire pour la Figure 73 qu'il pourrait être utile d'avoir une vision des émissions propres des aéroports. Il faut étendre ceci à une analyse des émissions des compagnies en raison de la conception ou exploitation des infrastructures. Par exemple, la localisation des activités non-aéronautiques au milieu d'une plateforme aéroportuaire augmente les besoins en termes de surface imperméabilisée et augmente le temps de roulage des avions.

Dans la figure 5, l'Autorité présente une visualisation montrant la densité de population en utilisant le transport par voiture pour délimiter les zones desservies. Un graphique similaire utilisant les transports en commun (toutes formes) pourrait également être intéressant.

2.6. Quelles thématiques complémentaires mériteraient d'être abordées, selon vous, dans le cadre du prochain rapport pluriannuel ?

- Une analyse des investissements aéroportuaires
- Une analyse de la productivité des aéroports
- Un retour sur le mécanisme de préfinancement mis en place dans un aéroport régional en termes d'avantages pour les usagers et passagers
- Un retour sur les impacts des modulations en vigueur

2.7. Quels sont les indicateurs ou les analyses issues du premier rapport qui devraient faire nécessairement l'objet d'une publication annuelle ? Lesquels vous apparaissent secondaires ?

2.8. Le principe et l'organisation du tableau de bord envisagés à ce stade par l'Autorité appellent-ils des commentaires de votre part ?

Comme évoqué par ailleurs, nous soutenons l'approche de la création des tableaux de bord ou systèmes d'accès aux données modernes et dynamiques. L'Autorité évoque la plateforme FAA CATS. Ce système peut



effectivement servir d'exemple, tout comme les bases de données statistiques de l'Union Européenne qui contiennent des informations pertinentes (trafic, infrastructures...)

Nous conseillons aussi à l'Autorité de s'inspirer de l'administration TSA qui publie des statistiques pour l'ensemble de ses points « poste d'inspection et filtrage » sur base hebdomadaire. Avec une plateforme moderne, ces données pourraient être mises à la disposition non seulement des usagers et de l'aéroport – mais aussi des chercheurs et experts pour faire des analyses de performance dans le secteur.

Nous considérons que les données sur le marché du transport aérien (évolution de la connectivité, évolution du trafic, évolution de l'offre) présentés par l'Autorité sont déjà disponibles par ailleurs. Nous constatons, par exemple, qu'une bonne partie des figures sur ces points proviennent des sources externes. Bien que nécessaire pour l'Autorité, ceux-ci sont plutôt secondaires hors les informations sur le trafic (nombre de mouvements, passagers, volume de fret etc.) Cependant les informations sur la capacité aéroportuaire, la situation financière des aéroports, les projets d'investissement et la qualité de service ne sont que peu disponibles auprès des aéroports et devraient être prioritaires.

	Figures
Les figures suivantes portent sur des thèmes potentiellement secondaires	17,18,19,25,28,29,30,31,34,35,48,72,73
Ces figures seraient plus pertinentes prenant en compte l'origine/la destination finale des passagers	22,27,37,30,31



3. Annexes

IATA Position Papers / Guidance

- Transparency
- Airport Service Quality Frameworks
- Airport Environmental Sustainability Policy
- Transparency requirements for the determination of airport charges - EU Directive 2009/12/EC (pdf)

Links

- [KPIs + Economics Report, 2023 - ACI World Store](#)
- [\(CATS\) View Reports and Spreadsheets Ver: 2019.10.2 \(faa.gov\)](#)
- [TSA Report](#)

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Transparency

Transparency is an integral aspect of any progressive commercial relationship between a provider and its customers.

Transparency is the means of facilitating knowledge, assessment and opinion on what is happening within an organisation and/or service.

IATA POSITION

Airports and Air Navigation Service Providers (ANSPs) need to ensure that airlines (as users) are provided with adequate information on major developments at airports/ANSPs, the rationale for any charges proposal, charge setting formula and the methods to establish the values used in the formula.

Airport operators/ANSPs should provide airlines with key operational data to support benchmarking and discussions on continuous improvements in performance and cost efficiency.

Also, regulators should be transparent to the users on the rationale for the selected regulatory formula and the methods for determining the values used in the formula. Similarly, third party arbitrators overseeing the consultation process need to be transparent in any ruling or decision.

KEY REASONS WHY TRANSPARENCY IS IMPORTANT

- ◆ ICAO fully supports transparency as one of the key charges Policies¹.
- ◆ Airlines need to know exactly for what they are paying for.
- ◆ Providers, regulators and third-party arbitrators need to justify the charges structure and demonstrate that the charges are cost-based and non-discriminatory in line with ICAO Policies.
- ◆ Providers need to justify investment plans and business developments that impact on its users.
- ◆ A meaningful and productive consultation can only take place if airlines have enough detailed information to analyze and provide feedback on the provider's charges proposals prior to the consultation meeting.
- ◆ Airlines need adequate information to evaluate the operational and financial performance of an airport in order to identify mutually beneficial improvement opportunities.

- ◆ Airlines need adequate information to evaluate and benchmark the financial and operational performance of the provider.
- ◆ Airlines need adequate information to evaluate the providers' future operational plans to ensure that the investment is cost effective and meets future requirements.

PROVIDERS' DATA THAT SHOULD BE TRANSPARENT TO AIRLINES

◆ Financial Data

- Historical revenue and costs – A minimum of five years
- Forecast revenue and costs – A minimum of five years
- Revenue segments – Commercial/aeronautical
- Corporate financial structure and shareholder commitments
- Unit costs and productivity metrics and targets
- Capital, borrowings, interest costs, depreciation etc

◆ Operational Data

- Historical traffic levels – Aircraft movements, passengers and freight
- Forecast traffic level
- Staffing levels
- Service levels, core functional delivery, customer satisfaction etc.

◆ Planning Data

- Master planning – Short, mid and long-term
- Business cases to support infrastructure development
- Growth and risk factors – External and internal

¹ICAO Doc 9082/7 – paragraphs 17, 31 & 49



Airport Service Quality Frameworks

Introduction

Airport service quality frameworks identify the service standards that airlines and their passengers can expect from airports in return for the airport charges they pay.

While service quality frameworks are most effective at airports where robust economic regulation exists, they are relevant to all airports reflecting good business practice that brings benefits for all parties involved.

Recognizing airlines are the primary users and customers of airports and a major source of revenue for them, service quality frameworks should always be developed based on a collaborative approach to meet user's needs.

Objectives

The objectives of airport service quality frameworks are to:

- Clearly define airport service levels and quality standards based on users' needs.
- Support airlines operational efficiency and the customer experience.
- Measure the performance of airport facilities and assets.
- Promote the consistent and cost-effective delivery of airport performance.
- Establish accountability and assurance for customers in return for user charges.
- Foster continuous improvements through effective monitoring and measurement.
- Enhance trust and communication between airports and airline-users.

Note the scope of these frameworks does not include elements relating to agreements with Ground Handling Service Providers.

Key Features of Airport Service Quality Frameworks

Best practice frameworks typically include:

- Well-defined objectives and key performance indicators that reflect airline priorities.

- Clearly understood and practical measurement methodologies that are automated wherever possible.
- To the greatest extent possible objective (quantitative) measures rather than subjective (perception) based measures.
- Service levels and Key Performance Indicators (KPI's) established through airport-airline community consultation based on informed decision making e.g., understand the existing baseline, identify options and select the optimum solution based on a balance between costs and performance.
- Identifying the expectations, responsibilities and accountabilities of all parties including the collection of data, measuring performance, and reporting results.
- Effective governance to periodically review performance e.g.
 - Regular monitoring through local associations e.g., Airline Operators Committee (AOC).
 - Management performance reviews that may include changes to scope and measures e.g., quarterly and/or annual reviews.
 - A defined escalation process and accountability mechanism if performance is unsatisfactory.
 - An auditing process to provide a transparent, independent assessment of whether performance against standards has been measured and reported as intended.
 - Transparency regarding actual airport performance.
- Airports are made up of a balanced set of integrated sub-systems and processes; therefore, both under and over-performance in any one system can result in extra costs and operational consequences and should therefore be avoided.
- Airlines may voluntarily agree to have elements of their performance tracked to support a



better understanding of airport quality:
however, this should:

- Not impose service standards / targets on airlines or result in adverse commercial impacts.
- Recognize that airlines operate in a very competitive landscape and are penalized by the market for poor operational performance.
- The scope of service quality frameworks is typically focused on:
 - Passenger experience touch points/ processing facilities.
 - Critical operational assets – passenger processing, airfield, back of house.

Airport Processing Facilities

Passenger and staff queuing times should be measured for each airport sub-system from the back of the queue to start of the relevant process, and ideally include total transaction times so the end-to-end performance can be monitored.

Typical passenger terminal queuing processes are:

- Passenger departures and transfer security screening.
- Staff security screening.
- Passport Control (emigration and immigration):
 - While airports do not usually have direct control over these processes, they typically have a formal relationship with control authorities and are best placed to discuss service levels with them.
- Queuing times for passengers requiring additional assistance.
- Vehicle control posts and security search to access airside.

Measurement is typically on a per-passenger or per-vehicle queuing time and is conducted on a regular frequency (e.g., a 5-minute KPI measured every 15 minutes). The KPI is often the percentage of median measurements that are within the target. Where possible, automated measurement methods should be used.

Asset Availability – Passenger Sensitive Equipment (PSE)

Passenger facing assets typically include:

- Passenger lifts, escalators, conveyors.
- Automated People Mover (APM) Systems.

- On-airport bussing e.g., inter-terminal, to gates.
- Passenger Boarding Bridges (PBB).
- Elevating equipment for boarding and disembarking passengers with accessibility needs where provided by airports.

Asset availability is commonly measured as the percentage of time that the asset is serviceable and ready for use. While each airport is different and requires a cost/benefit analysis of options, a high level of service is typically required for passenger facing assets i.e., assets available 97%-99% during live operations.

Asset Availability – Other

The availability of other assets can be just as critical as PSE. Airports and airlines are encouraged to agree on key service elements to protect the operation and avoid delays and disruption.

For critical assets, such as runways, KPI's can include how quickly assets can be returned to service after a major disruption event, in addition to asset availability.

Airfield and Related Elements:

- Runway/s as the primary airport asset.
- Taxiway, taxi lanes and parking aprons.
- Aircraft parking and stand availability.
- Stands and their associated infrastructure:
 - Fixed Electrical Ground Power (FEGP).
 - Pre-Conditioned Air (PCA).
 - Visual Docking Guidance Systems (VDGS).
- Navigation Aids (NAVAIDS) – where provided by the Airport.
- Snow plough and de-icing equipment - where relevant and provided by the airport.

Passenger Terminal Facilities

Airport systems are inter-related and will impact the overall passenger experience and operation, appropriate KPI's should be considered for:

- Baggage handling systems (BHS) e.g., "in-system time" of bags and the availability of the system.
- Baggage Misconnect Rates.
- Arrival reclaim belts availability.
- Airport common use equipment availability e.g., check-in desks/bag drops, gate areas.
- Flight Information Display Systems (FIDS) availability.



- Wi-Fi availability, coverage and quality.
- Pier Service – The percentage of passengers able to access the aircraft via a contact gate.

Passenger experience elements

Elements of the passenger experience may be assessed with quantitative measures while others will rely on a qualitative assessment via surveys and other means:

- Departure lounge / gate / arrivals seating.
- Cleanliness – airport overall and toilets.
- Ease of wayfinding and availability of flight information.
- Passengers with Restricted Mobility (PRM) service timeliness.

Service Quality Frameworks as part of Economic Oversight or Concession Agreements

Given airport market power, to ensure that airlines and passengers receive value for money in return for the charges they pay, supervisory authorities and grantors of concessions include service quality frameworks as part of their economic oversight or within concession agreements.

For this reason, a service quality framework can be mandated by oversight authorities as part of the economic regulation of the airport or established as minimum service levels to be guaranteed during the life of a concession agreement. While the principles highlighted in this paper are applicable in those situations there are some important features that need to be considered:

- A mechanism should be established to review and modify the KPIs, targets and measurements methodologies on an ongoing basis allowing for a continuous improvement mindset to be established.
- Consultation with the airline community should be included as part of that revision and the possibility to include new KPIs to address service shortcomings identified by them or to remove KPIs that are no longer relevant e.g. that will naturally occur over a 30 or 40 years concession agreement.
- The relationship between service and cost needs to be fully analyzed before selecting targets with users' agreement.
- When there is a consistent lack of performance, supervisory authorities may consider the establishment of rebates on the fees to recognize that relationship between charges and services.
- "Bonuses" for providing higher service levels than requested by the airlines should be avoided. This will result in the perverse incentive to outperform the agreed service levels unnecessarily increasing costs for users. This can also potentially result in unintended operational consequences recognizing airport processes are integrated and finely balanced.

Supporting Documentation

- For further information regarding Service Quality Framework example KPI's and methodologies contact airportdevelopment@iata.org
- IATA Airport Infrastructure Investment – User Consultation paper



Airport Environmental Sustainability

Introduction

The airline industry has consistently delivered substantial reductions in carbon emission intensity through continuous innovations in aircraft and engines, as well as the adoption of improved operational processes and infrastructure.

For example, each new generation of aircraft has had double-digit fuel efficiency improvements compared to the previous generation which has led to aircraft producing substantially less CO₂ per seat.

Despite the impressive gains in efficiency, the industry is today facing increasing pressures from investors, customers, and regulators to reduce greenhouse gas emissions.

IATA members are committed to meeting this challenge by achieving net zero carbon by 2050¹. This will require the collective efforts of the entire air transport industry backed by supportive government policies.

Airports have also set out a net-zero carbon target for their own emissions and have been mapping out strategies to achieve this goal, as an essential enabler for continuing their current operations and to allow for future growth.

Airlines are committed to addressing environmental challenges; however, airport investments in environmentally sustainable infrastructure are ultimately reflected in an airport's cost base that airlines pay for through aeronautical charges. Therefore, these investments need to be carefully considered and based on a sound business case developed in consultation with airline users.

IATA Position

Securing the greatest environmental benefits means supporting, and not impeding, airlines' own ability to make investments in new fleet, fuels, and technologies that can make an even larger impact on tackling the climate crisis. This requires that

airports be managed efficiently with a strong focus on reducing costs and maximizing efficiency, even beyond environmental initiatives.

Environmental sustainability should be an integral part of airport planning and the expected impact of different development options, including retaining still functional infrastructure and improving existing processes, should be weighed to assess the impact.

The investments required to become a 'green airport' can be substantial, based on the need either to retrofit existing airport facilities or build new infrastructure in line with net zero carbon standards.

Sustainability actions should therefore be prioritized based on what can practically deliver the greatest possible reduction in the air transport industry's overall carbon footprint in the most efficient way. This sometimes involves making difficult choices on where best to spend scarce resources, but the urgency of the climate crisis requires that tough decisions be made.

What should be prioritized?

First and foremost, it is important to note that aircraft account for the largest share of total air transport CO₂ emissions. Therefore, it is crucial that airlines retain the financial means to continue to innovate and invest in new technology, particularly aircraft. Airport charges that are affordable and appropriate help to sustain this effort.

However, airports also have a part to play in their role as infrastructure and service providers. Airport investments in ground infrastructure that support the industry's environmental ambitions are welcomed as long as projects are supported by a business case that demonstrates a positive cost / benefit analysis for users that is subject to a consultation process with them.

The greatest potential lies with initiatives that increase airline operational efficiency and reduce

¹ IATA members' AGM resolution on Net Zero 2050



aircraft fuel burn and emissions. These include improvements to airfield layouts and airside operations.

Based on studies² utilizing aircraft performance data, it is estimated that aircraft ground operations (taxi/runway movements and APU use) account for nearly 8% of total aircraft emissions, which is several times the amount of all other airport emissions combined. This highlights the fact that supporting airline efficiency and fuel burn reduction can have an outsized impact in reducing the industry's total emissions.

Airports also need to address environmental issues related to their own facilities and operations including greenhouse gas emissions (GHG). This includes the embodied carbon, associated with materials and construction processes during the entire lifecycle of airport infrastructure, and operational carbon which comes from its use.

Assessing Green Investments

Whatever environmental initiatives airports pursue; it is important to note that such green investments should be held to the same standards as other capital spending plans. That is, they must be based on in-depth analysis and the development of plans that:

- Are informed by consultation with airline-users and enjoy their explicit support.
- Identify short, medium, and long-term objectives and targets and how they will be achieved.
- Assess the impact on operations and demonstrate how airline user requirements for functionality and efficiency will be met.
- Consider capital, operations, and maintenance costs as well as the financial return through a detailed cost benefit analysis.
- Estimate the environmental benefits of different investment options (e.g., reductions in energy usage and GHG emissions).
- Assess the expected impact of alternatives, including retaining still functional infrastructure

– premature replacement of which can have negative GHG impact compared to a successive renewal linked to the infrastructure's lifecycle.

- Identify possible alternative funding schemes such as government aid, green funds, or other third-party aid or seed funding.
- Conduct regular reviews of infrastructure plans to track performance and adjust if necessary.

Airport Environmental Initiatives

The suitability of different types of airport sustainability investments will depend upon the size, type, and local circumstances of each airport. For each part of an airport, there are key principles and practices that can be used to guide sustainability.

Airport Planning and Design

Airport planning and design decisions can have an enduring impact on an airport's environmental and operational performance; therefore, a sustainability strategy should be addressed in an airport's master plan and also embedded at an early stage into the concept, design, development, delivery, and implementation of airport projects. The following strategies should be considered:

- Maximize the use of existing assets to avoid unnecessary capital expenditure costs.
- Incorporate a concept of operations (how the facility will be used) that optimizes utilization, efficiency, and ultimately the required size.
- Use technology to increase the efficiency of airport processes and reduce the environmental footprint.
- Implement sustainable building standards and design tools to maximize energy efficiency, conserve resources, and minimize the CO₂ emissions associated with materials and construction processes throughout the whole lifecycle of the infrastructure.
- Design building envelopes to be more energy efficient such as by avoiding unnecessarily large spaces and/or non-functional

² Kesgin, U. (2006). "Aircraft Emissions at Turkish Airports", Zurich Airport (2017), "Taxi Emissions at Zurich Airport"



architectural features that result in extra embodied or operational carbon (energy use).

Airfield Configuration

An efficient airfield layout can optimize capacity and operational performance, while also reducing the aircraft fuel burn and emissions of airline users. Features that can improve efficiency and sustainability include:

- A terminal location and airfield layout that minimizes taxi distances from the gate or stand to taxiways and runways to reduce fuel burn and CO₂ emissions³.
- Runway holding bays and bypass taxiways to facilitate aircraft flow and sequencing.

Airside Operations

Airside operations are a shared responsibility; therefore, requirements should be jointly defined by airports and airlines. Wherever economically feasible, and following a cost-benefit analysis, the following airside electrification and other initiatives can be considered to reduce noise and emissions and improve operational efficiency.

- Fixed Electrical Ground Power and Pre-Conditioned Air systems at aircraft stands to replace the use of auxiliary power units and diesel-powered ground power units that burn fuel and generate significant levels of emissions.
- Electric, hybrid or alternative fuel powered airside vehicle fleets and ground service equipment.
- Fuel hydrant systems that reduce the need for fuel trucks and the emissions they generate. It should be noted that these systems also require a significant investment and are best suited for airports with sufficient traffic volume and a need for efficient aircraft turnarounds. Where fuel trucks are used, alternative fuels can be considered.
- Assisted taxiing by hybrid or electric towing vehicles to reduce aircraft fuel burn and carbon emissions during ground movements.
- Airport Collaborative Decision Making (A-CDM) and digital technologies to improve the

efficiency of aircraft turnarounds and the utilization of gates.

Each of these initiatives requires close collaboration with airlines and other stakeholders to assess their requirements.

Electrification, for example, will require a sufficient, reliable and continuous supply of electricity from low carbon sources and suitable infrastructure such as well-located charging points with standardized connectors.

Energy Use

The energy used to operate the airport is a significant source of CO₂ emissions, including what is generated on-site and what is purchased offsite. The mix of energy sources and the use of energy efficiency measures will influence the environmental impact. Mitigation strategies may include:

- Identify opportunities to shift to renewable energy sources (e.g., solar, wind, biomass, geothermal, hydroelectric) both off-site and on-site. The case for renewables has been bolstered by their increasing supply and falling costs which has been driven by improving technologies and economies of scale.
- Reducing energy consumption through the adoption of more efficient technologies to replace end-of-life lighting and heating, ventilation, and air conditioning (HVAC) systems. Costs vs. energy savings should be assessed.
- Monitoring electricity consumption of each airport system and adopting automatic power-down systems on escalators, conveyor motors and lighting systems, etc., when not in use.
- Employing alternative heating and ventilation methods e.g., solar, geothermal, displacement ventilation, etc.
- Using skylights and natural ventilation to provide energy savings if the climate permits.

Resources Management

The natural environment and resources can be conserved by:

³ One kg of Jet-A fuel burned = 3.15 kg of CO₂



- Waste management that encourages the reduction, reuse, and recycling of waste.
- Avoidance of single-use materials.
- A lifecycle approach to the design, construction, operation, and decommissioning of facilities can reduce waste and keep valued resources in use.
- Use of local building materials and replacement of hazardous substances with more benign alternatives.
- Reducing water consumption through low-flow water fixtures, and the recycling of grey water and harvesting of rainwater.
- Protecting local water resources from storm runoff, and contamination from deicing fluid and fuel spills.
- Maintaining or restoring natural habitats to enhance and preserve biodiversity while monitoring and controlling wildlife hazards.

Surface Access

Airports also need to consider strategies to mitigate the environmental effects of landside access of passengers, staff, goods and freight to and from the airport and may consider:

- Strategies to promote convenient, reliable, and cost-effective transport modes that minimize vehicle emissions and congestion.
- Seamless links to public transport including high-speed, regional and local rail services.
- Terminal forecourt design that supports a free-flowing road network.
- Consolidation of off-airport car hire facilities and hotel shuttle services.
- Infrastructure to support the use of zero emission vehicles (e.g., EV charging points).
- Safe access for pedestrians and cyclists.

Governments should play a role in funding the transition to more environmentally friendly public transport including modes that support seamless regional connectivity.

Local Impacts

When a new airport or a major expansion is planned, it is also important to consider its environmental impact on the surrounding community.

The environmental impacts of noise, air, and water pollution can be minimized through:

- Land-use planning, management and zoning, land acquisition, encroachment protection, noise protection or insulation programs.
- Runway configurations that minimize aircraft noise and emissions impacts.
- Use of approved noise abatement operational procedures consistent with ICAO guidance⁴.
- Construction of 'sound walls' or 'ground profiling' to reduce noise disturbance for neighbouring communities.
- Protection of local watercourses and soil from stormwater and hazardous liquid runoff.
- Nature-based planning approaches that maintain biodiversity without impacting safety.

Sustainable Aviation Fuel

Sustainable Aviation Fuel (SAF) is seen as one of the most effective and practical solutions to help the industry decarbonize. The primary challenge is the lack of supply and its high cost. Scaling up feedstocks and production is essential for making SAF affordable. It is important to keep in mind that:

- SAF is a drop-in fuel that requires no special investments or changes to infrastructure from airport operators.
- Airports can best promote the use of SAF by joining airlines in advocating for support from governments, the financial community, and others to incentivize and boost early production and make the price of SAF commercially viable. Such support can have positive effects on ramping up the supply and accelerating the learning curve.
- Airports should not mandate SAF use or modulate airport charges, which could result in

⁴ ICAO 8168 PAN OPS Volume I (2018)



a costly patchwork of solutions that distort the market and lead to undesirable trade-offs.

Future Technologies

Intensive research has been underway on the next generation aircraft and engines that can provide the zero-carbon solutions needed to sustain commercial aviation for the long term.

This includes electric aircraft but their use is likely to be concentrated on small regional airliners and electric vertical take-off and landing aircraft with limited range. If these planes materialize, airports may need to upgrade their existing power grid.

Hydrogen-powered propulsion for aircraft is a promising longer-term prospect but needs to overcome many challenges before it can play an appreciable role in reducing aviation's CO₂ footprint. New aircraft fleets and substantial infrastructure and renewable energy would be required to produce, liquefy, and distribute green hydrogen.

While some airports are participating in the research, airlines cannot be expected to support airport investments in H₂ infrastructure until the technology is proven, and commercially viable aircraft are widely available.

Conclusion

Making progress to becoming an environmentally sustainable industry and achieving the goal of net zero carbon by 2050 will require the active participation of all aviation stakeholders. Actions will need to be prioritized according to what is financially sustainable and has the greatest effect on reducing aviation's impact on climate change.

Airports can maximize their contribution to sustainability by ensuring that airport infrastructure costs do not impede airlines' ability to invest in new technology. This can best be done by retaining a sharp focus on costs and efficiency while choosing green airport investments that make a positive difference and are based on a sound business case that is supported by airlines.

Supporting Documents

- IATA Airport Development Reference Manual 12th edition
- IATA Airport Infrastructure Business Cases paper

Transparency requirements for the determination of airport charges in the context of the EU Directive 2009/12/EC

Foreword

Airport charges account for a relevant proportion of airlines' operating costs, and in order to ensure a certain degree of market protection the European Parliament and Council adopted the Directive 2009/12/EC on airport charges in March 2009, to be transposed by Member States by March 2011.

The objectives of the Directive are to (i) to improve fairness in the process of charges setting, with the aim of improving the countervailing bargaining power of airport users, especially when dealing with airports with market power; (ii) contribute to fair competition between EU airports by the introduction of common charging principles; (iii) promote more transparent charging systems applicable to users of airport infrastructure; and (iv) generate sufficient revenues to maintain and complete airport infrastructure at an optimal level.

Art 6 para 2 indicates that member states shall ensure, wherever possible, that charges are set in agreement with airport users. One of the essential elements to make this a possibility (or to determine whether an appeal to an ISA is necessary) is for airport users to have the adequate level of transparency in order to properly assess the justification of the existing or new charges proposals.

Article 7 of the Directive outlines the minimum requirements for information flow to and from the airport users, which has improved the initial information sharing as a baseline for a meaningful consultation meeting in some member states.

However, the Directive does not go into details on transparency requirements and therefore in many cases the current level of transparency at consultations does not allow for a proper assessment of how airport charges are set, preventing meaningful engagement between parties.

As outlined in the Commission's 2014 [Report](#) about the implementation of the Directive, a critical element of concern, also leading to appeals in the past, is related to the question of the required level of transparency, which is not detailed enough in Article 7 of the Directive. This was later confirmed in the Commission's 2017 publication of the [Inception Impact Assessment](#) which highlighted that "... at several EU airports, despite the Directive, the exchange of information between airports and airlines is still inadequate and/or the opportunity for airlines to influence airport charges is insufficient".

IATA believes that the Directive has not achieved its stated objectives, as its provisions have not prevented airports abusing their market power. The Directive needs to be replaced, in the form of a regulation, to address such failure. Among a number of needed changes, transparency requirements need to be further detailed in order to ensure meaningful consultations.

This paper provides guidance on what information is needed and why it is necessary as minimum for any meaningful consultation.

Introduction

IATA strongly advocates for more detailed transparency requirements as these will enable meaningful consultations on airport charges and support ISA's to carry out their duties.

This document provides an overview of the level of basic information necessary, in order to ensure a meaningful review and analysis of any charges proposals. The information requirements are even higher if an airport operates under a hybrid/dual till, as common infrastructure is artificially being split up.

This document follows the building block methodology described in the ICAO airport charges manual, explaining and justifying the baseline information required in airport charges consultations. It aims to be neutral and provide sufficient transparency for airlines to assess the current/proposed level and structure of airport charges, as intended by the Directive. As such, the document does not reflect IATA's positions on the determination of airport charges (such as regulatory framework, regulatory till, methodology for WACC calculations, network charging, among others) which can be found on our website.

<https://www.iata.org/policy/infrastructure/Pages/index.aspx>

Detailed Transparency requirements for the determination of airport charges

Information requirement	Justification
GENERAL INFORMATION	
<p>What are the facility/services being covered by the proposed airport charges? What facility/services are NOT covered?</p>	<p>Facilities and services have to be clearly described in order to be able to understand the charges determination, i.e. what users are paying for. (ref: ICAO Doc 9082, Doc 9562, ACD article 7.1a).</p> <p>Not all airports cover the same facilities within the scope of airport charges, therefore detailed information on what is covered by airport charges and what is covered by other charges is required.</p>
<p>What is the till applied by the airport for setting charges (single, hybrid, dual)?</p>	<p>The till of an airport impacts significantly the cost base for charges and is therefore necessary information.</p>
<p>What is the regulatory environment?</p>	<p>Some airports may operate within a framework (e.g. price-cap regulation). The details of such regulations or other modes of operation need to be transparent in order to comprehend the charges calculation. Reference to relevant legislation or any other legally binding document is necessary. Within the European scope, how and where has the charges directive been implemented.</p>
<p>What has been the methodology for calculating the level of proposed airport charges?</p>	<p>The calculation method used by the airport (e.g. a certain formula used for the calculation) has to be disclosed, as mentioned under Article 7, 1, b of the ACD. (Also: ICAO building block methodology in Doc 9082, para 2 i) of Section II; developed in Doc 9562)</p>
<p>If the airport managing body operates more than one airport (if so: how many?), what are the effects on the level of charges?</p>	<p>This information is needed to understand the cost and revenue allocation among the airports in the network</p>

Information requirement	Justification
Have financial information been provided on a per airport basis?	Article 4 and 5 of the ACD requires the airport to specify the mode under which it operates and to introduce a common and transparent airport charging system to cover all the airports in the network. (Also: ICAO Doc 9082, para 2 ii) of Section II; Doc 9562 para 2.37)
Have annual reports, audited accounts and notes been provided?	This information is helpful to understand the airport's charges approach and the consistency between the displayed costs during the consultation and the company's financial data.
Has information on ownership structure been provided? Is the company listed on the stock market and what is the free float?	Ownership information is necessary to assess applicability of EU/government/state aid rules (other funding) and to understand potential transfer pricing.
Are the documents also provided in English and will the consultations also be held in English? Who is eligible to participate in the consultation process?	In an international environment, setting charges applicable to international carriers, information must also be in English to allow every stakeholder the necessary involvement, to ensure that transparency is provided to all stakeholders operating in the airport.
OPERATING COST DETAILS	
<p>Have details of cost categories been provided?</p> <p>For instance, cost categories should include at least (not conclusive):</p> <ul style="list-style-type: none"> • Staff cost (and number of staff incl. applicable allocation) • Maintenance cost • Information Technology cost • Utilities cost • Consulting or outsourcing cost • Other cost (e.g. rental) <p>In a dual/hybrid till operation, this information requires a higher level of detail in terms of cost split between regulated and non-regulated activities (aeronautical/commercial).</p>	<p>Staff cost comprises the overall staff cost (direct and indirect) and is a key component of operating costs of an airport. Airlines must be able to understand how the airport manages this cost and therefore any significant change and assumptions/cost drivers need to be justified (e.g. changes due to pension schemes, out-/insourcing, internal allocation methods to share staff cost among business segments, etc.). Changes in staffing levels correlate with the staff cost, this information is required to understand the development of the airport's facilities and services, its reflection in the cost and how and why staffing has developed and is developing in future. Staffing vacancies should be displayed as the planned number often differs from actual staffing levels.</p> <p>Maintenance cost may have different cost drivers, and these must be understood.</p>

Information requirement	Justification
	<p>Information Technology is a key instrument for efficient management and comes at a cost. IT spending generally drives efficiency thus having a counter-effect. These effects need to be understood by airlines.</p> <p>The cost for utilities (e.g. electricity, water) is often dictated by the suppliers but as a major element in the cost base the development and its reasons need to be understood also to anticipate future changes.</p> <p>Consulting/ Outsourcing can be a major cost element and it is therefore necessary to understand if any overall cost increases are driven from it (e.g. understanding the relationship between staff cost and outsourcing cost development).</p> <p>In general, the drivers for cost changes need to be provided in order to better understand if changes in charges are justified.</p> <p>Any further cost not covered by the above categories should be explained as well.</p>
<p>How does the cost develop over time?</p>	<p>For charges set every c.12 months, the development of cost needs to be made available over a five years period. This would mean information of the previous three years, the most recent forecast of the current year plus planning data of at least one year ahead.</p> <p>For a longer charges period, the timeline best reflects the charges period, i.e. five years would look five years back and five years into the future.</p> <p>The cost development over time is important information as it shows in perspective the effectiveness of efficient airport management and the relevant cost for improvements of the airport's infrastructure and services.</p> <p>It also helps to understand the accuracy of previous years' planning and how correctly future cost is forecast.</p>

Information requirement	Justification
<p>Which efficiency initiatives have been identified?</p> <p>What is the quantified value of these initiatives?</p> <p>What is the value added over time of these initiatives?</p>	<p>In a generally monopolistic environment, where often a cost pass through is de facto in place there should and must be incentives for increasing efficiency. In a competitive environment there is naturally a motivation to do so driven by competition. In both cases the airport should demonstrate its targets, efforts and results. Airlines need to see that the airport has undertaken significant efforts to mitigate cost rises.</p> <p>In a clear and concise manner, it needs to be explained what efficiency initiatives have been identified and their related value.</p>
<p>For dual/hybrid till airports, has information been split in the respective aeronautical and commercial parts?</p>	<p>Dual and hybrid till airports have to separate aeronautical from commercial costs in a highly accurate manner. Staff that provides services for both areas such as HR, Finance, Procurement etc., has to be properly separated based on sound and transparent allocation keys (e.g. HR – based on number of staff in each area, Procurement based on volume).</p> <p>Cost for utilities, IT and other costs have to be segmented as well. Caution is required as any wrongful allocation from commercial to aeronautical may impact charges without justification.</p> <p>Moreover, full transparency for this subject is required to ensure that e.g. internal cost allocation principles are executed in a fair and consistent manner, to avoid that commercial cost elements are not partially allocated to aeronautical activities.</p>
<p>INVESTMENTS</p>	
<p>Has a detailed list of investments (and their justification) been provided, consulted upon and agreed with Users?</p> <p>What are the drivers for investments and what are expected outcomes?</p> <p>Are investments linked to the traffic forecast?</p>	<p>Investments are paid for through charges via depreciation and the cost of capital and they are consequently a key driver for future cost. It is therefore essential that investments are discussed, planned and agreed with airlines in full transparency. Airport infrastructure development is iterative and requires structured, regular airport-Users consultation. IATA has developed industry best practice guidance to support meaningful consultation and transparency with airlines: https://www.iata.org/whatwedo/ops-infra/airport-</p>

Information requirement	Justification
	<p>infrastructure/Documents/Airport-InfrastructureInvestment-Best-Practice-Consultation.pdf</p> <p>In case of any other modes of financing should be envisaged, these have to be made transparent.</p> <p>Detailed information about investments has to be shared openly and consulted upon with all relevant stakeholders. This information must explain and justify why investments are required i.e. what drives the investment and what is the output.</p>
<p>Has the airport provided a master plan to demonstrate long term planning?</p> <p>Has the airport provided information regarding the link between capacity utilization and investments?</p>	<p>A master plan is important and needs to be discussed with airlines as it defines how a future growth strategy will be implemented. Investments in infrastructure have to be aligned with a master plan strategy to ensure investing is done for future demand and no sunk cost will materialize.</p>
<p>What is the timeline of investments?</p> <p>What trigger mechanisms have been agreed upon for the timing to start investments.</p>	<p>The timing when to start and complete investments is important information for the airport's users not only in terms of capacity and traffic planning but as well in terms of financials. Full transparency has to be provided in terms of when to invest, what is the basis for the cost estimate and when investments will be available for use.</p> <p>Moreover, airlines need to see that the investment program is realistic and not, as is often observed, over-ambitious in terms of completion dates.</p>
<p>For dual/hybrid till airports, has information been split in the respective aeronautical and commercial parts?</p>	<p>Transparency has to be provided in a dual/hybrid till operation on the share between commercial and aeronautical investments.</p>
<p>Investment accuracy:</p> <ul style="list-style-type: none"> • How do actuals compare to previous forecasts? • Have airports included forecast in previous charges determinations depreciation/cost of capital for investments that were not made? 	<p>It needs to be understood if planned investments, which may have been drivers for charges changes, have actually been undertaken and to what degree.</p> <p>This relationship has to be transparent to airlines in order to avoid double charging.</p>

Information requirement	Justification
<ul style="list-style-type: none"> • What is the plan of the airport in case of cost overruns for envisaged investments? • How shall cases be handled where investments are canceled, and budgets are reassigned? 	
<p>DEPRECIATION</p>	
<p>What is the applied asset life of existing and new assets?</p>	<p>As a capital intensive industry, depreciation is a major cost component and needs to be well understood. Transparency is key and users need to know if internationally applied standards of accounting are used for asset life determination.</p> <p>Any deviation from international accounting standards has to be made transparent and clearly described.</p> <p>Any changes in asset life cycles or evaluation methods need to be explained.</p>
<p>When is the start of capitalization of new assets?</p>	<p>The timeline of investments, i.e. when does a new asset comes to live, is important to calculate an accurate depreciation rate as of the start the asset becomes operational.</p> <p>This information is also relevant to obtain transparency for any pre-funding.</p>
<p>Which depreciation method is used and why? Have there been any changes in this methodology since the last setting of charges?</p>	<p>Understanding the depreciation method is important in order to see how the depreciation amount has been calculated. As well, it helps airlines to understand whether the method is internationally recognized and appropriate.</p>

Information requirement	Justification
ASSET BASE	
<p>What individual assets make the total asset base?</p> <p>Have any revaluations/impairments been made transparent?</p>	<p>The accurate determination of the asset base is important for the calculation of the cost of capital.</p> <p>An asset schedule with assets starting at above a reasonable value shall be provided. This would help understand the value of the main investments (gross, net), the depreciation rates being applied and their cost allocation (if applicable).</p>
<p>Have any assets been sold and what has been the treatment of the proceeds?</p> <p>Has the asset base been properly adjusted for the sale?</p>	<p>Airlines need to understand the treatment of the proceeds of any assets sold during the period (i.e. whether the difference between the price and the net book value of the asset sold has been taken into account when setting airport charges).</p>
<p>In a dual/hybrid till airport, what is the value of the regulated asset base (RAB) and how has it been calculated?</p> <ul style="list-style-type: none"> • What is the methodology for allocating assets between regulated and non-regulated assets? • In particular, how common used infrastructure assets have been allocated? • Which allocation keys have been applied? • What are the resulting amounts? 	<p>The assets have to be properly assigned (aeronautical /commercial in a hybrid/dual till airport) and their value correctly reflected for the year.</p> <p>Allocation keys for common used infrastructure need to be adequate and are often based on space (sqm). The approach though may vary which is why details have to be made available to airlines</p>
<p>Has the evolution of the asset base been properly explained?</p>	<p>It is important to understand what is affecting the evolution of the asset base over time (investments, depreciation, sale of assets, other adjustments, etc).</p>
<p>Does the asset base (for cost of capital calculations) include “assets under the course of construction”?</p>	<p>Including assets in the course of construction as part of the asset base (for cost of capital calculations) would constitute prefunding, and it is important for airlines to understand if the airport is proposing such an approach.</p>
COST OF CAPITAL	
<p>Which is the methodology used for the determination of the cost of capital?</p>	<p>Due to a high proportion of fixed cost driven infrastructure the cost of capital of an airport or an air navigation services provider can have a</p>

Information requirement	Justification
	<p>significant impact on the level of charges. It must be agreed with the airlines and set using fair judgment and transparency at a reasonable level. Fair judgment, transparency, consideration of the specific market situation and consideration of recent relevant precedent from established regulatory bodies are key in overcoming the inherent challenges involved in airports and airlines agreeing a cost of capital.</p>
<p>Have the parameters used to determine the Cost of Capital been explained and justified?</p> <p>For instance, in case of the WACC methodology the following needs to be provided:</p> <ul style="list-style-type: none"> • How is the Risk Free Rate determined? • How is the Debt Premium determined? • What was the input for the determination of the Market Risk Premium? • How has the asset/equity beta been determined? • Which gearing rate is applied and why? • Which Tax Rate is applied? • How is the WACC expressed? 	<p>The Risk Free Rate is normally reflected through secure government bonds of a defined duration of the country in which the airport operates. Details need to be provided on:</p> <p>a) Whether the country bonds used as the basis for the rate can be considered as ‘risk free’</p> <p>b) definition of the duration of bonds (1, 5 or 10 years generally) and</p> <p>c) the forward rate applied.</p> <p>The airport needs to be transparent how the rate is determined as it could be expected that it chooses the least expensive method of financing, which can be expressed with short term or long-term bonds, depending on macroeconomic circumstances.</p> <p>The Debt Premium considers the risk of an airport above that of the risk free bond rates. As airports operate in a low risk environment, the surcharge is usually not significant. A generally accepted approach is to compare the airport with other companies of similar risk structure and similar credit rating, then using the average and subtracting the Risk Free Rate. An overview of the companies selected for the benchmark needs to be provided to ensure that only comparable companies are selected.</p> <p>Airlines need to be made aware if the Risk Free Rate and the Debt Premium have been used in combination with the gearing under consideration of the tax shield to calculate the cost of debt.</p> <p>Transparency has to be ensured on the Market Risk Premium as to what has been used for the determination of the rate.</p>

Information requirement	Justification
	<p>As the equity beta is derived from the asset beta, the latter is usually determined first. To compare the variations of the airport business segment over the general market, the approach to determine the actual business segment is important. A careful approach is necessary to identify comparable airports with a comparable traffic structure, region and growth rates, which is why this information is necessary to understand how the airport has calculated the beta.</p> <p>In addition, airports can be and are often compared with utilities where public information on beta values is more often available. Airlines need to understand if utilities have been considered for the beta value determination and if not why.</p> <p>Furthermore, it is important to understand if the tax rate has been included when determining the equity beta (as it allows to adjust for the tax benefit provided by the gearing of the company).</p> <p>As the determined value is important, the company has to provide information which gearing has been used and why.</p> <p>The applied tax rate shall always be mentioned as it is an important element in the calculations, impacting the WACC.</p> <p>It is important to understand if the calculations are done including an inflation component, i.e. expressing a nominal WACC and the source of the applied inflation rate should be made available for airlines.</p> <p>The difference between pre- and after tax WACC is significant, both values have to be expressed for clarity.</p>
<p>What is the basis used to determine the cost of capital?</p> <ul style="list-style-type: none"> • Fixed assets? • Long term assets? 	<p>The cost of capital is a major cost component and every information how the calculation is done is thus important.</p>

Information requirement	Justification
<ul style="list-style-type: none"> • Long term assets + working capital (current assets - current liabilities)? • Is cash & equivalents being included? 	
Any other adjustments?	Have there been any adjustments to the RAB on which the WACC is applied? This information is relevant as it drives the cost of capital.
In case of dual/hybrid till, has a distinction been made between the aeronautical and commercial beta?	As an expression of risk over the general market, the separated beta value of the airport accounts for the different risk profiles of the aeronautical and commercial business areas in a dual till environment.
TRAFFIC FORECAST	
What is the method used for forecasting future traffic? Have specific assumptions on traffic forecasts and enough granularity on traffic numbers been provided?	<p>The traffic forecast is a major element in the charges determination and detailed information on underlying assumptions have to be clearly explained.</p> <p>While a one year forecast is often less demanding, a multi-year charges period requires multi-year forecasts which are more challenging. It is important that the airport provides all information on how it has calculated future traffic.</p>
How accurate had previous traffic forecasts been?	To understand the level of accuracy of the forecast, the correctness of previous forecasts has to be considered, which is why this information has to be provided.
Who had been involved in the forecast?	Traffic is driven by the airlines' passenger growth. It is therefore important to know who has provided data for the traffic forecast of the airport and how this has been taken into account in the airport's forecast.

Information requirement	Justification
REVENUES	
<p>What is the detailed revenue per charges category (Landing & Take Off charges, parking charges, Passenger charges, Security charges and Others)?</p>	<p>As under current regulation Article 7d, the revenue of the different charges has to be explained. It is important for airlines to understand how the different charges relate to the cost and return situation of the airport.</p> <p>As with costs, revenues have to be provided for different periods (past, present and future) in order to understand the forecasting accuracy of past years and to anticipate future developments with the possibility for mitigation. Mitigation for anything such as revenue shortfalls versus plan or cost increases versus planned cost cannot be done without transparent information on both.</p>
<p>In a dual/hybrid till airport, what is the commercial transfer?</p>	<p>As the airlines provide a dual till airport with the customers to develop commercial opportunities, it is common practice that a portion of the commercial profits is shared with the aeronautical business in terms of a transfer to reduce the charges level.</p> <p>In this regard, airports need to explain to what extend and using which method of calculation a transfer has been planned and where this is expressed in the level of charges.</p>
STRUCTURE OF CHARGES	
<p>Are any changes planned in the structure of charges and if so why?</p>	<p>Changes in the structure of charges must be explained and justified.</p>
SERVICE LEVELS	
<p>What are the defined service levels are the users are paying for?</p> <p>Are there any mechanisms in place for the case defined service levels are not met?</p>	<p>As the service levels/quality are directly linked to the cost of providing services, the consultation and agreement with Users is required regarding all services level metrics, and how they will be measured and met. IATA has developed industry best practice guidance to</p>

Information requirement	Justification
	<p>support meaningful consultation and transparency: https://www.iata.org/whatwedo/ops-infra/airport-infrastructure/Documents/airport-development-level-service-best-practice.pdf</p> <p>As the defined level of service determines the level of charges, any deviation in the service level must be explained to outline the impact on the charges. (ACD article 9).</p>