



Where do Slots Fit?
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Introduction

Pardon the title which reads a little strangely, as normally it is 'things' that fit into slots, and not the other way around. However, the purpose of this Occasional Paper is to explore the position of slots within the air transport industry in the light of how the industry has developed over recent decades and particularly following the airline failures in Europe of 2017.

Background

Slots were created with the establishment by IATA of a world-wide system to co-ordinate flight schedules in order to avoid congestion at airports. Domestic operations in the US were largely excluded because of anti-trust concerns (triggered by competition law) about competing airlines co-operating/colluding on their schedules. Even in the US, however, international schedules were co-ordinated as well as domestic flights at four High Density airports (viz. JF Kennedy and La Guardia in New York, Chicago O'Hare and Washington Regan). Given these origins, it is disappointing to see frequently the association (often by those who should be better informed) of the terms 'slot' and 'congested airport'.

The advent of the Single Market in the EU created a need to codify the voluntary compliance with the custom and practice of IATA's Schedule Co-ordination Guidelines, and EU Regulation 95/93 emerged. Although based on the IATA Guidelines, it was not the best drafted piece of legislation, and while its update (Regulation 793/2004) was an improvement, it still has deficiencies.

With traffic growth outpacing infrastructure capacity provision at many airports, the schedule co-ordination process has increasingly become the method for allocating scarce resources, a task it was not designed for. In addition, the slot process was adapted to foster competition policy, with the introduction of the concept of 'new entrants'. Alongside this, there was an increase in the calls from academic economists for auctions to replace the current primary allocation process.

The greater realisation of the value of a slot has also seen the emergence of a secondary market for slots and they have been both leased out and sold for financial compensation. Exchange of slots between airlines has always been a necessary lubricant for schedule co-ordination, and for many years this was done without charge between airlines, with a favour being returned at another airport or in a later season. As an essential aspect of the process, Regulation 95/93 sanctioned such practices, but the wording was ambiguous leading to different conclusions as to whether or not the secondary trading of slots for money was legal.



The ultimate in slot trading is to buy an airline, and that has happened a number of times over the years. However, before 2017 the airline being sold had always been in operation, and 2017 that was the first time slots were transferred from Zombie airlines!

What is a Slot?

An interesting starting point is perhaps the various definitions of 'Slot' that exist:

- Slot: slit provided in a machine etc. for something to be inserted or work in (Oxford English Dictionary);
- Slot: the permission given by a coordinator in accordance with this Regulation [EC 793/2004] to use the full range of airport infrastructure necessary to operate an air service at a coordinated airport on a specific date and time for the purpose of landing or take-off as allocated by a coordinator in accordance with this Regulation;
- Slot: a fixed-odds gambling machine used in casinos and betting shops, popularised in Las Vegas;
- Slot: Track of deer etc..

While the last of these definitions probably has no relevance to this discussion, arguably the other three do. Certainly, the first definition will remind anyone who has struggled with the assembly of flat-pack furniture, how important it is to associate the correct part with the correct socket, thereby demonstrating the **non-homogeneity** of slots, a characteristic often ignored by academic proponents of slot auctions.

The second definition contained in the European Commission's Regulation covering slot allocation does reflect the potentially **multi-dimensional** and heterogeneous nature of slots. While this is an improvement over the original Regulation (EC 95/93), it is still imperfect as a co-ordinator only grants permission *to plan* to operate¹: permission to operate comes from the ground and air traffic controllers on the day.

The third definition, while clearly not directly relevant, does though highlight the increasing importance of the **financial aspects** of slot 'holdership', and the willingness of some airlines to buy slots in secondary trading in order to give themselves the opportunity of generating profits from providing additional air services. As discussed in Occasional Paper 2, airline profitability has never been great, so that such investments are a calculated risk (in other words, a gamble).

¹ The updated regulation also missed the opportunity to emphasise the multi-dimensional nature of a slot by continuing to refer to a 'slot pool' rather than introduce the notion of a 'resource pool'.



Does Anyone Own a Slot?

Slot ownership has been a hot topic for many years, but is not defined in the EU's slot regulation². The question has become more important as the transfer of slots for money has increased. A number of stakeholders have claims to ownership:

- **Airports:** as the majority of slot resources are physical assets provided by the airport operator, ownership could rest here. However, this could only be translated into financial income if the primary allocation was to be changed to one charging airlines for slots, though it is possible that any such income would be 'regulated' away. It is likely that airport operators will have to be content with higher revenue generated by the larger aircraft and greater passenger numbers normally associated with slot purchase in the secondary market, rather than receiving a share of the windfall of a slot sale from the vendor;
- **ANSPs:** ANSPs have some theoretical claim as they control the actual permission to operate and set the capacity of the element that is most frequently constrained, namely the runway system. The arguments are very similar to those relating to airport operators, and in practice few if any ANSPs have ever sought to advance such an argument;
- **Governments:** as slots are intangible assets, and in view of their representational role, governments could lay some claim to initial ownership. However, this is difficult to justify with the current primary allocation process, in which slots are distributed without financial charge. Governments generally have other ways of extracting revenue from the air transport industry and also normally have a considerable interest in increasing connectivity in order to support economic development;
- **Airlines:** airlines have by far the best claim to own slots, as apart from the non-trivial fact that they are the only entities that can use them, they actually create the slot by combining the individual resources and then add value by operating an air service using these (and other) resources. They also are (generally) the parties that on occasion buy and sell slots to each other on the secondary market
- **Brokers and Financial Institutions:** For a number of years, US airlines have used their domestic slots as security for loans. This has recently spread to Europe where Virgin Atlantic has issued bonds securitised against some of its slot holdings, and as discussed later in this paper, an investment fund which had owned Monarch Airlines received the proceeds of the sale of some of its slots. Until this transaction, any institution providing funds securitised against slots ran the risk of the asset value evaporating if the airline ceased operations. Now? Who knows!

² The situation may be different in the USA.



Attaching a monetary value to a slot raises many questions that need to be addressed in terms of the accounting treatment. These questions are arguably easier to address if only a small number of slots is involved as a result of a secondary trade, and might be accounted for as, say, goodwill in a Balance Sheet. However, the matter would be very different if for example the value of BA's slot holding at London Heathrow had to be included in its Balance Sheet. Indeed, valuation itself would be a major challenge: while a slot pair at Heathrow might be \$25m to \$50m (measured by secondary trades), could the same price per slot be associated with several hundred slot pairs, given that in the (almost) inconceivable scenario of British Airways ceasing to operate, huge number of slots would become available and therefore become worthless?

As slots are in essence an ephemeral asset, the strongest claim for ownership probably comes from airlines, as not only do they breathe life into the resources allocated but also they are the only entities that can use the slots. Overall though, the term 'holdership' may be more appropriate than 'ownership'.

Flaws in the current process

Although this paper has been triggered by the financial transactions of late 2017 and the general arguments for and against the monetisation of slots, it is worth also recognising a number of weaknesses of the current EU Slot Regulation that are worthy of rectification (assuming that nothing more fundamental happens).

Slot Trading

As noted above, Regulation 793/2004 recognises that slots need to be exchanged between airlines and continues to permit the exchange of slots "...one for one, between air carriers..." (Article 8a, Clause 1c). This article of the Regulation is silent on whether or not there may be a parallel financial transaction from one carrier to the other³. This was a changed wording from the original Regulation 95/93 which stated that "...slots may be freely exchanged between air carriers..." (Article 8, Clause 4). Hence, although the text has been changed, the situation remains capable of different interpretations, and indeed co-ordinators in different countries do behave differently, with some openly permitting monetised secondary trading, and others vehemently opposing it.

In practice, not only could prohibiting secondary sales be difficult (although it could be made unlawful), but also it is probably beneficial to the air transport industry as slots find their way to an airline that can find a higher value use of a scarce resource, thereby rectifying the economic inefficiencies of the administrative rules of the current primary allocation process (which is unlikely to be radically changed). Such trading can also be beneficial in the short term, with airlines leasing out slots for other airlines to 'baby-sit' for a few seasons until the original holder has an economic use for them.

³ Article 8b covering transfers required by public authorities for competition policy reasons does stipulate that such "...transfers can only take place without monetary compensation...".



Reduction of Capacity

The primary allocation of slots each season is based on the 'grandfather rights' principle: if you held and operated a slot on more than 80% of occasions in the previous corresponding season, you are entitled to it again in the coming season. That at least is the basis of the current Regulation, although the previous one contained a subtly different provision which was merely the right to claim the slot for the forthcoming season: the Co-ordinator was under no obligation to award the slot, although with Regulation 793/2004 he does have such an obligation.

In most circumstances, this difference will not create problems. However, should any of the co-ordination parameters (airport capacity elements) become smaller⁴, then difficulties could arise since the total capacity would be less than that required to support all grandfathered slots. This could lead to legal difficulties for co-ordinators, and while this has never become a major issue making the headlines anywhere, the change incorporated in the current Regulation would appear to represent a 'dis-improvement' in the legislative framework.

New entrant definition

In an effort to encourage competition in the provision of air services, special provisions are made in Regulation 793/2004 to advantage new entrants in the allocation of slots. The definition of what constitutes a new entrant, however, is not obvious from the label. A carrier may be a new entrant at an airport if:

- It would hold fewer than five slots at the airport on that day if its request were accepted; or
- There are no more than two other air carriers already operating services between the two Community airports (or airport systems) of the proposed new service, again with the proviso that should the slots be allocated to the new carrier it would hold fewer than five daily slots on that route; or
- There is no other air carrier offering flights that day between the airport (or airport system) and a regional airport, again subject to a successful request not resulting in the new airline holding five or more daily slots on that route.

Each of these specifications is subject to an overall requirement that the air carrier concerned should not hold more than 5% of total daily slots at the airport, or more than 4% of total daily slots in the airport system.

These definitions give rise to some outcomes which might be surprising (if not perverse) given the label of 'new entrant'. For example, at Heathrow there are some 20 long haul airlines as well as a handful of short carriers that hold on average about two slots per day,

⁴ As a consequence of, for example, new environmental regulations, increased separation intervals between aircraft, temporary re-configurations of terminals or aprons.



and who therefore would qualify as new entrants, despite many of them having served Heathrow for a number of years, and in some cases decades! At the same time, neither easyJet nor Ryanair would qualify as new entrants because of their scales of activity elsewhere in the London Airport System, despite neither of them operating at Heathrow.

Modifications to the definition of a new entrant have been considered in the past, although with the withdrawal of the UK from the EU, the primary reason for considering a change, namely allocation of slots at a three runway Heathrow, may well disappear with the advent of Brexit (which will happen before any third runway at Heathrow).

New entrant allocation

The definition of new entrant is important because new entrants are accorded some priority in the primary allocation of slots each season. Their position is still behind existing airlines requesting historically operated slots, but 50% of remaining slots (or resources) are reserved initially for new entrants, thereby offering some advantage over incumbent airlines wishing to expand their services.

However, the Regulation does not specify the period of time over which the 50% is measured: if this is over the entire season, then new entrants would have a very considerable advantage over incumbents in gaining prime-time slots, whereas if the period were very much shorter, say a few hours or less, the advantage would be very much reduced. The absence of stipulation in the Regulation could lead to different practices by different co-ordinators.

The Developments of 2017

The potential modifications to the existing Regulation discussed above, are though relatively inconsequential when considered in relation to the amendments that could be triggered by two airline failures of 2017, namely those of Air Berlin and Monarch: Alitalia might possibly be added to this, having been placed into administration as a prelude to either sale or bankruptcy, although neither has yet happened.

The two airlines followed different paths to oblivion, although slots previously held by both were acquired by other airlines.

Air Berlin

Air Berlin was established by US interests to operate charter flights from West Berlin before the fall of the Berlin Wall and when only airlines from France, the UK and the USA were allowed to operate into and out of the city. Ownership changed over the years and several other airlines joined the group (Deutsche BA, LTU, Niki, Belair, Luftfahrtgesellschaft Walter (LGW)). Etihad became the largest shareholder (although with a minority holding), and provided considerable support to the company. When it announced on 15 August 2017 that it would no longer be providing financial support, the Board of Air Berlin filed for voluntary insolvency, but continued to operate with the help of a loan of €150 million provided



(ultimately) by the German Federal Government. Air Berlin's last flight was on 27 October 2017, although Niki continued flying until 14 December 2017.

On Air Berlin's last operational day, it was announced that easyJet was paying €40 million for Air Berlin's slots at Berlin Tegel, 25 A320 aircraft and would employ some Air Berlin staff. By this time, however, Air Berlin no longer owned any aircraft – all were on lease – so that this was effectively a slot acquisition.

Niki followed a similar though later path although there were more twists in the story. Lufthansa made a proposal to acquire Niki, but this bid was withdrawn on 13 December following indications that it would not be approved by the European Commission. Niki ceased operations the following day and it was 29 December 2017 before IAG was announced as the purchaser of 15 aircraft and slots at Vienna with a bid of €36.5 million. However, this transaction did not close because of a legal ruling that the jurisdiction for the disposal need to be Austrian and not German. The assets were sold on 23 January 2018 to Laudamotion, a vehicle established by Niki Lauda for this acquisition. A final twist, was the announcement on 20 March 2017 that Ryanair would acquire up to 75% of Laudamotion, starting with a tranche of some 25%.

The rise and fall of Air Berlin will no doubt be the subject of a PhD thesis – an MBA dissertation would be unlikely to do justice to the complexity of the tale – but the above synopsis does give a flavour of developments and for Niki at least indicates that slots can outlive the holding airline.

Monarch

The Monarch story is a little simpler (see text box), but with equally as serious implications as Air Berlin. It is interesting that although the media paid considerable attention to the imminent expiry of Monarch's ATOL, an ATOL only relates to the sale of package holidays to be covered by the CAA's insurance scheme: the expiry of the ATOL would only have prevented Monarch from selling package holidays but would not directly have prevented it from continuing to fly. It was later reported by the Financial Times that when Monarch ceased operations it held some £30 million in cash, on paper at least⁵ sufficient funds to allow it to continue flying for a couple of weeks, long enough to repatriate most passengers to their home country probably without shortening of holiday. Instead, with the cessation of operations by Monarch, repatriation flights were organised and paid for by the UK Government.

⁵ Expiry of its ATOL could easily have triggered action by other creditors, so complicating any winding-down programme.

Monarch Airlines ceased flying in the early hours of 2 October 2017, with the return to the UK of its last flights – a number of planned departures late the previous evening had been cancelled shortly before boarding. Its ATOL (Air Travel Organiser's Licence) was due to expire at midnight on 2 October, and without adequate financial backing could not be renewed by the UK Civil Aviation Authority. Monarch was placed into Administration, and KPMG appointed to oversee the process. The CAA provisionally suspended Monarch's AOC (Air Operator's Certificate), but under UK legislation introduced in 2009 but not previously tested had to delay suspension of the company's Type A Operating Licence (which allowed it to carry passengers and freight on aircraft with 20 or more seats).

While this occurred at the end of the busy holiday period, it coincided with the allocation of slots for the Summer 2018 season, with the primary scheduling conference due to be held in early November. Shortly before the last date for airlines to request slots for S18, KPMG applied to ACL in the UK for all Monarch's slots allocated for S17 to be re-allocated for S18 under the historic-privilege rule ("grandfather rights").

After taking external legal advice, ACL decided to reserve the slots for KPMG, pending the outcome of the CAA licence suspension/revocation processes. KPMG was unhappy about this position and sought a Judicial Review by the UK High Court of ACL's decision to 'reserve' rather than 'allocate/award' the slots. The case was heard within less than a week, and a decision given within two further days: the slots should be returned to the pool and allocated by ACL other airlines. Furthermore, the costs of the legal action were all to be paid by KPMG (including those of ACL), and the judges also considered there were no grounds on which KPMG could appeal this decision as slots could only be held by an air transport undertaking, and with no aircraft, no passenger bookings and only a handful of staff, such a description could no longer be applied to Monarch.

However, the Court ruled that the slots at Gatwick and Luton should not be re-allocated as KPMG had found potential buyers for them. The Court accepted that if the slots were to be re-allocated, any appeal made would be pointless, even if the higher court subsequently found in KPMG's favour.

ACL allocated former Monarch slots at Birmingham and Manchester to other airlines, but decided as a matter of prudence to delay distribution of slots at Luton and Gatwick until KPMG had confirmed it would not appeal this (first) legal decision. In fact, KPMG decided it would lodge an appeal, and the Court of Appeal heard this, again very quickly. This Court however concluded that as Monarch's Operating Licence had not been suspended, under the terms of EU Regulation 1008/2008, Monarch was still an air carrier (albeit a defunct one) and so could hold slots, and hence it should be allocated slots for S18.

ACL decided not to appeal this decision to the Supreme Court, and the legal actions ceased. KPMG quickly sold these slots to British Airways (Gatwick) and Wizz (Luton).

At the start of the Administration process, it was assumed by most parties familiar with the slot process, that Monarch had lost the opportunity to sell its slots when it ceased flight operations. However, the events of late 2017 has shown that in the UK as well as in Austria, slots do have a life – albeit probably short – after the death of their holder. Has this opened up the possibility that financial institutions might invest in slots with slightly greater confidence and slightly less risk than was previously the case? The risk of 'asset evaporation' is still there, but financial backers would have a little longer to find new operators who are willing to buy the slots rather than hope for a favourable and free allocation from the slot pool.



Conclusions

For some years now, the slot allocation process has been morphing from its origins as a sensible approach to avoid/minimise congestion, towards being a method of allocating scarce airport capacity and also one instrument of competition policy.

Despite being a tool not designed for this purpose, it is highly improbable that the current approach to the primary allocation of slots will be changed radically, or replaced with some completely new system: not only are there too many entrenched interests – airlines, for example, have spent decades and invested billions of dollars in building their networks – but also, the current schedule co-ordination system works, albeit with some creaks and strains. The primary allocation process is well known globally and functions well, and has a correction mechanism (in the shape of secondary trading) to improve economic efficiency. Against this, advocates for an intellectually superior and economics-based approach to primary allocation have failed to articulate a practical and workable alternative (although there is one which could work).

This is not to say that the existing system could not be improved. As noted in this Paper, the drafting of the current EU Regulation governing slots in Europe could be improved, while the provisions for encouraging airline competition should be re-assessed to see if they are the most effective measures available, in a situation in which airlines compete to stimulate and carry demand rather than compete to supply capacity⁶. Wider application of Local Rules by schedule co-ordinators might also be beneficial.

Assuming that the fundamental structure of schedule co-ordination remains essential the same, do the events of 2017 foreshadow a world in which financial institutions and investors own or hold slots and then rent them to airlines?

Recently, slots have been used as securities for loans. This seems to be perfectly sensible and acceptable as holdership continues to rest with an airline. The financial institutions providing the debt are presumably content with the risks involved, and are confident that if necessary they could force a sale of the slots for a price that would at least match their exposure. This will require monitoring of both the financial performance of the airline and the state of the secondary slot market. The arrival on the market of a large number of slots would inevitably depress the value of the slots, so that securitisation is probably not for all slots that an airline holds at a particular airport. Also, the risks to the financial institutions have probably decreased with the Monarch and Air Berlin transactions.

And what of the Zombie airline transactions? The fact that there were ‘serious’ airlines that were willing buyers who presumably considered it worthwhile to pay for the certainty of obtaining 100% of the slots available rather than take a proportion of them for free from the pool, suggests that the market was at work. It will be interesting to see what happens in the

⁶ Occasional Paper 2 suggested that this second approach to competition might improve airline finances, and might also reduce environmental impacts.



slot allocation process for Winter 18/19, if and when the slot purchasers seek to extend this summer's flights into year-round operations without the benefit of grandfathered slots but rather having to compete with other airlines for slots from the pool. As Winter is the off-peak season there may be fewer problems, but with Ryanair announcing an expansion into Berlin Tegel, there might be some interesting debates. Keeping slots alive for a little while after the death of an airline, would seem to have some merits (at least for the creditors of the airline), provided of course that no airline is deprived of the opportunity to use an airport immediately.

It is clear that for a Zombie airline, a non-airline entity is the actual vendor of the slots, but should non-airlines be allowed to hold/own slots on a longer term basis? They might be interested in doing this for operating revenue (i.e. rental from airlines using the slots) or for capital appreciation (i.e. slot values increasing over time). If this were to happen, there would have to be consideration of suspension of the use-it-or-lose-it provisions. In turn, the holder would also have an obligation to make regular payments to the airport operator for foregone airport charges and commercial revenues from car parking, in-terminal retail etc. if the slots were not rented. As only airlines can exploit a slot to bring revenues into the aviation ecosystem, would slot holding be an attractive proposition for financial institutions waiting for slot scarcity to drive up the value of their assets, or would they do better to take their money to the casinos of Las Vegas and feed it into the Slots there?



Brexit Update 2

With less than a year to go until the UK leaves the EU, the end picture remains as uncertain as ever. Indeed, the only matters that seem to emerge are further difficulties and complications, with the UK's continued membership and support of EASA possibly being the most critical.

Ryanair's Plan B

Ryanair has now joined several other LCCs in seeking a UK AOC to allow it to continue to operate a handful of UK domestic routes. If awarded, though, it would also be able to seek to utilise UK international traffic rights, under whatever arrangements are used to create them: this of course may well have been its un-publicised intention.

Ryanair has also gone a step further than most other airlines by including in its terms and conditions of carriage a proviso that the operation of flights is conditional upon agreements being reached between the UK and other governments. This seems like a very low cost safeguard, and it is strange that other airlines have not done the same.

Can Member States negotiate new Bi-Laterals?

Following the Brexit Update in Occasional Paper 8, one knowledgeable respondent noted that EU Member States no longer have a legal right to negotiate new bi-laterals with third countries (although there are regular reports in the trade press of bi-laterals being signed between an EU27 State and a third party State). Also, under the Third Package, Member States were obliged over time to bring any pre-existing bi-laterals into line with EU law, an important aspect being that any designated EU airline had to right to exercise traffic rights granted by the third party. This would mean that any EU27 bi-laterals with the UK which still exist would need the UK to recognise any EU airline as a reciprocal carrier. However, would this cover 7th Freedom operations?

The primary issue remains, though, whether the individual EU27 states would be permitted to negotiate bi-laterals with the UK (probably preceded by Exchanges of Notes to prevent lengthy suspension of service). This possibly hinges on the relative importance attached by Member States to the preservation of the EU on the one hand, and more parochial national interests for tourism, car manufacturing, fisheries etc. on the other hand. However, if this were to be allowed, it should be a reasonably simple process to implement, and it may well represent the easiest compromise between the UK and the EU27.

Can a Majority EU-owned airline also be a Majority Non-EU Owned Airline?

Nationality of designated airlines is still fundamental to International Air Services Agreements, whether they be between two sovereign states or involve an economic grouping such as the EU. While the need for nationality clauses has been challenged for many years, and while a number of blind eyes and/or legal constructions have been found to



side-step such provisions, is there time in the Brexit negotiations to tackle this difficult subject on anything more than a case-by-case basis? If air services are to continue for several airline groupings (including easyJet, IAG, Norwegian, Ryanair, and Wizz), the authorities in the EU and the UK would need to accept that one division of Airline Group A is an EU carrier, while at the very same time another division is a UK carrier. Quite a conundrum!

A further complication for some carriers, especially those with listings on Stock Exchanges, is that of investors from outside the current EU28. UK investors often represent a significant quantum of shares and indeed may currently tip the balance of ownership to being majority EU. However, with the UK leaving the EU on 29 March 2019, this balance may tip the other way. Ryanair for one is clearly aware of this issue.

A possible resolution to the ownership issue might be to divide an existing airline grouping into two institutionally and financially independent companies, which have long term co-operation agreements in place with each other. Existing shareholders would be 'allocated' to one or the other company based on nationality, in order to comply as best as possible with ownership requirements. Alternatively, blind eyes could continue to be turned, or the UK and the EU could jointly decide that airline ownership clauses had outlived their useful life and not include them in the agreed solution to traffic rights!

Transition Period

There was considerable relief in many quarters when the EU and the UK reached agreement on a transition period up to 31 December 2020, during which time, it would in essence be 'business as usual'. However, the existence of this period is conditional on a final withdrawal treaty having been agreed, so 29 March next year could still be an interesting day!