



**Malaysian
Aviation Commission**
Suruhanjaya Penerbangan Malaysia

Case number: MAVCOM/ED/CC/DIV2/2022(2)

**SECTION 51 OF THE MALAYSIAN AVIATION COMMISSION ACT 2015 [ACT 771]
INDIVIDUAL EXEMPTION**

**Proposed Decision by the Malaysian Aviation Commission on an Application
for Individual Exemption under Section 51 of the Malaysian Aviation
Commission Act 2015 by Singapore Airlines Limited and Deutsche Lufthansa
AG**

11 October 2022

Summary of the Decision:

1. The joint venture entered into by Singapore Airlines Limited and Deutsche Lufthansa AG via a Joint Venture Framework Agreement falls within the scope of section 49 of the Malaysian Aviation Commission Act 2015 [Act 771]. The joint venture involves commercial cooperation between Singapore Airlines Limited and Deutsche Lufthansa AG, as well as their subsidiaries where they will cooperate in schedule coordination and capacity management, pricing and inventory management, sales, marketing, and revenue sharing, among others.
2. The existing joint venture covers scheduled air passenger services on Singapore Airlines Limited, Deutsche Lufthansa AG, Swiss International Air Lines AG, and Austrian Airlines AG between four (4) countries in Asia and Oceania, namely, Singapore, Indonesia, Malaysia, and Australia, and four (4) countries in Europe, namely, Austria, Belgium, Germany, and Switzerland. In their renewal application, Singapore Airlines Limited and Deutsche Lufthansa AG have sought an exemption for an expanded scope of the joint venture, to cover more markets, as well as the inclusion of Singapore Airlines Limited's subsidiary, Scoot Tigerair Private Limited, into the joint venture. The expanded scope of the joint venture covers scheduled air passenger services on routes between seven (7) countries in Asia and Oceania and 39 countries in Europe. The list of countries falling within the scope of the JV can be found in **Appendix I**.
3. Upon assessing the joint venture, and by virtue of sections 50 and 51 of Act 771, the Commission proposes to grant an individual exemption to the joint venture from the section 49 prohibition of Act 771 for a period of three (3) years from the issuance of the Final Decision.
4. For the avoidance of doubt, the individual exemption shall cover only the Joint Venture Framework Agreement, including its subsequent amendments in the form that has been submitted to the Commission. The individual exemption shall also cover the proposed expansion of the scope of the joint venture to cover more markets as listed in **Appendix I**, as well as the inclusion of Scoot Tigerair Private Limited into the joint venture. The individual exemption shall not cover any other amendment to the joint venture beyond the above proposed amendments submitted to the Commission.

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1.0 BACKGROUND

1. Singapore Airlines Limited (“**SQ**”) and Deutsche Lufthansa AG (“**LH**”) (collectively referred to as the “**Applicants**”) had submitted an application (“**Application**”) to the Malaysian Aviation Commission (“**Commission**”) to renew the individual exemption granted to their joint venture (“**JV**”) pursuant to section 51 of the Malaysian Aviation Commission Act 2015 [Act 771]. The JV entered into by the Applicants via a JV Framework Agreement (“**Framework Agreement**”) falls within the scope of section 49 of Act 771. The Applicants submitted their complete Application on 31 March 2022.
2. On 6 April 2022, the Commission published a summary of the Application on its website for public consultation for a period of one (1) month. The Commission received written feedback from one (1) airline, namely [REDACTED] on 6 May 2022.
3. The Commission had previously granted an individual exemption to the Applicants’ Framework Agreement on 3 September 2019, for a period of three (3) years, which had expired on 2 September 2022.¹ Pursuant to the individual exemption granted by the Commission, the Applicants had implemented the JV since [REDACTED], which was when coordinated fares were first made available for flights between Malaysia and Austria, Belgium, Germany, and Switzerland. Meanwhile, corporate products were implemented in Malaysia in [REDACTED]. The delay in the implementation of corporate products was primarily due to the effects of the COVID-19 pandemic in 2020. As of the date of this Proposed Decision, the JV remains in force and the Applicants have since, continuously operated under the JV in the Malaysian market. However, some components of the JV have been suspended due to the COVID-19 pandemic, which will be further elaborated in paragraph 21 below.
4. In their current renewal Application, the Applicants have sought to expand the scope of their services from the original scope of their joint venture. The Applicants are now seeking for an individual exemption to cover services between seven (7) countries in Asia and Oceania (previously, four (4) countries) and 39 countries in Europe (previously, four (4) countries). The current Application also seeks to include SQ’s subsidiary, Scoot Tigerair Private Limited (“**TR**”) into the joint venture.
5. This Proposed Decision is made upon taking full consideration of the Application and the Commission’s findings and analysis.
6. This Proposed Decision refers to airports and airlines according to the airport and airline codes as defined by the International Air Transport Association (“**IATA**”). The IATA airport and airline codes used are provided in **Appendix II**.

¹ The Commission’s Decision on an Application for Individual Exemption under Section 51 of Act 771 by SQ and LH dated 3 September 2019, available at <https://www.mavcom.my/wp-content/uploads/2020/02/SQ-LH-Final-Decision-03092019-redacted.pdf>.

2.0 OVERVIEW OF THE PARTIES TO THE JV

7. The JV is governed by a Framework Agreement entered by the Applicants. Unless otherwise specified, the Framework Agreement also includes the subsequent amendments made to the Framework Agreement as submitted to the Commission. While SQ and LH are the only signatories to the Framework Agreement, it also covers the services operated by the passenger airline subsidiaries of LH, namely, Swiss International Air Lines AG (“**LX**”) and Austrian Airlines AG (“**OS**”), as well as TR, pursuant to an amendment to include it into the JV.
8. The Framework Agreement which was originally submitted to the Commission in 2019 had covered the services of SQ’s subsidiary, SilkAir (Singapore) Private Limited (“**MI**”). SQ had completed an internal restructuring, pursuant to which MI ceased to operate as a separate carrier. Therefore, MI has automatically ceased to be part of the Framework Agreement. The Applicants had additionally signed an amendment to the Framework Agreement to expressly exclude MI from the JV. The Applicants submitted that for the purposes of the Application, flights previously operated by MI have been treated as being operated by SQ or TR (as the case may be), in order to reflect SQ’s arrangements going forward. These arrangements involve the integration of MI into SQ which includes MI’s pilots, cabin crew, and ground staff, as well as their aircraft and flight operations being transferred to SQ.
9. For the purposes of this Proposed Decision, reference to the “Parties” contained herein, may be read to mean the following five (5) airlines: SQ, TR, LH, LX, and OS, unless otherwise specified.

2.1 Background on LH

10. LH is the parent company of the Lufthansa Group. LH is listed on the Frankfurt Stock Exchange and forms a component of the MDAX, a stock market index consisting of 60 major German companies trading on the Frankfurt Stock Exchange.
11. The Lufthansa Group is a global aviation group. Its business segments include, among others, Network Airlines, Eurowings, Logistics, MRO, and Catering. The Network Airlines business segment comprises LH, LX, OS, Brussels Airlines, Lufthansa CityLine, Air Dolomiti, and Edelweiss Air, as well as Eurowings Discover, the Lufthansa Group’s new holiday airline, which started operations in July 2021. The Eurowings business segment includes the flight operations of Eurowings and Eurowings Europe.
12. Although there are a number of wholly-owned carriers that form part of the Lufthansa Group, only the following carriers are involved in the Framework Agreement:
 - (a) **LH.** LH is the largest airline in Germany. It operates from the two (2) biggest German hubs in Frankfurt and Munich. At the end of 2021, LH operated a global route network of over 3,200 flights per week across 169 destinations with a fleet of 389 aircraft;

- (b) **LX.** LX is a wholly-owned subsidiary of LH. It is the national airline of Switzerland, with hubs in Zurich and Geneva. At the end of 2021, LX operated over 720 flights per week across 83 destinations. LX, together with its sister company, Edelweiss Air have a fleet of 107 aircraft; and
 - (c) **OS.** OS is a wholly-owned subsidiary of LH. It is Austria's largest carrier. At the end of 2021, OS operated over 670 flights per week across 74 destinations, with a fleet of 61 aircraft.
13. LH's annual turnover was RM79.4 billion for the Financial Year ending 31 December 2021.²

2.2 Background on SQ

14. SQ is a public-listed company on the Mainboard of the SGX-ST. The principal activities of SQ, through itself and its subsidiaries, comprise the provision of scheduled international air passenger and cargo air transportation services, engineering services, training of pilots, air charters, and tour wholesaling and related services.
15. The following carriers are involved in the Framework Agreement:
- (a) **SQ.** SQ is a Singapore-based, full-service airline offering scheduled air passenger services to 60 destinations in 31 countries and territories using a fleet of 168 aircraft, as at 31 March 2021; and
 - (b) **TR.** TR is a low-cost commercial airline based in Singapore and an indirect wholly-owned subsidiary of SQ. SQ's wholly-owned subsidiary, Budget Aviation Holdings Pte. Ltd. wholly owns Tiger Airways Holdings Pte. Ltd., which in turn wholly owns TR. TR operates flights to 18 destinations and the fleet consists of 27 Airbus 320s (excluding four (4) that are parked) and 20 Boeing 787 Dreamliners as of 31 March 2021.
16. SQ's annual group-wide turnover was RM11.8 billion for the Financial Year ending 31 March 2021.³

² Using the EUR:MYR exchange rate of 1:4.7256 on Bank Negara Malaysia's website (<https://www.bnm.gov.my/exchange-rates>) as of 31 December 2021. The reported amount in LH's 2021 Annual Report was in Euro at €16,811 million.

³ Using the SGD:MYR exchange rate of 1:3.0870 on Bank Negara Malaysia's website (<https://www.bnm.gov.my/exchange-rates>) as of 31 March 2021. The reported amount in SQ's 2021 Annual Report was in Singapore Dollar at S\$3,815.9 million.

3.0 THE FRAMEWORK AGREEMENT

3.1 Purpose and Scope of the Framework Agreement

17. The Applicants had entered into a horizontal agreement via the Framework Agreement on [REDACTED]. Under the Framework Agreement, the Parties aim to achieve cooperation for scheduled air passenger services on routes between Singapore, Indonesia, Malaysia, and Australia (“**Original SQ Markets**”), and Austria, Belgium, Germany, and Switzerland (“**Original LH Markets**”). The Framework Agreement is a horizontal agreement involving deep cooperation between the Parties, with the aim to achieve incentives that would arise out of metal neutrality.
18. The Applicants have further sought to expand the scope of the JV (“**Proposed Expanded JV**”). The Proposed Expanded JV covers scheduled air passenger services on routes between seven (7) countries in Asia and Oceania (“**SQ Home Markets**”) and 39 countries in Europe (“**LH Home Markets**”). The seven (7) SQ Home Markets include Singapore, Indonesia, Malaysia, Australia, [REDACTED]. The list of countries in the SQ and LH Home Markets can be found in **Appendix I**.

3.2 Status of the Framework Agreement

19. The Framework Agreement had come into force on [REDACTED] for a period of [REDACTED].
20. The Framework Agreement has already been implemented for the Original LH Markets, as well as the Original SQ Markets—except Indonesia, where the Parties have yet to implement the JV due to regulatory reasons. The Framework Agreement has not been implemented in relation to the other routes specified in the Proposed Expanded JV.
21. The Commission notes that the [REDACTED]. Other components of the JV, such as joint pricing and coordinated scheduling have continued to remain in place.
22. The Commission notes that the Applicants had obtained authorisations or exemptions from other jurisdictions for their JV. The Australian Competition and Consumer Commission (“**ACCC**”) issued a final determination on 11 February 2022, granting reauthorisation for five (5) years, until 4 March 2027 for the Framework Agreement, including the expanded scope of the LH Home Markets and SQ Home Markets.⁴
23. The Competition Commission of Singapore (“**CCCS**”) had previously issued a decision on the Applicants’ JV on 12 December 2016, granting clearance to the JV after

⁴ The ACCC’s Final Determination for the Application for Revocation of AA60295 and the Substitution of Authorisation AA1000580 lodged by SQ and LH in Respect of Cooperation on Services on Certain Routes dated 11 February 2022, available at <https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/singapore-airlines-limited-and-deutsche-lufthansa-ag-0>.

accepting a set of commitments from the Applicants.⁵ The clearance granted by the CCCS had not been made subject to any validity period.

3.3 Salient Provisions of the Framework Agreement

24. The Parties cooperate in the following matters:

- (a) **Schedule coordination.** [✂].
- (b) **Capacity management.** [✂].
- (c) **Pricing cooperation.** [✂].
- (d) **Inventory management.** [✂].
- (e) **Sales.** [✂].
- (f) **Marketing.** [✂].
- (g) **Revenue sharing.** [✂].

25. The Parties established a JV Management Board, a Network Committee, as well as a Revenue and Commercial Committee to oversee the areas of cooperation under the JV.

26. The Framework Agreement provides for cooperation in relation to the following conduct:

- (a) on all routes within the JV scope:
 - (i) pricing cooperation and inventory management on services that are entirely operated by the Parties and include a Revenue Share Route (as defined in paragraph 29); and
 - (ii) sales and marketing; and
- (b) on Revenue Share Routes: network and schedule coordination, capacity management, and revenue sharing.

27. The Framework Agreement does not extend to:

- (a) other non-passenger services in the airline industry (e.g., air cargo);

⁵ The CCCS's Decision on the Proposed JV between LH and SQ dated 12 December 2016, available at https://www.ccs.gov.sg/public-register-and-consultation/public-consultation-items/proposed-jv-between-lufthansa-and-singapore-airlines?type=public_register.

- (b) air passenger services which do not operate between the LH Home Markets and the SQ Home Markets, i.e., operations with an origin in the LH Home Markets but a destination which is not in the SQ Home Markets, or vice versa, including operations within only one of the markets, where both the origin and destination are in the same market; and
- (c) coordination in relation to services offered pursuant to codeshare arrangements the Parties have in place with third parties. The JV has no effect on these existing alliances or codeshare arrangements—which are effectively "grandfathered" under the Framework Agreement and continue to remain in place—and all decisions in relation to them will be made independently by the Parties.

28. The Framework Agreement also contains an exclusivity clause. The clause states that [✂].

Revenue Share Routes

29. The Parties have identified direct routes between Singapore and the LH Home Markets (referred to as "**Revenue Share Routes**") which form part of a sector of an indirect route from the LH Home Markets to Malaysian cities and vice versa. The Framework Agreement defines Revenue Share Routes as follows:

[✂]

30. A route involving a stopover is not a Revenue Share Route, irrespective of whether the origin or destination are points within the respective Home Markets. For example, routes between Malaysia and the LH Home Markets will not be Revenue Share Routes, since they are not direct, non-stop routes. However, a Revenue Share Route may form part of a route with an origin or destination in Malaysia. For example, the KUL–SIN–FRA route will not be a Revenue Share Route, but part of that route, namely, the SIN–FRA service, will be a Revenue Share Route.

31. Under the current scope of the JV, the Applicants submit that there are four (4) routes between Singapore and the Original LH Markets that are Revenue Share Routes, which are the routes between:

- (a) Singapore – Frankfurt, on which SQ and LH operate services;
- (b) Singapore – Munich, on which SQ and LH operate services;
- (c) Singapore – Zurich, on which SQ and LX operate services; and
- (d) Singapore – Dusseldorf, on which SQ operated services.

32. However, SQ flights between Singapore and Dusseldorf have been permanently suspended since September 2020 and there are no current plans to reinstate them. As such, only three (3) of the Revenue Share Routes are currently operational under the

Framework Agreement, namely the routes between Singapore and Frankfurt, Munich, and Zurich.

33. The Proposed Expanded JV does not result in any new direct, non-stop routes between SQ Home Markets and LH Home Markets. However, there are nine (9) routes on which only SQ and/or TR currently operate direct flights between Singapore and a destination in the LH Home Markets but are not operated by LH or its subsidiaries.
34. As such, the Applicants identified a total of 12 Revenue Share Routes in the current renewal Application, which include the routes between Singapore and:
- (a) Amsterdam, operated by SQ;
 - (b) Athens, operated by TR;
 - (c) Barcelona, operated by SQ;
 - (d) Berlin, operated by TR;
 - (e) Frankfurt, operated by SQ and LH;
 - (f) London, operated by SQ;
 - (g) Manchester, operated by SQ;
 - (h) Milan, operated by SQ;
 - (i) Munich, operated by SQ and LH;
 - (j) Paris, operated by SQ;
 - (k) Rome, operated by SQ; and
 - (l) Zurich, operated by SQ and LX.
35. The Parties will exercise metal neutrality on the Revenue Share Routes and coordinate connections for feeder routes where practical. However, the Parties will unilaterally decide on the scheduling of their own feeder routes.

4.0 PROHIBITION ON ANTI-COMPETITIVE AGREEMENT

4.1 Legal Framework

36. Subsection 49(1) of Act 771 prohibits an agreement between enterprises that “*has the object or effect of significantly preventing, restricting, or distorting competition in any aviation service market*”. The reference to “object or effect” in subsection 49(1) of Act 771 should be read disjunctively.

37. Subsection 49(2) of Act 771 further provides as follows:

“(2) Without prejudice to the generality of subsection (1), a horizontal agreement between enterprises which has the object to—

- (a) fix, directly or indirectly, a purchase or selling price or any other trading conditions;*
- (b) share the aviation service market or sources of supply;*
- (c) limit or control—*
 - (i) production;*
 - (ii) market outlets or market access;*
 - (iii) technical or technological development; or*
 - (iv) investment; or*
- (d) perform an act of bid rigging,*

in connection with aviation services, is deemed to have the object of significantly preventing, restricting, or distorting competition in any aviation service market.”

38. An agreement may be exempted from the prohibition in section 49 of Act 771 subject to the conditions under section 50 of Act 771 being satisfied. Section 50 of Act 771 provides that an enterprise applying under subsection 51(1) of Act 771 must show the following:

- (a) there are significant identifiable technological, efficiency or social benefits directly arising from the agreement;
- (b) the benefits could not reasonably have been provided by the parties to the agreement without the agreement having the effect of preventing, restricting, or distorting competition;
- (c) the detrimental effect of the agreement on competition is proportionate to the benefits provided; and
- (d) the agreement does not allow the enterprise concerned to eliminate competition completely in respect of a substantial part of the aviation services.

4.2 The Commission’s Analysis

39. The Commission is of the view that the Framework Agreement falls within the definition of an agreement prohibited under section 49 of Act 771 as it is an agreement which aims to share revenues, costs, and profits and to coordinate the Parties’ marketing and network plans, all while the Parties remain as separate entities. Given that the

Framework Agreement is a horizontal agreement involving cooperation in the areas mentioned in paragraph 24, the Framework Agreement is concluded to have the object of significantly preventing, restricting, or distorting competition in any aviation service market by virtue of subsection 49(2) of Act 771.

5.0 DEFINING THE RELEVANT MARKET

5.1 Legal Framework

40. Section 47 of Act 771 defines an “aviation service market” as “a market for aviation services in Malaysia or in any part of Malaysia”. The Commission’s Guidelines on Aviation Service Market Definition (“**Market Definition Guidelines**”) provide that a service market could include a group of services which are substitutable or competitive with one another.⁶
41. The Market Definition Guidelines further state that the identification of the relevant market should generally consider two dimensions of the market—the service market and the geographical market.⁷ An aviation service market definition depends on the facts of each case.

5.2 The Applicants’ Submission

42. In defining the relevant markets, the Applicants used the same approach as has been used in the Commission’s Decision granting an Individual Exemption to the Parties’ JV, dated 3 September 2019 (“**2019 SQ-LH Decision**”). The Applicants submitted that the relevant markets for scheduled air passenger services are defined on the basis of airport-pairs or city-pairs. In particular, each combination of a point of origin and point of destination (“**O&D**”) can form a separate market, as demand substitutability is limited between O&D pairings.
43. The Applicants submitted that the relevant markets which fall within the scope of the Framework Agreement would be the scheduled air passenger services for the O&D pairs between Malaysia and the LH Home Markets.
44. The Applicants identified nine (9) Malaysian cities which are connected to LH Home Markets via the Revenue Share Routes, which are:
- (a) Kota Kinabalu International Airport (“**BKI**”);
 - (b) Sultan Azlan Shah Airport, Ipoh (“**IPH**”);
 - (c) Kuching International Airport (“**KCH**”);
 - (d) Sultan Ismail Petra Airport, Kota Bharu (“**KBR**”);

⁶ Paragraph 2.1 of the Market Definition Guidelines, GL/Competition/ASMD/2018 (19 January 2018).

⁷ Paragraph 3.1 of the Market Definition Guidelines.

- (e) Kuala Lumpur International Airport (“**KUL**”);
- (f) Sultan Ahmad Shah Airport, Kuantan (“**KUA**”);
- (g) Langkawi International Airport (“**LGK**”);
- (h) Miri International Airport (“**MYY**”); and
- (i) Penang International Airport (“**PEN**”).

45. The Parties grouped the O&D pairs based on the following categories of routes:

- (a) **Focal Routes:** These refer to routes that connect Malaysia to the LH Home Markets in which the Revenue Share Routes comprise a sector. The total number of theoretical O&D pairs that would arise from the Focal Routes would accordingly be the total number of permutations between the nine (9) identified Malaysian cities and the 12 airport destinations served by the Revenue Share Routes as listed in paragraph 34. As such, the Applicants identified a total of 108 potential Focal Routes; and
- (b) **Relevant Indirect Routes:** These refer to services between the nine (9) Malaysian cities and all destinations within the LH Home Markets that operate via the Focal Routes.⁸ The Parties noted that the key difference between the Focal Routes and Relevant Indirect Routes is the number of sectors. The Focal Routes would involve two sectors (e.g., KUL–SIN–FRA) whereas the Relevant Indirect Routes would involve an additional sector (e.g., KUL–SIN–FRA–GRZ (Graz)). In respect of the Relevant Indirect Routes, the Parties identified 199 potential indirect airport destinations in the LH Home Markets—including both airport destinations that are currently operational, as well as those that may become operational in the future. As such, the Parties identified a total of 1,791 potential Relevant Indirect Routes.

The Focal Routes and the Relevant Indirect Routes are listed in **Appendix III**.

46. The Applicants stated that the Relevant Indirect Routes are relevant for the purposes of assessing the impact of the JV insofar as they form part of a sector of an indirect route between the LH Home Markets and Malaysia through Singapore (e.g., KUL–SIN–FRA–GRZ). The Applicants further submitted that as the Relevant Indirect Routes would necessarily involve a sector which is a Revenue Share Route, the Focal Routes are the only routes that are relevant for the purposes of assessing the impact of the JV on Malaysia.

⁸ From Malaysia to the LH Home Markets through Singapore and subsequently, through one of the twelve (12) destinations in the LH Home Markets which make up a Revenue Share Route, i.e., FRA, MUC, ZRH, AMS, ATH, BER, BCN, LHR, MAN, MXP, CDG, FCO.

Substitutability of other forms of transport

47. The Applicants submitted that other modes are not considered as substitutable as the Focal Routes involve a long-haul international flight sector operated by the Parties.
48. The Applicants noted that there are other transport options⁹ between Singapore and Malaysia which may be considered substitutes for the short-haul sector, to the extent that they are comparable in terms of journey time and frequencies.
49. The Applicants submitted that notwithstanding the above, there are no substitutes for air travel given that the Focal Routes necessarily involve a long-haul international flight sector.

Direct versus indirect air passenger services

50. The Applicants submitted that nearly all air passenger services in the relevant markets are indirect services. The Applicants noted that for the purpose of the analysis, save for a direct flight on the KUL–LHR route operated by British Airways PLC (“**BA**”) and MH, with two (2) weekly flights each, there are no direct flights that are relevant as the Parties do not operate direct flights between Malaysia and the LH Home Markets.
51. LH does not operate flights on any routes into or out of Malaysia—except through codeshare arrangements with Thai Airways International Public Company Limited (“**TG**”) via Bangkok (“**BKK**”)—but operates flights between Singapore and the LH Home Markets. SQ operates flights between Malaysia and Singapore, as well as between Singapore and the LH Home Markets.
52. Therefore, the Applicants submitted that the overlap between the networks operated by the Parties to and from Malaysia is very limited.
53. The Applicants also submitted that one-stop and two-stop services are to be considered as a single market.
54. The Parties are of the view that the applicable analysis has not changed since the Commission’s 2019 SQ-LH Decision. The Parties, however, submitted that only indirect air passenger services are relevant for the purposes of the assessment of the Application.

Business versus leisure travel

55. The Applicants submitted that the distinctions between different types of passengers, their purpose of travel, and the travel characteristics that each category of passengers display have become less apparent. For example, business travellers were historically considered to be time-sensitive, relatively inflexible in terms of departure and/or arrival time, and requiring the option of changing their reservation at short notice, with many of

⁹ Transport options by land, such as by car and train, as well as transport options by sea, such as scheduled ferry services.

them travelling in business class. However, increasingly, business travellers no longer display these characteristics. Further, the Applicants do not consider that there would be any meaningful way to identify any accurate and usable information with regard to the split between business and leisure travellers on the Focal Routes, given that the various classes of travel on an airline do not map accurately against the purpose of travel or time sensitivity.

56. Given the above, the Applicants consider that it would not be meaningful, appropriate, or possible to identify distinct business and leisure service markets.

5.3 The Commission's Analysis

57. With regard to section 47 of Act 771, the Commission notes that passengers for air transport services generally travel to a specific destination for a reason and are not likely to switch to another destination when faced with a small but significant, non-transitory increase in price. For the purposes of this assessment, the Commission accepts that the service market is the scheduled air passenger services between Malaysia and the LH Home Markets. In line with the Commission's previous decisions, including the Commission's 2019 SQ-LH Decision, the geographical market is defined by O&D city-pairs between Malaysia and the LH Home Markets.

58. The Commission also adopted its findings in its previous decisions in relation to the different aspects of defining the service market. For the purposes of the Application, the Commission did not find any other mode of transport to be substitutable with air passenger services between Malaysia and the LH Home Markets. The Commission had also previously found that indirect services are substitutable to direct services where the services are long-haul flights. The Commission also did not make any distinction between business and leisure travellers. Further explanation of the above aspects of the service market can be viewed in the Commission's 2019 SQ-LH Decision, the Decision for the Individual Exemption Application by All Nippon Airways Co., Ltd. and United Airlines, Inc.¹⁰, and the Decision for the Individual Exemption Application by Malaysia Airlines Berhad and Japan Airlines Co., Ltd.¹¹

59. The Commission disagrees with the Applicants' submission that only the Focal Routes are relevant in assessing the impact of the JV on Malaysia. The Commission is of the view that each market falling within the scope of the JV can be assessed to determine the impact of the JV in those markets. As long as the Parties can sell tickets as a marketing airline on any O&D route between Malaysia and the LH Home Markets, and such O&D route falls within the scope of the JV, the O&D route would form part of the relevant markets, which would warrant assessment.

5.4 Conclusion

60. The relevant markets are therefore scheduled air passenger services on O&D city-pairs between Malaysia and the LH Home Markets ("**Relevant Markets**"). As there would be

¹⁰ Decision dated 11 May 2017.

¹¹ Decision dated 9 December 2019.

numerous Relevant Markets due to the various possible permutations of the O&D routes arising from the large scope of the Framework Agreement, the Commission carried out an exercise to refine the scope of its analysis. By way of illustration, there were a total of 135 operational airports in the LH Home Markets in 2021 and 1,791 O&D routes between cities in Malaysia and destinations in the LH Home Markets.

61. While the Commission finds that each of the above O&D routes could form separate Relevant Markets, the Commission agrees with the Applicants that it is not necessary to identify and assess each O&D route that falls under the scope of the JV, as most of these airports have none or very little traffic to or from Malaysia carried by the Parties. The Commission, therefore, had refined the scope of its analysis to focus only on Relevant Markets that would be more materially impacted by the JV. O&D routes that are only minimally impacted by the JV have not been included in the Commission's full analysis. The Commission's findings on the number of O&D routes falling under the scope of the JV and how the Commission carried out the exercise of refining the scope of the Commission's analysis will be further explained in paragraph 97 below.

6.0 RELIEF OF LIABILITY

6.1 Legal Framework

62. An agreement prohibited under section 49 of Act 771 may be granted an individual exemption by the Commission if such an agreement fulfils all of the requirements under section 50 of Act 771, as follows:
- (a) there are significant identifiable technological, efficiency, or social benefits directly arising from the agreement;
 - (b) the benefits could not reasonably have been provided by the parties to the agreement without the agreement having the effect of preventing, restricting, or distorting competition;
 - (c) the detrimental effect of the agreement on competition is proportionate to the benefits provided; and
 - (d) the agreement does not allow the enterprise concerned to eliminate competition completely in respect of a substantial part of the aviation services.
63. The Commission's Guidelines on Anti-Competitive Agreements further provide that, in claiming any benefits under subparagraph 50(a) of Act 771, the applicant shall identify and provide evidence on the nature of the benefits. The Guidelines on Anti-Competitive Agreements also state that claims of benefits that are unsubstantiated would be rejected.

6.2 The Applicants' Submission

Subparagraph 50(a) – Significant identifiable technological, efficiency or social benefits directly arising from the agreement

64. The Applicants submitted that the Framework Agreement has, and would continue to, give rise to significant economic and social benefits and benefit from the relief of liability, as provided under section 50 of Act 771 and that the Framework Agreement is indispensable with regard to their attainment. In particular, the Applicants submitted that the Framework Agreement has already, and is highly likely to continue to, lead to public benefits for the Malaysian economy and for Malaysian travellers in the following areas:

- (a) Better scheduling which results in a reduction in travelling time;
- (i) The Applicants submitted that the JV potentially results in a significant reduction of travelling time as a result of better scheduling. The Applicants submitted evidence to prove their claim that travelling times had reduced as a result of the JV, using a sample of routes in the original scope of the JV. The Applicants noted that the examples are non-exhaustive and are representative of time savings that will likely be achieved on a large number of other services.

Table 1 below shows the comparison between the total elapsed time and the total connecting time pre- and post-JV for the sample of routes submitted by the Applicants.

Table 1: Comparison between the total elapsed time and total connecting time for selected routes on the Parties' flights pre- and post-JV

Route	Total elapsed time (mins)			Total connecting time (mins)		
	Pre-JV	Post-JV	Difference	Pre-JV	Post-JV	Difference
KUL-ZRH	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-FRA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-MUC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-FRA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ZRH-PEN	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
BKI-ZRH	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-GVA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Route	Total elapsed time (mins)			Total connecting time (mins)		
	Pre-JV	Post-JV	Difference	Pre-JV	Post-JV	Difference
PEN-ZRH	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
BKI-FRA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Applicants' submission

Notes:

1. The numbers shaded in green indicate that the Parties' elapsed/connecting time during the post-JV period is lower compared to the pre-JV period while numbers shaded in red indicate that the Parties' elapsed/connecting time during the post-JV period is higher compared to the pre-JV period.
2. Pre-JV figures are based on the period before the Parties entered into the Framework Agreement in 2015, while post-JV figures are based on flights in June 2022, which were arranged by the Parties while COVID-19 restrictions were slowly eased.

- (ii) The Applicants submitted that there have been reductions in travel times on the [redacted] routes comparing the pre- and post-JV travelling times, using the June 2022 schedule as a reference point. For the [redacted], there is similarly a reduction in transit time. However, the Applicants claim that the increased total travel time can be accounted for by the longer flight time for the [redacted] sector. The Applicants had not provided an explanation for the longer flight time.
 - (iii) The reductions in actual or potential total travel time ranged between [redacted]. The Applicants submitted that the reduced travel times would be available to passengers as COVID-19 restrictions are lifted internationally.
 - (iv) The Applicants submitted that similarly, the JV will likely result in a reduction of travelling time for other routes in the Proposed Expanded JV.
- (b) Better scheduling and expanded route options which result in benefits to travellers;
- (i) The Applicants submitted that the JV provides additional routing options available to travellers under the scope of the Proposed Expanded JV. The Applicants submitted that travellers would have a wider range of routing options to select from that would better suit their timing.
 - (ii) The Applicants provided the proposed itineraries for a sample of seven (7) O&D pairs between KUL and the LH Home Markets to substantiate their claim on expanded routing options, which include the routes between KUL and [redacted]. The Applicants chose these seven (7) O&D pairs as [redacted].
 - (iii) For example, the Applicants provided that travellers from KUL to LHR have the additional option of travelling to LHR via FRA (i.e., KUL-SIN-FRA-LHR), in addition to the existing option of KUL-SIN-LHR,

potentially giving them options to travel on more days or at different timings.

- (iv) The Applicants further submitted that following the implementation of the JV, the immediate benefit to passengers for some routes, such as the [X] route, would be in the form of additional routing options rather than reduced travel time.
 - (v) The Applicants submitted that this benefit would not be achievable in the absence of the JV. Initiatives taken such as deploying larger aircraft, establishing new routes, and increasing route frequency can result in significant business risks and are more readily achievable through the support of a JV.
- (c) Expanded virtual networks for both airlines through the alignment of networks that are largely complementary which benefits travellers;
- (i) The Applicants submitted that their networks are largely complementary and that the JV has increased the virtual networks of both airlines. This enables more travelling options, as well as decreased search time and cost for travellers.
 - (ii) Since its inception, the JV has expanded the virtual networks from [X] services during the pre-JV period to [X] services during the post-JV period, as of February 2022. **Table 2** below shows the summary of the Parties' codeshare routes pre- and post-JV.

Table 2: Number of the Parties' codeshare routes pre- and post-JV

Codeshare	Virtual Network Routes (Codeshare Routes)		
	Pre-JV (2015)	2017	Post-JV (2022)
SQ/TR on LH/LX	[X]	[X]	[X]
LH/LX on SQ/TR	[X]	[X]	[X]
Total	[X]	[X]	[X]

Source: Applicants' submission

- (iii) The Applicants submitted that the expansion of the codeshare arrangements to the Malaysian markets through the current JV, such as SIN-KUL, SIN-PEN, and SIN-BKI, has benefitted not only Malaysian travellers but also travellers worldwide.
- (iv) The Applicants also submitted that the Proposed Expanded JV has increased the virtual networks of both airlines by another [X] codeshare sectors. The Proposed Expanded JV has added a wide network of

destinations for the Parties and allowed them to expand their reach through joint marketing.

- (v) With regard to possible future developments under the Proposed Expanded JV, the Applicants submitted that an additional [redacted] codeshare sectors could potentially be added to the Parties' virtual networks.
- (d) Wider selection of fare products which leads to potentially more competitive fares;
 - (i) The Applicants submitted that their ability to harmonise fares and coordinate inventory under the JV allows them to offer a wider range of fare types and seat availability to customers. Without the JV, passengers would only be able to access SQ's inventory on SQ's website, which will differ from what a passenger can obtain on LH's website. With the coordination under the JV, passengers' fare access on the Parties' websites will be similar. This may benefit the passengers through the convenience of obtaining fares from a single carrier's channel rather than two, for a greater range of travel options.
 - (ii) Under the JV, the Parties have [redacted]. Hence, the Applicants submitted that this will increase their ability to offer more competitive fares compared to the case in the absence of the JV.
 - (iii) By comparing [redacted], the Applicants submitted that there is a significant reduction in average fares, which arose as a result of the elimination of double marginalization. The Applicants provided the fares for selected routes between Malaysia and the LH Home Markets to further substantiate their claim. **Tables 3 and 4** show the difference between the sum of sector fares offered pre-JV and the post-JV offered through-fare in 2021 for selected routes.

Table 3: Difference in fares (%) between the sum of sector fares offered pre-JV and the post-JV through-fare in 2021 for selected routes from Malaysia to the LH Home Markets, where the point of sale is in Malaysia

Route	Economy Lite	Economy Standard
KUL-GVA	[redacted]	[redacted]
PEN-STR	[redacted]	[redacted]
KUL-BER	[redacted]	[redacted]
KUL-HAM	[redacted]	[redacted]
KUL-HAJ	[redacted]	[redacted]
PEN-DRS	[redacted]	[redacted]
KUL-BRU	[redacted]	[redacted]

Average	[REDACTED]	[REDACTED]
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Source: Applicants' submission

Table 4: Difference in fares (%) between the sum of sector fares offered pre-JV and the post-JV through-fare in 2021 for selected routes from the LH Home Markets to Malaysia, where the point of sale is in an LH Home Market

Route	Economy Lite	Economy Standard
GVA-KUL	[REDACTED]	[REDACTED]
STR-PEN	[REDACTED]	[REDACTED]
BER-KUL	[REDACTED]	[REDACTED]
HAM-KUL	[REDACTED]	[REDACTED]
HAJ-KUL	[REDACTED]	[REDACTED]
DRS-PEN	[REDACTED]	[REDACTED]
BRU-KUL	[REDACTED]	[REDACTED]
Average	[REDACTED]	[REDACTED]

Source: Applicants' submission

- (iv) The Applicants had submitted their reduction in fares based on 2021 data. As shown in **Table 3**, the reduction in fares for the Economy Lite- and Economy Standard-class fares ranged from [REDACTED] and [REDACTED], respectively. The post-JV reduction in fares was, on average, [REDACTED] for the Economy Lite-class fares and [REDACTED] for the Economy Standard-class fares. The Applicants submitted that the reduction in fares indicates benefits to Malaysia-based travellers arising from the JV.
- (v) The Applicants also provided a simulation of the estimated fare reductions for selected routes between Malaysia and the LH Home Markets under the scope of the Proposed Expanded JV, as shown in **Tables 5 and 6**.

Table 5: Estimated fares for selected routes from Malaysia to the LH Home Markets under the scope of the Proposed Expanded JV, where the point of sale is in Malaysia

Route	Economy Lite			
	Pre-JV (RM)	Estimated Post-JV (RM)	Estimated Difference (RM)	Estimated Difference (%)
KUL-TLS	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-MAD	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-WAW	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-VCE	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

PEN-ZAG	[✂]	[✂]	[✂]	[✂]
PEN-PRG	[✂]	[✂]	[✂]	[✂]
PEN-BUH	[✂]	[✂]	[✂]	[✂]
Average				[✂]

Route	Economy Standard			
	Pre-JV (RM)	Estimated Post-JV (RM)	Estimated Difference (RM)	Estimated Difference (%)
KUL-TLS	[✂]	[✂]	[✂]	[✂]
KUL-MAD	[✂]	[✂]	[✂]	[✂]
KUL-WAW	[✂]	[✂]	[✂]	[✂]
KUL-VCE	[✂]	[✂]	[✂]	[✂]
PEN-ZAG	[✂]	[✂]	[✂]	[✂]
PEN-PRG	[✂]	[✂]	[✂]	[✂]
PEN-BUH	[✂]	[✂]	[✂]	[✂]
Average				[✂]

Source: Applicants' submission

Table 6: Estimated fares for selected routes from the LH Home Markets to Malaysia under the scope of the Proposed Expanded JV, where the point of sale is in an LH Home Market

Route	Economy Lite			
	Pre-JV (RM)	Estimated Post-JV (RM)	Estimated Difference (RM)	Estimated Difference (%)
TLS-KUL	[✂]	[✂]	[✂]	[✂]
MAD-KUL	[✂]	[✂]	[✂]	[✂]
WAW-KUL	[✂]	[✂]	[✂]	[✂]
VCE-KUL	[✂]	[✂]	[✂]	[✂]
ZAG-PEN	[✂]	[✂]	[✂]	[✂]
PRG-PEN	[✂]	[✂]	[✂]	[✂]
BUH-PEN	[✂]	[✂]	[✂]	[✂]
Average				[✂]

Route	Economy Standard			
	Pre-JV (RM)	Estimated Post-JV (RM)	Estimated Difference (RM)	Estimated Difference (%)
TLS-KUL	[x]	[x]	[x]	[x]
MAD-KUL	[x]	[x]	[x]	[x]
WAW-KUL	[x]	[x]	[x]	[x]
VCE-KUL	[x]	[x]	[x]	[x]
ZAG-PEN	[x]	[x]	[x]	[x]
PRG-PEN	[x]	[x]	[x]	[x]
BUH-PEN	[x]	[x]	[x]	[x]
Average				[x]

Source: Applicants' submission

- (vi) The simulation shows that the average estimated reduction in fares for round-trip flights from Malaysia to the LH Home Markets under the scope of the Proposed Expanded JV, where the point of sale is in Malaysia was [x] for the Economy Lite-class fares and [x] for the Economy Standard-class fares. All routes with a point of sale in Malaysia showed a reduction in fares except for the Economy Lite-class fares on the KUL-MAD route, which showed a slight increase of [x].
- (vii) The Applicants consider the benefit of reduction in fares could only be realised through the Parties' ability to jointly price and harmonise airfares, and from the ability to share revenue through the implementation of the JV.
- (e) Better coordinated offerings for corporate accounts;
- (i) The Parties had implemented corporate products in Malaysia on [x]. Since the implementation of the JV, corporate ticket sales have been comparatively low as Malaysia closed its borders to international travellers in March 2020.
- (ii) The Applicants submitted that coordinated corporate deals have allowed them to offer corporate travellers a single contract for travel on all Parties' flights, allowing corporate travellers to enjoy the benefit of multiple flights under the contract. Under the JV, corporate travellers have access to negotiated deals on both Parties' flights, compared to only one of the Parties' flights pre-JV. The Applicants submitted that this allowed for the increase in options for corporate travellers under the same corporate deal. For example, LH corporate travellers are able to choose SQ flights under LH's corporate scheme and vice versa.

- (iii) With increased flight frequency, better connections, and more competitive fares, the Applicants submitted that they can better succeed in bidding for corporate accounts, which will in turn drive demand for services to Malaysia, resulting in spillover effects benefiting the Malaysian economy. In particular, the Applicants submitted that the JV will increase the attractiveness of Malaysia as a destination for business travellers and bring benefits to the Malaysian tourism industry post-COVID-19.
- (iv) The number of corporate accounts that have benefitted from the joint contracting under the JV is [REDACTED]. The Applicants submitted that as part of the JV, [REDACTED]. The Applicants highlighted that [REDACTED]. In addition, the Parties have [REDACTED]. The Applicants submitted that the Proposed Expanded JV will result in a greater number of potential corporate clients that will benefit from the better corporate offerings.
- (v) The Applicants also submitted that the number of passengers travelling to Malaysia through corporate accounts has since increased after Malaysia opened its international borders on 1 April 2022. The number of ticketed corporate passengers in April 2022 was [REDACTED] (April 2019: [REDACTED]). **Appendix IV** shows the number of monthly ticketed corporate passengers from January 2019 to April 2022.
- (vi) Further, the Parties have also introduced a discount matrix that results in lower fares for corporate travellers under the JV, with [REDACTED]. The benefits include:
 - (A) Amended discount structure to offset [REDACTED], as [REDACTED];
 - (B) Enhanced benefits for clients with both LH and SQ corporate accounts, in terms of [REDACTED];
 - (C) Enhanced benefits for clients with expired corporate accounts. For example, [REDACTED], which would not have been possible pre-JV;
 - (D) Lower threshold for [REDACTED] as [REDACTED]; and
 - (E) Discounts applied to [REDACTED], from [REDACTED].
- (f) Increased passenger, seat capacity, routes, and services;
 - (i) The Applicants submitted that the JV will contribute to the overall increase in passenger volume between Malaysia and the LH Home Markets. The Applicants could only submit historical data for passenger traffic from Malaysia to the LH Home Markets from 2Q18 onwards due to limitations in their database.

- (ii) As for the forecast of future passenger traffic, the Applicants stated that it is difficult to reliably estimate the extent to which passenger volumes will increase due to the JV itself during the COVID-19 pandemic period. The Applicants did not provide new quantitative estimates of the expected increase in passengers and maintained that they could not reliably provide passenger traffic projections past 1Q22.
- (iii) However, the Applicants submitted that the figures identified in the Commission’s 2019 SQ-LH Decision¹² would continue to be a good indicator of how the JV could lead to an overall increase in passenger volumes.
- (iv) The Applicants also submitted that the JV will contribute to an increase in seat capacity, routes, and services between Malaysia and the LH Home Markets.
- (v) As a result of the implementation of the JV, LH launched the SIN–MUC route on 27 March 2018. The Applicants submit that this has allowed customers to benefit from having an additional airline to choose from in the SIN–MUC market.
- (vi) The Applicants had also submitted flight frequency, seat capacity, and load factor data of the Revenue Share Routes which had already been implemented under the JV to further substantiate their claim. **Tables 7 and 8** show the Parties’ annual flight frequency and seat capacity for the Revenue Share Routes between Singapore and FRA, MUC, ZRH, and DUS for both pre- and post-JV.

Table 7: SQ’s annual flight frequency and seat capacity for the Revenue Share Routes between Singapore and FRA, MUC, ZRH, and DUS pre- and post-JV

Routes	2017 (Pre-JV)		2019 (Post-JV)		YoY Change	
	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity
SIN–DUS	[X]	[X]	[X]	[X]	[X]	[X]
SIN–FRA	[X]	[X]	[X]	[X]	[X]	[X]
SIN–MUC	[X]	[X]	[X]	[X]	[X]	[X]
SIN–ZRH	[X]	[X]	[X]	[X]	[X]	[X]
TOTAL	[X]	[X]	[X]	[X]	[X]	[X]

Source: Applicants’ submission

¹² Paragraph 49(e) of the Commission’s 2019 SQ-LH Decision.

Table 8: LH's annual flight frequency and seat capacity for the Revenue Share Routes between Singapore and FRA, MUC, and ZRH pre- and post-JV

Routes	2017 (Pre-JV)		2019 (Post-JV)		YoY Change	
	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity
SIN-FRA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SIN-MUC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
SIN-ZRH	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
TOTAL	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Applicants' submission

- (vii) The Applicants also submitted that SQ's load factors for the [REDACTED] routes increased between [REDACTED] following the implementation of the JV. LH's load factors for the [REDACTED] route were on average between [REDACTED]. The Applicants also highlighted that the number of LH flights increased from [REDACTED]. For the [REDACTED] route, LX's load factor increased by [REDACTED].

- (g) Enhancing post-COVID-19 recovery for the airline industry and stimulation of tourism; and
 - (i) The Applicants submitted that the continuation of the JV, as well as the Proposed Expanded JV, will reduce the risks for the Parties in restoring capacity in the current operating environment during the post-COVID-19 recovery period. The Applicants submitted that the JV will allow the Parties to reinstate capacity in a sustainable manner without incurring the risk of overinvesting in capacity, which in turn allows the Parties to continue servicing routes between Malaysia and Europe with less resources and expenditure than if each of the Parties were to service these routes alone.

 - (ii) The Applicants submitted that the benefits to customers brought about by the JV will assist in meeting an increasing demand for travel between Malaysia and various other countries. The Applicants anticipate that the JV will allow the Parties to operate at the optimal capacity the market will allow once borders reopen, thereby facilitating any further such growth in the future. The Parties, therefore, expect that the volume of tourism from the LH Home Markets to Malaysia will have the opportunity to bounce back rapidly as a result of the JV.

- (h) Additional cost savings and other efficiencies
 - (i) The Applicants submitted that the JV allowed for the expansion of services and frequencies on the relevant routes, which has driven higher traffic on routes such as SIN–MUC and previously, SIN–DUS. This resulted in better load factors and scale effects in operations as fixed costs are allocated to more flights and spread over more passengers.
 - (ii) The Applicants submitted that they have [✂].
 - (iii) In particular, the Applicants submitted that they have been able to reduce excess costs through an increased ability to deploy appropriately-sized aircraft on routes from Singapore to MUC, FRA, and ZRH, taking into account combined demand on the relevant routes, in order to maximise load factors.
 - (iv) The Applicants submitted that benefits related to cost savings and synergies may or may not lead to lower fares, as fare movements are heavily influenced by various exogenous factors such as fuel costs and travel demand. Notwithstanding this, the Applicants submitted that they would be in a better position to offer more competitive fares—which at any given time may be higher or lower than pre-JV prices, given market conditions—as a result of such efficiencies.
 - (v) The Applicants also provided their fare analysis, which showed that fares were lower following the implementation of the JV compared to the simulated reductions forecasted in 2019. The Parties submitted that this is regarded as evidence that the efficiencies from the JV have led to cost savings for customers.
65. The Applicants submitted that the economic efficiency benefits arising from the JV in subparagraphs 64(a), (b), (c), (d), (e), and (f) will lead to connectivity-related social benefits, i.e., through improved connectivity between Malaysia and the LH Home Markets.
66. The Applicants also submitted that the economic efficiency benefit arising from the JV described in paragraph 64(g) above will lead to employment-related social benefits via an increase in passenger numbers to and from Malaysia.

Subparagraph 50(b) – The benefits could not reasonably have been provided without the agreement having the effect of preventing, restricting, or distorting competition

67. The Applicants submitted that the JV is indispensable to the efficiency benefits claimed in paragraph 64 and that the cooperation under the Framework Agreement is necessary to provide the requisite incentives for the Parties to materialise the metal-neutral alliance, and as such, are necessary for the anticipated benefits to arise.

68. The Applicants submitted that the anticipated benefits of the JV are dependent on metal neutrality, which will change the Parties' mutual incentive to be that of growing traffic and optimising capacity on routes between Malaysia and the LH Home Markets. Without this mutual incentive, the Parties would not be incentivised to enter into the cooperation as such arrangements would potentially provide the ability for one of the Parties to cannibalise traffic in the Relevant Markets. The Applicants submitted that the need for metal neutrality requires revenue sharing on services between Malaysia and the LH Home Markets as this would remove the Parties' desire for passengers to be carried on their own aircraft and also to fairly remunerate the Parties.
69. The Applicants also submitted that their ability to coordinate schedules and capacity through the JV provides more possibilities to:
- (a) manage capacity in a way that optimises services directly. For example, the Parties could upgauge aircraft to cater for the combined demand of the airlines and potentially freeing resources for deployment on other routes or at other timings; and
 - (b) time services in a way that would better connect to onward services, thereby increasing the attractiveness of that option to the travelling customer, which leads to greater demand and capacity utilization.
70. The Applicants submitted that other forms of cooperation between the Parties do not allow for joint pricing, joint selling, harmonisation of schedules, or the sharing of route results, which are elements that are critical for the generation of the benefits claimed. Hence, the Applicants are of the view that the JV is indispensable to achieving the benefits stated in paragraph 64.

Subparagraph 50(c) – The detrimental effect of the agreement on competition is proportionate to the benefits provided

71. The Applicants did not submit monetary estimates of the value of the benefits claimed. The Applicants nevertheless submitted that the JV has no adverse effect on actual or potential competition on any relevant market in question.
72. In line with the Commission's approach in the 2019 SQ-LH Decision, the Applicants examined the annual passenger volumes, the post-JV market concentration by calculating the Herfindahl-Hirschman Index ("HHI"), and the change in the HHI resulting from the JV ("**delta HHI**") to assess the competitive effect of the JV. The Applicants identified 11 routes in 2019 which have:
- (a) more than 2,500 annual passengers; and
 - (b) would result in significantly higher post-JV HHI and delta HHI.¹³

¹³ The Applicants took reference to the United States Department of Justice ("**US DOJ**") and Federal Trade Commission's ("**FTC**") Horizontal Merger Guidelines, available at <https://www.justice.gov/atr/horizontal-merger-guidelines-0#15>.

73. The 11 identified O&D routes based on the criteria above are shown in **Table 9** below.

Table 9: Focal Routes with more than 2,500 annual passengers in 2019 and which would result in significantly higher post-JV HHI and delta HHI, as submitted by the Parties

Focal Route	Passenger Volume	Post-JV HHI	Delta HHI
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: Applicants' submission

74. The Applicants also submitted one (1) route based on data in 2020, which is the [REDACTED] route, with a passenger volume of [REDACTED], a post-JV HHI of [REDACTED], and a delta HHI of [REDACTED].
75. In respect of the routes mentioned above, the Applicants submitted that the JV passenger volumes and HHI data are only an initial filter. The Applicants submitted that there are no substantial detrimental effects on competition arising from the JV in relation to the Focal Routes and the Relevant Indirect Routes as there are several other existing competitors and no barriers to entry for scheduled air passenger services between Malaysia and the LH Home Markets.
76. With regard to barriers to entry, the Applicants submitted that the relevant bilateral air service agreements (“**ASA**”) concerning the LH Home Markets are generally liberal. The route schedules in these ASAs permit airlines in the LH Home Markets to depart from any point in their respective jurisdictions and land in either any destination or specified destinations in Malaysia. The codeshare arrangements are generally flexible, i.e., include third-party codesharing agreements. Apart from Croatia, France, Germany, Greece, Italy, and Slovenia, there are also no restrictions on the frequency, capacity or aircraft type for passenger services.¹⁴ The Applicants further noted that the EU’s Horizontal Aviation agreement with Malaysia, which entered into force on 3 April 2009,

¹⁴ The details of these ASAs can be accessed from the Commission’s website at https://www.mavcom.my/wp-content/uploads/2017/10/Air-Service-Agreement-List_vOct17.pdf.

removed nationality restrictions in the bilateral ASAs and thereby allows European airlines to operate flights between any EU Member State and Malaysia.¹⁵

77. Further, the Applicants submitted that the relevant bilateral ASAs concerning their competitors' jurisdictions—in particular, ASAs between Malaysia and China, Hong Kong, Iran, Netherlands, Taiwan, Thailand, Turkey, Oman, Qatar, United Arab Emirates, and the United Kingdom—are similarly liberal.
78. Given the above, the Applicants submitted that there are no barriers to entry and expansion that are created by these ASAs.

Subparagraph 50(d) – The agreement does not allow the enterprise to eliminate competition completely in respect of a substantial part of the aviation services

79. In respect of the Focal Routes, the Applicants submitted that the implementation of the JV has no adverse effect on actual or potential competition on any relevant market given that there is limited competition between the Parties in relation to services to and from Malaysia, especially since LH does not operate flights into or out of Malaysia. Further, LH's codeshare agreement with TG will not be affected by the JV, i.e., LH will continue to operate the codeshare arrangement with TG, independent of the JV.
80. The Parties will remain subject to strong competitive constraints by way of existing and potential competition, as there are no or negligible barriers to entry or expansion on the Focal Routes. The Applicants state that they are not aware of any barriers to entry, including any legal barriers, or barriers arising from air rights, gate access, slot availability or otherwise, in relation to direct air passenger services between Malaysia and the LH Home Markets.
81. The Applicants further provided the following examples of recent entries by airlines which offer indirect air passenger services from Malaysian cities to the LH Home Markets, through their respective home bases:
 - (a) Etihad Airways PJSC (“**EY**”), which added an additional daily service for the KUL–AUH route and *vice versa*, to offer a double daily service from 15 July 2016 onwards;
 - (b) Turkish Airlines Inc. (“**TK**”), which increased frequencies on the KUL–IST route and *vice versa* from 10 times weekly to double daily on 31 May 2016. However, this was reduced back to a daily service on 8 January 2017; and
 - (c) Qatar Airways Group Q.C.S.C. (“**QR**”), which launched three (3) times weekly flights on the PEN–DOH route and *vice versa* in February 2018.¹⁶
82. Given the above, the Applicants submitted that they will remain subject to strong competitive constraints by way of existing and potential competition. The Applicants

¹⁵ EC's press release dated 23 March 2007, available at https://ec.europa.eu/commission/presscorner/detail/en/IP_07_407.

¹⁶ However, the Commission notes that QR has since discontinued its direct services on the PEN – DOH route.

further submitted that there will not be any significant reduction in competition arising from the JV.

6.3 The Commission's Analysis

Subparagraph 50(a) – Significant identifiable technological, efficiency or social benefits directly arising from the agreement

83. The Commission has considered all of the benefits claimed by the Applicants, and its assessment in relation to subparagraph 50(a) of Act 771 are as follows:

- (a) Better scheduling which results in a reduction in travelling time;
 - (i) The Commission found that there has been a reduction in travelling time post-implementation of the JV. Based on data from AirportIS, the minimum elapsed time on the Parties' flights decreased on the KUL–ZRH, PEN–FRA, and PEN–ZRH routes in 1Q22, as compared to the Parties' flights in 1Q17. In terms of connecting time, out of the sample of eight (8) routes selected by the Commission, only the KUL–ZRH and BKI–FRA routes have a shorter connecting time post-JV compared to pre-JV. The Commission chose the eight (8) routes based on the routes that would be most impacted by the JV, as well as to cover at least three (3) cities in Malaysia for a fairer representation of the claimed benefit. **Table 10** below shows the comparison between the minimum elapsed time and connecting time for selected routes on the Parties' flights pre- and post-JV.

Table 10: Comparison between pre- and post-JV elapsed time and connecting time for selected routes on the Parties' flights

Route	Minimum elapsed time (mins)			Connecting time (mins)		
	Pre-JV	Post-JV	Difference	Pre-JV	Post-JV	Difference
KUL–ZRH	[redacted]	[redacted]	[green]	[redacted]	[redacted]	[green]
KUL–FRA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PEN–MUC	[redacted]	[redacted]	[red]	[redacted]	[redacted]	[red]
PEN–FRA	[redacted]	[redacted]	[green]	[redacted]	[redacted]	[red]
PEN–ZRH	[redacted]	[redacted]	[green]	[redacted]	[redacted]	[red]
PEN–CDG	[redacted]	[redacted]	[red]	[redacted]	[redacted]	[red]
BKI–ZRH*	[redacted]	[redacted]	[red]	[redacted]	[redacted]	[red]

BKI-FRA*	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
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Source: Commission's analysis, Parties' websites

Notes:

1. The numbers shaded in green indicate that the Parties' elapsed/connecting time during the post-JV period is lower compared to the pre-JV period while numbers shaded in red indicate that the Parties' elapsed/connecting time during the post-JV period is higher compared to the pre-JV period.
2. Pre-JV figures are based on flights in 1Q17 while post-JV figures are based on flights in 1Q22, except for the routes marked with a (*), which were based on flights in October 2022.

- (ii) The connecting time refers to the transit time at the airport while the minimum elapsed time refers to the shortest total travelling time for the entire itinerary of a particular O&D route. The Commission found that most of the routes in **Table 10** above have a longer minimum elapsed time due to the increase in the connecting time. However, it is also noted that some routes, such as the PEN-FRA and PEN-ZRH routes have shorter elapsed time even though there was a longer connecting time.
- (iii) Although the Parties' connecting time and elapsed time increased for some routes post-JV, the Commission acknowledges that this data was based on 1Q22, where market conditions have yet to recover from the effects of the pandemic. Therefore, the pre- and post-JV data may not be comparable due to the different market conditions in the post-pandemic period. Disruptions such as staff shortages, flight delays, congestion at airports, and limitations imposed on capacity by airports could affect actual travelling times during the recovery period.
- (iv) The Commission had also compared the elapsed time between the Parties and their competitors in 1Q22. The Parties' competitors would face the same disruptions as mentioned above, allowing the Commission to draw comparisons between the Parties' and their competitors' travelling times. **Table 11** below shows the elapsed time for a selected number of routes on the Parties' flights compared to the average elapsed time of their competitors.

Table 11: Comparison between the elapsed time for selected routes on the Parties' flights and their competitors

Route	Minimum elapsed time (mins)			Average elapsed time (mins)		
	Parties	Others	Difference	Parties	Others	Difference
PEN-FRA	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PEN-CDG	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PEN-ZRH	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
PEN-MUC	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Route	Minimum elapsed time (mins)			Average elapsed time (mins)		
	Parties	Others	Difference	Parties	Others	Difference
PEN-LHR	[X]	[X]	[X]	[X]	[X]	[X]
KUL-BER	[X]	[X]	[X]	[X]	[X]	[X]
KUL-ZRH	[X]	[X]	[X]	[X]	[X]	[X]
PEN-MAN*	[X]	[X]	[X]	[X]	[X]	[X]
BKI-LHR*	[X]	[X]	[X]	[X]	[X]	[X]
KUL-FRA	[X]	[X]	[X]	[X]	[X]	[X]
BKI-ZRH*	[X]	[X]	[X]	[X]	[X]	[X]
BKI-FRA*	[X]	[X]	[X]	[X]	[X]	[X]

Source: Commission's analysis, Parties' websites

Notes:

1. The numbers shaded in green indicate that the Parties' elapsed time is lower compared to their competitors' elapsed time while numbers shaded in red indicate that the Parties' elapsed time is higher compared to their competitors' elapsed time.
2. Figures are based on flights in 1Q22 from AirportIS, except for the routes marked with a (*), which were based on flights in October 2022, as observed on 3 August 2022 from the Parties' websites.

- (v) The data above shows that the Parties' average elapsed time is lower as compared to their competitors' average elapsed time in all of the routes analysed, except for the KUL-BER route. The travelling times of the Parties' flights were much lower than their competitors' flights, where their difference ranged between 30 minutes and 267 minutes.
- (vi) The Commission notes that despite all airlines being similarly affected by the pandemic, the Parties had performed better than their competitors in terms of elapsed time during this period.
- (vii) The Commission had also reviewed and accepted the Applicants' submission regarding the travelling times in June 2022 as shown in **Table 1**. The Parties' current plan during the recovery period, as seen in the Parties' June 2022 schedule, is similar to their post-JV plan during the period immediately preceding COVID-19 restrictions. Hence, the Commission takes the Applicants' estimated June 2022 travelling time data as plausible, as it is close to the actual travelling time data in 2020, despite the market changes due to COVID-19. This shows that the benefit of shorter travelling times between Malaysia and the LH Home Markets has arisen as a result of the Parties carrying out joint scheduling under the JV.

- (viii) While the estimated reduction in travelling time for June 2022 is not as large as the post-JV 2020 data submitted by the Applicants, the Commission nevertheless found that the Parties' estimated June 2022 travelling time data is lower than pre-JV for most routes. The Commission, therefore, views the reduction in travelling and connecting time that had arisen from the JV favourably, as the Parties had objectively demonstrated the potential reductions based on schedules in June 2022. The Commission finds that the lower elapsed time shows better quality in connectivity and is a benefit from the perspective of consumers.
 - (ix) The Commission also notes that the benefit is not restricted to only mitigating the anti-competitive effects on the Significant Relevant Markets, but is also a benefit on other routes. Although the inclusion of TR in the JV may raise concerns for routes involving PEN, the Commission finds that the Parties' ability to better schedule their flights could result in further reductions in travelling time for passengers travelling from PEN.
 - (x) Based on the above, the Commission views the reduction in elapsed time as a significant benefit.
- (b) Better scheduling and expanded route options which result in benefits to travellers;
 - (i) The Commission accepts that the expanded routing options from the Proposed Expanded JV would enable the Parties to provide a wider routing selection for travellers, as enabled by the JV. However, the Commission does not regard the expanded routing options as a material benefit to consumers, for the following reasons:
 - (A) the itineraries do not cover new destinations but only cover existing ones; and
 - (B) the itineraries result in longer journeys through an additional stop, on routes served by existing, direct services.
 - (ii) For example, the Applicants provided an example of the increase in options for travellers from KUL to LHR, who have the additional option of travelling to LHR via FRA (i.e., KUL–SIN–FRA–LHR), in addition to the existing option of the KUL–SIN–LHR route. Based on the Commission's analysis, the Parties already have presence on the above itineraries pre-JV.
 - (iii) However, the Commission is therefore of the view that this benefit can be provided without the JV and is therefore not a significant benefit arising out of the JV. This is because consumers would have had the

option to fly on the routes operated by the Parties regardless of the implementation of the Proposed Expanded JV. Therefore, the Commission concludes that this is not a direct benefit to consumers as the benefit refers to an expanded route option from a supply-side perspective.

- (c) Expanded virtual networks for both airlines through the alignment of networks that are largely complementary which benefits travellers;
 - (i) The Commission had verified the Parties' virtual networks on AirportIS and accepts that the JV has expanded the virtual networks of the Parties from [X] services pre-JV to [X] post-JV, as of February 2022. This has provided increased travelling options for travellers with its wider network.
 - (ii) The Commission further notes the additional [X] codeshare sectors submitted by the Applicants under the Proposed Expanded JV, as well as the [X] potential codeshare sectors, which may potentially be added to the Parties' virtual network.
 - (iii) The Commission also agrees with the Applicants' claim that the expansion of the codeshare arrangements to the Malaysian markets such as SIN-KUL, SIN-PEN, and SIN-BKI has benefitted travellers in Malaysia.
 - (iv) The Commission accepts that an expansion of the Parties' virtual network is beneficial to passengers in the form of decreased search time and cost. For instance, the Commission accepts that passengers would have the benefit of viewing a wider range of travelling options when visiting any one of the Parties' websites. Pre-JV, passengers visiting SQ's website would only have access to SQ's inventory. Based on the Commission's analysis, the inclusion of TR into the JV would enable consumers to be able to access TR flights on the Parties' websites, allowing passengers to choose itineraries that may better suit their needs.
 - (v) Therefore, the Commission agrees that the expansion of the Parties' virtual networks arising from the JV is a significant benefit to travellers.
- (d) Wider range of fare products which leads to the Parties' customers being able to access a range of fares, including lower fares;
 - (i) The Commission found that due to the Parties' cooperation under the JV, consumers were not only able to access more flight options across a wider network, but also a wider range of fares. This could lead to consumers being able to access potentially lower fares.

- (ii) The Commission accepts that the JV allows for the combination of discounted fares and the reduction in double marginalisation. The Commission finds that the Parties had objectively demonstrated that there had been fare reductions on selected routes between Malaysia and the LH Home Markets under the JV. Through the JV, through-fares provided by the Parties provide a significant reduction in average fares compared to the sum-of-sector fares before the implementation of the JV, as evidenced by the average fares on the sample routes provided by the Applicants.
- (iii) The Commission finds that based on the data provided by the Applicants, the average round-trip Economy Lite and Economy Standard airfares provided for all of the sample routes were lower after the implementation of the JV. The difference in the average round-trip airfares between January – June 2019 and January – June 2022 is shown in **Table 12** below.

Table 12: Comparison between the Parties' average round-trip economy airfares for selected routes pre- and post-JV

Route	Average Round-trip Economy Lite Airfares			
	Pre-JV (RM)	Post-JV (RM)	Difference (RM)	Difference (%)
KUL-GVA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-STR	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-BER	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-HAM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-HAJ	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-DRS	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-BRU	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Average	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Route	Average Round-trip Economy Standard Airfares			
	Pre-JV (RM)	Post-JV (RM)	Difference (RM)	Difference (%)
KUL-GVA	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-STR	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-BER	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-HAM	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-HAJ	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PEN-DRS	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
KUL-BRU	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- (e) Better coordinated offerings for corporate accounts;
 - (i) The Commission found that the Applicants had adequately substantiated its submission regarding the increase in the number of passengers travelling to Malaysia through corporate accounts based on the number of ticketed corporate passengers.
 - (ii) The Commission also accepts that through the JV, there are increased options for corporate customers through a single contract for travel. The Applicants have also provided sufficient evidence to demonstrate better-coordinated offerings, especially through the [redacted]. The [redacted] has been able to provide benefits to corporate customers. For example, the Parties have introduced an amended discount structure, which would [redacted]. Further, the Commission also found that corporate discounts would be applied to a wider range of flight options and booking classes. The Commission also notes the benefit of a lower threshold being applied for customers to qualify for corporate discounts. The Parties would implement [redacted]. Moreover, [redacted]. Through the aforementioned benefits, the Commission finds that the JV may potentially lead to lower fares for corporate customers.
 - (iii) As such, the Commission agrees that the Parties' joint corporate contracting arrangements under the JV will provide significant benefits to corporate clients.
- (f) Increase in passengers;
 - (i) Based on AirportIS data, the Parties' passenger traffic from Malaysia to the LH Home Markets decreased by 19% between 2015 and 2019. This was due to a sharp decrease of 35% between 2015 and 2016, which had occurred pre-JV, as the Parties had implemented the JV in Singapore on 1 October 2017. The passenger traffic then increased by 25% between 2016 and 2019. Therefore, the Commission notes that the JV has contributed to the Parties' increased passenger traffic from 2016 onwards.
 - (ii) The Commission, however, does not see the increase in passenger traffic on the Parties' flights as conferring much direct benefit to consumers. The Commission finds that it is only a direct benefit to the Parties. However, any increase in the Parties' revenue may have indirect knock-on benefits to consumers. Regardless, there has been no claim by the Parties of any indirect benefit to consumers arising out of the increase in passengers carried by the Parties. Any increase in passengers carried by the Parties would therefore be treated by the Commission only as indicative of the Parties being able to maintain the frequency of its services and their network.

- (iii) As such, while the Commission accepts that there has been an increase in passenger traffic, this is not seen as a significant direct benefit for consumers.
- (g) Increase in seat capacity and frequency;
 - (i) The Commission notes that the JV itself has not introduced any new routes which have not been operated by the Parties before. The JV had only allowed [redacted]. However, this is a route already operated by SQ and as such, it is only seen as an increase in frequency.
 - (ii) The Commission had also analysed the Parties' annual flight frequencies and annual seat capacity on the four (4) Revenue Share Routes, namely, SIN–DUS, SIN–FRA, SIN–MUC, and SIN–ZRH. The Commission found that as a result of the JV, flight frequencies have increased on those routes between 2017 and 2019, resulting in additional seat capacities and services between Malaysia and the LH Home Markets.

Table 14 shows the Parties' annual flight frequency and the seat capacity pre- and post-JV.

Table 14: Parties' annual flight frequency and the seat capacity pre- and post-JV

Routes	2017 (Pre-JV)		2019 (Post-JV)		YoY Change	
	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity	Annual Flight Frequency	Annual Seat Capacity
SIN–DUS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SIN–FRA	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SIN–MUC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SIN–ZRH	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: Commission's analysis, AirportIS

- (iii) The Commission notes that the JV not only allowed the Parties to increase their frequency, as seen on the SIN–DUS and SIN–MUC routes, but it also allowed them to maintain their existing frequency on routes such as SIN–FRA and SIN–ZRH. While the increase in seat capacity and flight frequency on the SIN–FRA and SIN–ZRH routes are small, the Commission notes that the Parties already had a relatively higher frequency on the routes.

- (iv) The Commission also calibrated the Parties' data on load factors and accepts the Parties' submission. Based on AirportIS data, the load factors for the three (3) routes, SIN–MUC, SIN–FRA, and SIN–ZRH, increased by [x] to [x] between 2017 and 2019 on SQ flights. The average load factor on LH flights for these routes ranged between [x] and [x] in 2019. The fact that the Parties were able to, on average, increase their load factors while, at the same time, increasing capacity on the abovementioned key routes indicates that the Parties have jointly been carrying more passengers on their flights.
 - (v) The Commission notes that while it is accepted that there has been an increase in load factor, this is primarily seen as a benefit to the Parties but not as a significant direct benefit for consumers. This is because the Applicants have not substantiated how their potential increase in revenue arising out of their increased load factors was directly translated into benefits for consumers.
 - (vi) However, the Commission accepts the increase in seat capacity and frequency as a significant benefit as it provides consumers with more availability of seats and flight options.
- (h) Enhancing post-COVID-19 recovery for the airline industry and stimulation of tourism; and
- (i) The Commission accepts that the pooling of the Parties' existing resources would allow the Parties to reintroduce capacity during the recovery period with fewer business risks than if the Parties were to do so separately. Due to this, the Commission accepts that the Parties could be more inclined to increase capacity on routes falling under the JV as they would have the benefit of more resources to work with in planning the reintroduction of capacity. An increase in capacity in the market may bring down prices, which in turn could stimulate tourism demand for Malaysia.
 - (ii) However, with the introduction of new SQ Home Markets in the Proposed Expanded JV, the Parties may also divert resources for marketing to penetrate markets in the new SQ Home Markets. The Parties have also not provided any evidence to show future scenarios or capacity plans that support tourism growth from the LH Home Markets to Malaysia or vice versa. The Applicants have further not provided any evidence of adding frequencies or capacities on routes between Malaysia and Singapore.
 - (iii) The Commission, however, accepts that the increase in frequencies and capacity between SIN and the LH Home Markets post-JV had coincided with an increase in passengers carried between Malaysia and the LH Home Markets. For example, the Parties' [x] increase in seat capacity

on the SIN–MUC route between 2017 and 2019 as shown in **Table 14** coincided with a 6.5% increase in passengers from Malaysia during the same period.

- (iv) The Commission, therefore, accepts that it is plausible that reinstatement of capacity on routes under the JV could encourage demand for travel to Malaysia.
 - (v) The Applicants were, nevertheless, unable to substantiate their claim that the JV could contribute to the promotion of Malaysia as a travel destination for travellers from the LH Home Markets. Hence, the Commission is of the view that the Applicants' claim is unsubstantiated, albeit plausible.
- (i) Additional cost savings and other efficiencies
- (i) The Commission accepts that the increase in passenger load factors on the four (4) sample routes, i.e., SIN-DUS, SIN-MUC, SIN-FRA, and SIN-ZRH, could have resulted in higher revenue for the Parties but not necessarily additional cost savings.
 - (ii) Since the implementation of the JV in Singapore, the Commission has found that the Parties' one-way economy class fares for these four (4) routes from 2018 to 2021 have, on average, been close to or below the pre-JV level in 2015. The lower fares offered by the Parties have also coincided with the increase in load factors, which could mean that the Parties have been able to spread their fixed costs over more passengers, thus, having a lower cost per passenger. It is, therefore, possible that the additional efficiencies generated by the JV have allowed the Parties to offer more competitive fares.
 - (iii) The Applicants, nevertheless, admitted that the efficiencies would not necessarily lead to lower fares post-JV, but only that the Parties would be in a better position to offer more *competitive* fares, as compared to their competitors. While the Commission accepts that fares are affected by a variety of factors, the Commission found that the Applicants were unable to provide any clear evidence to show that they have made a conscious effort to pass on their alleged cost savings to consumers. Hence, the Commission is of the view that the Applicants' claim is unsubstantiated, albeit plausible.
84. The Commission notes that there had been disruptions in the aviation industry due to the COVID-19 pandemic, including the capacity restrictions at certain airports in Europe, labour shortages, union strikes, etc. The Applicants submitted that the impact of these disruptions on their current operations includes [REDACTED]. The Applicants submitted that the disruptions have also [REDACTED]. However, the Applicants submitted that their future

plans in relation to the implementation of the JV [§]. The Applicants further submitted that the JV has [§].

85. With regard to short- and medium-term solutions implemented by the Parties to overcome these disruptions, the Applicants submitted that [§]. The Applicants also submitted that [§].
86. Notwithstanding the above, the Commission found that the Parties were still able to provide benefits to consumers through the JV even during the pandemic period. As such, the Commission expects that as the aviation industry recovers post-pandemic, the Parties would be able to further realise the benefits claimed through additional flight frequencies and seat capacities.

Conclusion on subparagraph 50(a) of Act 771

87. The Commission notes that while the Parties do not implement revenue sharing for routes between Malaysia and Singapore, the Commission has found that this has not limited the Parties' incentives to provide benefits for the Malaysian sector.
88. Further to the Commission's analysis above, the Commission has found that there are significant, identifiable efficiency and social benefits directly arising from the JV, such as the reduction in travelling time, expansion of virtual networks, decrease in fares, and improved corporate offerings between Malaysia and the LH Home Markets. Therefore, the Commission finds that the subparagraph 50(a) requirement of Act 771 is satisfied.

Subparagraph 50(b) – The benefits could not reasonably have been provided without the agreement having the effect of preventing, restricting or distorting competition

89. The Commission found that some of the more discernible benefits for consumers, such as the expansion of codeshare routes, could have been provided without a metal-neutral alliance in place, as it could be provided through a codeshare agreement.
90. However, the Commission agrees that revenue sharing is an essential aspect of the JV to incentivise the Parties to further optimise capacity and frequency across both airlines. Such optimisation of capacity and frequency will bring knock-on benefits to consumers through the Parties being able to better allocate resources, such as the up-gauging of aircraft to cater for the combined demand of the airlines, as well as the redeployment of aircraft on other routes or at other timings.
91. The Commission agrees that some of the benefits discussed in paragraph 83 such as the reduction in travelling time, decrease in fares, and improved corporate offerings could not have been provided through an alternative arrangement such as a codeshare agreement, a special prorated agreement or a frequent flyer agreement alone.
92. A more transparent coordination of flights between the Parties through the JV would also benefit consumers through the availability of expanded route options.

93. The Commission, therefore, finds that the subparagraph 50(b) requirement of Act 771 is satisfied and some of the benefits arising out of the JV could not have been provided without the JV being a metal-neutral alliance.

Subparagraph 50(c) – The detrimental effect of the agreement on competition is proportionate to the benefits provided

94. In assessing whether the Parties fulfil the requirement under subparagraph 50(c) of Act 771, the Commission first identified the Relevant Markets that may raise competition concerns.

95. The Commission thereafter analysed any detrimental effects of the Framework Agreement in the identified Relevant Markets and assessed whether the benefits accepted by the Commission in paragraph 83 above outweighed the detrimental effects of the Framework Agreement.

96. As submitted by the Applicants, there are numerous permutations of O&D routes between Malaysia and the LH Home Markets, due to the large scope of the Framework Agreement. The Commission found that there was a total of 496 routes that had traffic carried by the Parties from 2018 onwards between Malaysia and the LH Home Markets.

97. Due to the large scope of the Framework Agreement, and as a consequence, the large number of possible Relevant Markets, the Commission further carried out an exercise to refine the scope of the Commission's assessment to determine only O&D routes that may raise competition concerns and likely to require full competition assessment. The Commission carried out the following steps to identify the O&D routes that would require full competition assessment.

(a) **Stage 1(a):** the Commission set two thresholds for determining O&D routes that are deemed significant to the Malaysian market and to the Parties. The thresholds applied to each route are:

- (i) The Parties' combined market share in the route in either 2018 or 2019 is more than 20%; and
- (ii) The traffic contribution of the route constitutes at least 0.5% of the total traffic between Malaysia and the LH Home Markets in either 2018 or 2019.¹⁷

(b) **Stage 1(b):** the Commission further identified any other route that does not meet the above thresholds, but may be considered significant enough for further

¹⁷ The number of passengers on the route is at least 0.5% of the total passengers between Malaysia and the LH Home Markets (excluding the KUL–LHR route) in 2019. The KUL–LHR route is excluded as it formed 26.6% of the entire passenger traffic between Malaysia and the LH Home Markets in 2019, which heavily skewed the passenger contribution of other routes downwards. For example, the passenger contribution of the KUL–CDG route is 8.6% without taking into account the KUL–LHR passenger contribution, but drops to 6.6% otherwise. Nine (9) routes would not have met the passenger contribution threshold if KUL–LHR was included.

assessment. Upon identifying the list of routes in accordance with Stage 1(a) and (b), the Commission carried out its market definition exercise on each route, where each Relevant Market is defined as a Significant Relevant Market.

- (c) **Stage 2:** The Commission then carried out a market analysis on each Significant Relevant Market to determine the levels of competition and to further identify Significant Relevant Markets that may raise concerns. This includes identifying the levels of market concentration, the number of players in the market, the size of the Parties' combined market shares, and whether the Parties have the highest market share in the Significant Relevant Markets or not.
 - (d) **Stage 3:** Upon identifying the list of Significant Relevant Markets that are likely to raise concerns, the Commission carried out a full competition assessment on each of the Significant Relevant Markets identified in Stage 2 in order to fully determine and assess the detrimental effects of competition arising from the Framework Agreement. This includes further assessment into any anti-competitive outcome arising from the JV through the analysis of fares and barriers to entry.
98. The Commission found that there were eight (8) routes or markets identified in Stage 1(a) above. The eight (8) routes are as follows:
- (a) Kota Kinabalu – London;
 - (b) Kuala Lumpur¹⁸ – Berlin;
 - (c) Kuala Lumpur – Zurich;
 - (d) Penang – Frankfurt;
 - (e) Penang – London;
 - (f) Penang – Manchester;
 - (g) Penang – Munich; and
 - (h) Penang – Paris.
99. The Commission also found 52 routes other than the eight (8) routes identified above where the Parties have combined market shares higher than 20% in 2018 or 2019. However, most of these routes have a very small air passenger traffic contribution of less than 0.1% in the entire market between Malaysia and the LH Home Markets.

¹⁸ In the Commission's analysis of Kuala Lumpur, it includes both Kuala Lumpur International Airport (KUL) and Sultan Abdul Aziz Shah Airport (SZB), as the Commission considers the two airports as substitutable and are within the same catchment area.

100. In Stage 1(b), the Commission further identified one (1) additional market, which is the Penang – Zurich market, which the Commission deems as significant to be further assessed.
101. The Penang – Zurich route had failed to meet the second threshold in Stage 1(a) as it had a 0.4% traffic contribution against the total passengers in the Malaysia – LH Home Markets in both 2018 and 2019. However, the Parties have consistently been dominant on this route with very high combined market shares, e.g., [] in 2018. Combined with the market’s traffic contribution in 2019 which was close to 0.5%, the Commission found that the Penang – Zurich market is a Significant Relevant Market that had to be further analysed and chose to move it on to Stage 2.
102. As such, there are a total of nine (9) Significant Relevant Markets that the Commission analysed in Stage 2. The nine (9) Significant Relevant Markets are as shown in **Table 15** below:

Table 15: Significant Relevant Markets in Stage 2

No.	Significant Relevant Market	Affected Route
1.	Kota Kinabalu – London	BKI – LHR
2.	Kuala Lumpur – Berlin	KUL – BER
3.	Kuala Lumpur – Zurich	KUL – ZRH
4.	Penang – Frankfurt	PEN – FRA
5.	Penang – London	PEN – LHR
6.	Penang – Manchester	PEN – MAN
7.	Penang – Munich	PEN – MUC
8.	Penang – Paris	PEN – CDG
9.	Penang – Zurich	PEN – ZRH

Source: Commission’s analysis

The Affected Route in the list above refers to the airport pairs flown by the Parties. **Appendix V** outlines how each of the nine (9) Significant Relevant Markets were determined and the airports that were considered as part of the Significant Relevant Markets.

103. In Stage 2, the Commission carried out a market analysis on each route to determine the levels of competition in each Significant Relevant Market. The Significant Relevant Markets that had shown to still be highly competitive did not move on to Stage 3 for a full competition assessment. As a result of the Commission’s findings in Stage 2, only four (4) Significant Relevant Markets were seen as showing lower levels of competition and warranted further assessment. The market data and the Commission’s analysis for Stage 2 are shown in **Appendix VI**.
104. The four (4) Significant Relevant Markets which were further assessed by the Commission in Stage 3 are:

- (a) Penang – Frankfurt;
- (b) Penang – Paris;
- (c) Penang – Zurich; and
- (d) Penang – Munich.

Penang – Frankfurt

105. Information related to the Commission’s market analysis for the Penang – Frankfurt market is shown in **Table 16** below.

Table 16: Market data for the Penang – Frankfurt market in 2019

Parties’ Combined Market Share	Change in Market Share (2017 vs. 2019)	HHI	Delta HHI	Total pax contribution
[REDACTED]	[REDACTED]	Pre-JV: 0.2681 Post-JV: 0.3570	0.0889	6,499 (0.6% of Malaysia – LH Home Markets)

Source: Commission’s analysis, AirportIS

(a) *Market condition*

106. In assessing the levels of competition in the market, the Commission bases its findings on pre-COVID-19 pandemic data, as it would more accurately represent actual post-JV market conditions. The Commission, however, notes that while data during the pandemic are less representative of normal and future market conditions, the Commission found it necessary to make references to market changes that occurred during the pandemic as airlines have carried out a restructuring of their businesses and operations as a result of the pandemic. Such changes and restructuring may remain in the long-term and should therefore be considered in the assessment of future market conditions. It is also noted that the post-JV HHI used by the Commission is based on a theoretical scenario if the JV was implemented in 2019. This is due to the fact that the Parties implemented the JV in Malaysia on 3 March 2020, right before the start of the COVID-19 pandemic. 2019 data is therefore used as an estimate for the probable HHI after the implementation of the JV in normal market conditions post-COVID-19.

107. The Parties are the dominant player in the Penang – Frankfurt market, as their market shares from 2015 to 2022 were consistently above or close to 50%. Before the pandemic, the Parties’ main competitor was QR, which had a market share of [REDACTED] in 2019 (Parties: [REDACTED]). **Appendix VI** shows the Parties’ combined market share in the Penang – Frankfurt market from 2015 to 1Q22.

108. The Parties’ decrease in market share from [REDACTED] in 2017 to [REDACTED] in 2019 appears to be due to the entry of QR into the market, as it had launched a direct service between PEN and DOH in February 2018. As such, QR was able to capture a portion of the

Parties' market share. It is also noted that QR has discontinued its direct services between PEN and DOH, from April 2020, due to the pandemic.

109. However, the Commission is of the view that [redacted] act as a competitive constraint [redacted]. In 2021, [redacted] market share was [redacted] (1Q22: [redacted]).
110. Additionally, Cathay Pacific Airways Ltd. (“**CX**”) had also gained market share on the Penang – Frankfurt route where in 1Q22, it had a market share of [redacted] (Parties: [redacted]). There are therefore other competitors in the market [redacted].
111. The market concentration in the Penang – Frankfurt market is classified as high, as indicated by the HHI which has consistently been higher than 0.25 from 2015 to 2019. **Appendix VI** shows the market concentrations in Penang – Frankfurt, as well as, the Significant Relevant Markets, from 2015 to 1Q22. In line with its previous decisions, the Commission considers an HHI above 0.25 as highly concentrated.
112. There may be some lessening of competition in the Penang – Frankfurt market due to the JV, as indicated by the delta HHI of 0.0889 in 2019. The Commission considers a delta HHI of 0.1 as significant and indicates that the JV could have a more significant impact on the market. Nonetheless, although there is a lessening of competition in the Penang – Frankfurt market, the presence of other competitors such as, CX (which had a market share of [redacted] in 1Q22) could [redacted], despite the Parties high market share. [redacted].
113. In relation to the detrimental effects on competition, the Commission analysed potential barriers to entry and fares that had been offered by the Parties. The Commission finds that there is still room for entry into the Penang – Frankfurt market, as evidenced by the entry of QR in 2018, which had introduced capacity and managed to capture market share from the Parties. The Commission notes that there are low barriers to entry for other airlines to provide similar competition in the market to the Parties due to the liberalised aviation markets in both Malaysia and Germany.
114. During the pre-pandemic period, the highest air traffic movements (“**ATM**”) per hour recorded at PEN was 19 out of a maximum of 20, occurring between 12pm and 1pm on 4 February 2019.¹⁹ While this shows that PEN was almost reaching its maximum capacity utilisation at peak hours, the Commission nonetheless finds that there was still room for other competitors to expand their services during non-peak hours. While limited slot selection may affect the attractiveness of the competitors' flights to consumers—should they choose to introduce and/or expand their services in PEN—the Commission finds that there was adequate competition coming from the Parties' existing competitors at PEN.
115. The Commission also notes that PEN is currently not congested as the highest ATM per hour is 13 out of a maximum of 20, occurring between 7pm and 8pm on 23 July

¹⁹ The Commission analysed a sample of schedules departing/arriving at PEN between 4–10 February 2019 during the 2019 Chinese New Year travel period.

2022.²⁰ This shows that there are still available slots for airlines to utilise at PEN. However, the Commission acknowledges that 13 is the ATM per hour when travel restrictions had just been lifted in Malaysia and that the demand and capacity have yet to reach pre-pandemic levels.

(b) *Impact of the JVA on fares*

116. In relation to the impact of the JV on fares offered in the Penang – Frankfurt market, the Commission found that the Parties’ fares have been on average higher than all other competitors’ since 2016, where the Parties’ one-way average economy fare in 2019 was [REDACTED] (Others, which includes both full-service carriers (“FSC”) and low-cost carriers (“LCC”): [REDACTED]). It should be noted that the average of the fares of the Parties’ competitors includes the fares of LCCs. In contrast, the Parties that had operated under the JV, namely, SQ, LH, LX, and OS are all FSCs. The Commission further found that the Parties’ fares are, on average, lower than their two closest competitors on the route in 2019 (QR: [REDACTED]; TG: [REDACTED]). Based on the Commission’s observations of fares in October 2022 as shown in **Table 13** above, the Parties’ fares appear to be lower than their competitors by [REDACTED].
117. While the Parties remain dominant in the Penang – Frankfurt market, the Parties do not have the power to unilaterally increase prices without constraint, as higher airfares have coincided with a significant drop in their market share with the entry of competitors. Therefore, the Commission finds that the JV does not appear to pose any detrimental effects in terms of fares for the Penang – Frankfurt market. **Appendix VII** shows the chart illustrating the trend in the Parties and their competitors’ average one-way economy class fares for the Penang – Frankfurt market, as well as, the other Significant Relevant Markets.
118. The Commission, therefore, finds that although there has been some lessening of competition in the Penang – Frankfurt market, such lessening of competition will not have a major impact on consumers or on the Parties’ competitors.

Penang – Paris

119. Information related to the Commission’s market analysis for the Penang – Paris market is shown in **Table 17** below.

Table 17: Market data for the Penang – Paris market in 2019

Parties’ Combined Market Share	Change in Market Share (2017 vs. 2019)	HHI	Delta HHI	Total pax contribution
[REDACTED]	[REDACTED]	Pre-JV: 0.2928 Post-JV: 0.3401	0.0473	5,483 (0.5% of Malaysia – LH Home Markets)

Source: Commission’s analysis, AirportIS

²⁰ The Commission analysed a sample of schedules departing/arriving at PEN between 18–24 July 2022.

(a) *Market condition*

120. In relation to the Penang – Paris market, the Parties had been the dominant player in the market from 2016 up until 2021. Prior to this, MH was the dominant player in 2015, with a market share of [REDACTED]. MH's market shares have since declined, with its KUL–CDG service discontinued in January 2016. Before the pandemic, the Parties' combined market shares were highest in 2017 at [REDACTED] before reducing to [REDACTED] in 2019. The Parties' closest competitor in the Penang – Paris market was QR, which held a market share of [REDACTED] in 2019. In 1Q22, the Parties were no longer the dominant player, with EY obtaining the highest market share of [REDACTED]. The Commission finds that there is adequate competition coming from the Parties' existing competitors in this market.
121. Due to the large presence of the Parties, the Penang – Paris market is quite concentrated, with an HHI above the 0.25 threshold. However, the delta HHI in 2019 was 0.0473, which indicates that any anti-competitive effects arising out of the JV are quite low.
122. Similar to the Commission's assessment for the Penang – Frankfurt market above, although the Commission found the market to be quite concentrated, the barriers to entry into the market are not high. The Commission notes that there are low barriers to entry for other airlines to compete in the market against the Parties due to the liberalised aviation markets in both Malaysia and France. This is evidenced by the entry of strong competitors into the market. In 2018, QR entered the market and was able to capture the Parties' market share from 2018 to 1Q22. The Commission's finding in relation to the barriers to entry in PEN in paragraphs 111 to 112 above is also applicable in the Penang – Paris market. It is therefore expected that other airlines may similarly enter and expand their operations in the Penang – Paris market to meet future demand.

(b) *Impact of the JVA on fares*

123. In relation to the impact of the JV on fares offered in the Penang – Paris market, the Commission found that the Parties' one-way average economy fares have been quite close to their competitors. For example, the Parties' one-way average economy fare in 2019 was [REDACTED] (Others: [REDACTED]). Moving forward, based on the Commission's observations of fares in October 2022, and as shown in **Table 13** above, the Parties' fares were slightly higher than their competitors by at least [REDACTED]. The Commission finds that even though the Parties are dominant in the market, their fares have been quite close to the average fares of other players in the market. Therefore, the Commission is of the view that the JV does not pose any detrimental effects in terms of fares for the Penang – Paris market.

Penang – Zurich

124. Information related to the Commission's market analysis for the Penang – Zurich market is shown in **Table 18** below.

Table 18: Market data for the Penang – Zurich market in 2019

Parties' Combined Market Share	Change in Market Share (2017 vs. 2019)	HHI	Delta HHI	Total pax contribution
[REDACTED]	[REDACTED]	Pre-JV: 0.3750 Post-JV: 0.4668	0.0919	5,124 (0.4% of Malaysia – LH Home Markets)

Source: Commission's analysis, AirportIS

(a) *Market condition*

125. The Commission finds that despite the decline in the Parties' market share from [REDACTED] in 2015 to [REDACTED] in 2019, their market shares had been consistently above 50% throughout 2015 to 1Q22—except for 2021—and thus were the dominant player in the Penang – Zurich market. Since 2018, the Parties' closest competitor is QR, which holds a market share of [REDACTED] in 2019. EY has also emerged as a competitor in the market in 1Q22, with a market share of [REDACTED].
126. The post-JV HHI of 0.4668 in 2019 is quite high, which is an indication that the Penang – Zurich market is highly concentrated. This is due to the presence of only two main players in the market, i.e., the Parties and QR. The Commission finds that the delta HHI in 2019 of 0.0919 is also quite high and that it is the highest delta HHI among all the Significant Relevant Markets. This shows that the JV does have an impact on the level of competitiveness in the Penang – Zurich market.
127. Although the market is highly concentrated, the barriers to entry into the market are not high. The Commission notes that there are low barriers to entry for other airlines to compete in the market against the Parties due to the liberalised aviation markets in both Malaysia and Switzerland. This is evidenced by the entry of strong competitors into the market. In 2018, QR entered the market and was able to capture the Parties' market share from 2018 until now. The Commission also notes, that despite QR not having any physical presence in PEN, QR had been able to [REDACTED]. To illustrate, QR had a market share of [REDACTED] in 2021 and [REDACTED] in 1Q22. Similar to the Commission's analysis in the Penang – Paris market, the Commission expects that other airlines may similarly enter and expand their operations in the Penang – Zurich market.

(b) *Impact of the JVA on fares*

128. In relation to the impact of the JV on fares offered in the Penang – Zurich market, the Commission found that the Parties had lower fares compared to their competitors from 2018 up until the pandemic in 2020. For example, the Parties' one-way average economy fare in 2019 was [REDACTED] (Others: [REDACTED]). The Commission is of the view that the Parties' ability to provide lower average fares compared to their competitors has likely enabled the Parties to maintain their high market share since 2015. Therefore, the Commission finds that the JV does not appear to pose any detrimental effects in terms of fares for the Penang – Zurich market.

Penang – Munich

129. Information related to the Commission’s market analysis for the Penang – Munich market is shown in **Table 19** below.

Table 19: Market data for the Penang – Munich market in 2019

Parties’ Combined Market Share	Change in Market Share (2017 vs. 2019)	HHI	Delta HHI	Total pax contribution
[REDACTED]	[REDACTED]	Pre-JV: 0.3607 Post-JV: 0.4296	0.0690	7,257 (0.6% of Malaysia – LH Home Markets)

Source: Commission’s analysis, AirportIS

(a) Market condition

130. The Commission finds that the Parties’ market shares have significantly declined each year, where their market shares decreased from [REDACTED] in 2015 to [REDACTED] in 2019. Nonetheless, the Parties were dominant in the Penang – Munich market from 2015 until 2018. In 2019, the Parties had the second largest market share behind QR, which had a market share of [REDACTED]. In 2021, the Parties’ market share reached [REDACTED], being once again the dominant player in the market as QR’s market share decreased to [REDACTED]. QR had slightly regained its market share in 1Q22, where it had a [REDACTED] market share.
131. Although the market concentration in the Penang – Munich market is classified as high, as seen by the post-JV HHI of 0.4296, its delta HHI was 0.0690, which is still below the Commission’s threshold for a delta HHI that it considers could result in significant impact on the market. Based on this, the Commission finds that any anti-competitive effects arising out of the JV in the Penang – Munich market are quite low.
132. The barriers to entry into the market are not high, as there is still the possibility of competitors entering the Penang – Munich market. The Commission notes that there are low barriers to entry for other airlines to compete in the market against the Parties due to the liberalised aviation markets in both Malaysia and Germany. In 2018, QR entered the market and was able to capture the Parties’ market share from 2018 to 2020—up to the [REDACTED] in 2019 and 2020. Thus, the Commission expects that other airlines may similarly enter and expand their operations in the Penang – Munich market.

(b) Impact of the JVA on fares

133. In relation to the impact of the JV on fares offered in the Penang – Munich market, the Commission found that the Parties’ fares have been on average higher than all other competitors’ since 2015. For example, the Parties’ one-way average economy fare in 2019 was [REDACTED] (Others: [REDACTED]). When compared to other top carriers on the route in 2019, the Parties’ fares are quite comparable to their closest competitor, QR ([REDACTED]). Based on the Commission’s observations of fares in October 2022 as shown in **Table 13**, the

Parties' fares were lower than their competitors by at least [redacted]. While the Parties remain dominant in the Penang – Munich market, the Parties do not have the power to unilaterally increase prices without constraint, as higher airfares have coincided with a significant drop in their market share with the entry of strong competitors. Therefore, the Commission finds that the JV does not appear to pose any detrimental effects in terms of fares for the Penang – Munich market.

Conclusion on subparagraph 50(c) of Act 771

134. The Commission notes that all of the four (4) Significant Relevant Markets identified for a full competition analysis in Stage 3 had routes with an origin from PEN, namely PEN–FRA, PEN–CDG, PEN–ZRH, and PEN–MUC. However, the Parties' dominance on these routes predates the implementation of the JV, with SIN being an attractive connecting hub for one-stop itineraries from PEN to the LH Home Markets via the Revenue Share Routes.
135. The Commission finds that the Parties' market shares are high and ranked among the top three (3) in terms of market shares in the analysed routes. Nevertheless, the Commission finds that the Parties have experienced increased competition in the Significant Relevant Markets, particularly from the entry of new competitors offering lower fares, causing the Parties' combined market shares to decrease.
136. In relation to ASAs, the Commission noted that for Switzerland, there are no restrictions on the frequency, capacity, or aircraft type for air passenger services. For Germany and France, there were no restrictions on the capacity or aircraft type but only limitations in the weekly flight frequency, as per the ASAs between Malaysia and these two (2) countries. Weekly frequencies to Germany are currently restricted to 14 per week while weekly frequencies to France are capped at seven (7) per week, with five (5) additional weekly frequencies to Lyons and one other unspecified secondary airport in France available for the designated airline of Malaysia. Nevertheless, none of these available frequencies are currently being utilised. The Commission, therefore, found that the barriers to entry in the Significant Relevant Markets in terms of ASAs are not high.
137. However, the Commission does note that one (1) airline, namely [redacted], objects to the Application to extend the scope of the JV due to the absence of an underlying traffic right enabling cooperation between Malaysia and Germany via Singapore. This is stated in the Confidential Protocol of Understanding between Germany and Malaysia, dated 30 November 2001, which explicitly excludes third-country codeshare via Singapore. In the absence of a third country codeshare via Singapore, [redacted].
138. Despite the airline's concerns, the Commission is of the view that competitors on the routes between Malaysia and the LH Home Markets are not limited to codeshares via Singapore only. As stated earlier, airlines in this market may offer direct or indirect air passenger services from Malaysian cities to the LH Home Markets, through various other transit points in Asia and the Middle East, such as Qatar, Thailand, Turkey, the

United Arab Emirates, etc. As such, the Commission finds that these competitors are able to exert competitive pressure on the Parties in this market.

139. Overall, while the Commission has found that there has been some lessening of competition in four (4) of the Relevant Markets as a result of the JV, there are still relatively low barriers to entry for other airlines to enter and expand and there have not been any detrimental effects in terms of fares.
140. The Commission had also found under its assessment of benefits claimed by the Applicants, that the JV has provided numerous benefits such as the reduction in travelling time, expansion of virtual networks, decrease in fares, and improved corporate offerings between Malaysia and the LH Home Markets.
141. The Commission finds that, on balance, the benefits arising from the JV outweigh the detrimental effects of the JV on competition, fulfilling the requirements under subparagraph 50(c) of Act 771.

Subparagraph 50(d) of Act 771 – The agreement does not allow the enterprise to eliminate competition completely in respect of a substantial part of the aviation services

142. As shown through the Commission's findings in relation to the Significant Relevant Markets above, the Commission found that the Parties have satisfied the requirement in subparagraph 50(d) of Act 771 as there has not been any complete elimination of competition in any of the Significant Relevant Markets following the implementation of the JV. In each of the Significant Relevant Markets, there continues to be competitors that act as a competitive constraint on the Parties.

7.0 CONCLUSION

143. In conclusion, the Commission is satisfied that the Framework Agreement, including the amendments to expand the scope of the JV and the inclusion of TR into the JV, as per the Application, fulfils the requirements under section 50 of Act 771 to qualify for a renewal of the individual exemption.

8.0 THE COMMISSION'S DECISION

144. Based on the considerations stipulated above, the Commission concludes that the Framework Agreement fulfils the requirements under section 50 of Act 771 and qualifies for renewal of the individual exemption.
145. The Commission proposes to grant a renewal of the individual exemption with respect to the Framework Agreement from the prohibition under section 49 of Act 771. The individual exemption shall be effective for a period of three (3) years from the date of the Final Decision.
146. The individual exemption covers only the Parties' Framework Agreement, as well as, the amendments to the Framework Agreement, as per the Parties submission. The individual exemption shall not cover any other amendment made to the Framework

Agreement beyond the proposed amendments that had been submitted to the Commission for the purposes of the Application.

147. The individual exemption shall continue to be subject to subsection 51(6) of Act 771. The Commission may take any action under subsection 51(6) of Act 771, should the Commission be satisfied that there has been a material change of circumstances from the time when the Commission grants the individual exemption. Material change of circumstances, amongst others, may include changes in market conditions.
148. The individual exemption is subject to the following conditions and obligations:
 - (a) The Parties shall submit the finalised and signed agreement to amend the Framework Agreement to the Commission within two (2) weeks after it has been signed;
 - (b) The Parties shall not operate under a common name;
 - (c) Where any other material change is made to the Framework Agreement or a Party to the Framework Agreement, either Party shall file for variation or amendment of the individual exemption to the Commission within two (2) weeks of the variation or amendment. A material change includes: a change in the scope of the JV; an addition of any new route or airline; a cooperation arrangement or a merger with any airline that would affect the services in the Relevant Markets; and
 - (d) The Parties shall provide any document or information as requested by the Commission, at any time, in relation to the Framework Agreement for monitoring purposes.
149. The Applicants may submit an application to renew the individual exemption for their Framework Agreement to the Commission before the expiry of the three (3) year exemption period.
150. The individual exemption granted by the Commission herewith is only in relation to the Framework Agreement which the Applicants had submitted to the Commission and does not preclude an investigation by the Commission on any other potential infringements under Act 771 by the Parties.

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APPENDIX I
LIST OF COUNTRIES IN THE SQ AND LH HOME
MARKETS

APPENDIX I: LIST OF COUNTRIES IN THE SQ AND LH HOME MARKETS

Scope of the JV	No.	SQ Home Markets	LH Home Markets
Original Home Markets as authorised in the 2019 SQ-LH Decision	1.	Australia	Austria
	2.	Indonesia	Belgium
	3.	Malaysia	Germany
	4.	Singapore	Switzerland
Additional Home Markets under the scope of the Proposed Expanded JV	5.	[✂]	Albania
	6.	[✂]	Andorra
	7.	[✂]	Bosnia and Herzegovina
	8.		Bulgaria
	9.		Croatia
	10.		Cyprus
	11.		Czech Republic
	12.		Estonia
	13.		France
	14.		Greece
	15.		Hungary
	16.		Iceland
	17.		Republic of Ireland
	18.		Italy
	19.		Kosovo
	20.		Latvia
	21.		Lichtenstein
	22.		Lithuania
	23.		Luxembourg
	24.		Malta
	25.		Republic of Moldova
	26.		Monaco
	27.		Montenegro
	28.		Netherlands
	29.		North Macedonia
	30.		Poland
	31.		Portugal
	32.		Romania
	33.		San Marino
	34.		Serbia
	35.		Slovakia
	36.		Slovenia

Scope of the JV	No.	SQ Home Markets	LH Home Markets
	37.		Spain
	38.		United Kingdom
	39.		Vatican City

Source: Applicants' submission

Note: The Applicants noted that Andorra, Liechtenstein, Monaco, San Marino, and the Vatican City are included in the LH Home Markets. However, it is unlikely that routes to these countries will exist under the JV as they do not have public airports, subject to a public airport being built.

APPENDIX II
IATA AIRPORT AND AIRLINE CODES

APPENDIX II: IATA AIRPORT AND AIRLINE CODES

Airport Codes

Airport Code	Airport Name
Airports in Malaysia	
BKI	Kota Kinabalu International Airport
IPH	Sultan Azlan Shah Airport, Ipoh
KBR	Sultan Ismail Petra Airport, Kota Bharu
KCH	Kuching International Airport
KUA	Sultan Ahmad Shah Airport, Kuantan
KUL	Kuala Lumpur International Airport
LGK	Langkawi International Airport
MYY	Miri International Airport
PEN	Penang International Airport
SZB	Sultan Abdul Aziz Shah Airport (Subang International Airport)
Airports in the SQ Home Markets	
SIN	Changi Airport, Singapore
Airports in the LH Home Markets	
AGB	Augsburg Airport, Augsburg, Bavaria, Germany
AMS	Amsterdam Airport Schiphol, Amsterdam, Netherlands
ATH	Athens International Airport (Eleftherios Venizelos Airport), Athens, Greece
BCN	Barcelona–El Prat Airport, Barcelona, Catalonia, Spain
BER	Berlin Brandenburg Airport, Berlin, Germany
BRU	Brussels Airport, Brussels, Belgium
BUH	Bucharest Henri Coandă International Airport, Bucharest, Romania
BVA	Beauvais–Tillé Airport, Beauvais, Picardy, France
CDG	Charles de Gaulle Airport (Roissy Airport), Paris, Île-de-France, France
DRS	Dresden Airport, Dresden, Saxony, Germany
FCO	Leonardo da Vinci–Fiumicino Airport, Rome, Lazio, Italy
FRA	Frankfurt Airport, Frankfurt, Hessen, Germany
GRZ	Graz Airport, Graz, Austria
GVA	Geneva Airport, Geneva, Switzerland
HAJ	Hannover Airport, Hanover, Lower Saxony, Germany
HAM	Hamburg Airport, Hamburg, Germany
HHN	Frankfurt–Hahn Airport, Hahn, Rhineland-Palatinate, Germany
LCY	London City Airport, London, England, United Kingdom
LGW	Gatwick Airport, London, England, United Kingdom
LHR	Heathrow Airport, London, England, United Kingdom
LPL	Liverpool John Lennon Airport, Liverpool, England, United Kingdom
LTN	Luton Airport, London, England, United Kingdom

Airport Code	Airport Name
MAD	Adolfo Suárez Madrid–Barajas Airport, Madrid, Spain
MAN	Manchester Airport, Manchester, England, United Kingdom
MUC	Munich Airport, Munich, Bavaria, Germany
MLP	Milan–Malpensa Airport, Milan, Lombardy, Italy
ORY	Orly Airport, Paris, Île-de-France, France
PRG	Václav Havel Airport Prague, Prague, Czech Republic
SEN	London Southend Airport, London, England, United Kingdom
STN	London Stansted Airport, London, England, United Kingdom
STR	Stuttgart Airport, Stuttgart, Baden-Württemberg, Germany
SXF	Berlin Schönefeld Airport, Berlin, Germany
TLS	Toulouse–Blagnac Airport, Toulouse, Midi-Pyrénées, France
TXL	Berlin Tegel "Otto Lilienthal" Airport, Berlin, Germany
VCE	Venice Marco Polo Airport, Venice, Veneto, Italy
WAW	Warsaw Chopin Airport, Warsaw, Poland
ZAG	Franjo Tuđman Airport, Zagreb, Croatia
ZRH	Zurich Airport, Zürich, Switzerland
Other Airports	
AUH	Abu Dhabi International Airport, United Arab Emirates
BKK	Suvarnabhumi Airport (Bangkok Airport), Thailand
DOH	Hamad International Airport, Doha, Qatar
IST	Istanbul Airport, Turkey

Airline Codes

Airline Code	Airline Name
Parties to the JV	
LH	Deutsche Lufthansa AG
LX	Swiss International Air Lines AG
MI	SilkAir (Singapore) Private Limited
OS	Austrian Airlines AG
SQ	Singapore Airlines Limited
TR	Scot Tigerair Private Limited
Other Airlines	
BA	British Airways PLC
CX	Cathay Pacific Airways Ltd.
EY	Etihad Airways PJSC
MH	Malaysia Airlines Berhad
QR	Qatar Airways Group Q.C.S.C.
TG	Thai Airways International Public Company Limited
TK	Turkish Airlines Inc.

APPENDIX III
LIST OF FOCAL ROUTES AND RELEVANT INDIRECT
ROUTES

APPENDIX III: LIST OF FOCAL ROUTES AND RELEVANT INDIRECT ROUTES

List of Focal Routes

No.	SQ Home Markets	LH Home Markets
1.	BKI	AMS
2.	IPH	ATH
3.	KBR	BCN
4.	KCH	BER
5.	KUA	CDG
6.	KUL	FCO
7.	LGK	FRA
8.	MYY	LHR
9.	PEN	MAN
10.		MUC
11.		MPX
12.		ZRH

Source: Applicants' submission

Note: The 108 potential Focal Routes are derived from the total number of permutations between the nine (9) identified Malaysian cities and the 12 airport destinations served by the Revenue Share Routes.

List of Relevant Indirect Routes

SQ Home Markets	LH Home Markets									
BKI	ABZ	BOJ	DBV	GDN	JSI	LJU	NRN	PRN	SMI	TRN
IPH	ACE	BRE	DEB	GLA	JTR	LNZ	NTE	PSA	SNN	TRS
KBR	AGP	BRI	DRS	GOA	KEF	LPA	NUE	PUY	SOF	TSR
KCH	AJA	BRQ	DTM	GPA	KGS	LPL	OHD	PVK	SPC	TXL
KUA	ALC	BRS	DUB	GRO	KIV	LUG	OLB	PXO	SPU	VAR
KUL	AMS	BRU	DUS	GRX	KLU	LUX	OMO	QFP	STN	VCE
LGK	AOI	BSL	EDI	GRZ	KLX	LYS	OPO	REU	STR	VIE
MYY	AOK	BTS	EFL	GVA	KRK	MAD	ORK	RHO	SUF	VLC
PEN	ATH	BUD	FAO	GWT	KSC	MAH	ORY	RIX	SVQ	VNO
	BCN	BZG	FCO	HAJ	KTW	MAN	OSI	RJK	SXB	VOL
	BDS	CAG	FDH	HAM	KVA	MJT	OTP	RLG	SXF	VRN
	BEG	CDG	FKB	HDF	LCA	MLA	PAD	RMI	SZG	WAW
	BER	CFU	FLR	HER	LCJ	MPL	PDL	RNS	TBS	WMI
	BGY	CGN	FMO	HHN	LCY	MRS	PDV	RZE	TFS	WRO
	BHX	CHQ	FNC	IAS	LEI	MUC	PFO	SBZ	TGD	XRY
	BIA	CIY	FRA	IBZ	LEJ	MXP	PMI	SCQ	TIA	ZAD
	BIO	CLJ	FRL	INI	LGW	NAP	PMO	SIR	TIV	ZAG
	BIQ	CLY	FSC	INN	LHR	NCE	PNA	SJJ	TLL	ZRH
	BLQ	CTA	FUE	JER	LIN	NCL	POZ	SKG	TLN	ZTH
	BOD	CUF	GCI	JMK	LIS	NQY	PRG	SKP	TLS	

Source: Applicants' submission

Note: The 1,791 potential Relevant Indirect Routes are derived from the total number of permutations between the nine (9) identified Malaysian cities and the 199 potential indirect airport destinations in the LH Home Markets that operate via the Focal Routes—including both airport destinations that are currently operational, as well as those that may become operational in the future. services between the nine (9) Malaysian cities and destinations within the LH Home Markets that operate via the Focal Routes.

APPENDIX IV
NUMBER OF MONTHLY TICKETED CORPORATE
PASSENGERS FROM JANUARY 2019 TO APRIL 2022

APPENDIX IV: NUMBER OF MONTHLY TICKETED CORPORATE PASSENGERS FROM JANUARY 2019 TO APRIL 2022

Month	2019	2020	2021	2022
January	[X]	[X]	[X]	[X]
February	[X]	[X]	[X]	[X]
March	[X]	[X]	[X]	[X]
April	[X]	[X]	[X]	[X]
May	[X]	[X]	[X]	
June	[X]	[X]	[X]	
July	[X]	[X]	[X]	
August	[X]	[X]	[X]	
September	[X]	[X]	[X]	
October	[X]	[X]	[X]	
November	[X]	[X]	[X]	
December	[X]	[X]	[X]	
Total	[X]	[X]	[X]	[X]

Source: Applicants' submission

APPENDIX V
DETERMINATION OF EACH RELEVANT MARKET

APPENDIX V: DETERMINATION OF EACH RELEVANT MARKET

Relevant Market	Affected Airport	All Airports in the Relevant Market
Malaysia		
Kota Kinabalu	BKI	BKI
Kuala Lumpur	KUL	KUL SZB Based on the Commission's past analysis ²¹ , it had found that KUL and SZB are, to a large extent, substitutable airports serving Kuala Lumpur.
Penang	PEN	PEN
LH Home Markets		
Berlin	BER	BER TXL SXF TXL and SXF were both airports in Berlin but have closed down in November and October 2020, respectively. They are included in the assessment for their historical data in Berlin.
Frankfurt	FRA	FRA HHN HHN was included in the Frankfurt market as the flights were much cheaper as it is serviced by LCCs.
London	LHR	LHR LGW LCY LTN STN SEN All airports in London are included in the assessment as they are all serviced by major LCCs. As London is a metropolitan city, there would be more airports which are substitutable.
Manchester	MAN	MAN LPL LPL is included in the Manchester market because the distance is less than 100km and the travelling time between LPL and MAN is about 45 minutes.
Munich	MUC	MUC AGB AGB is included in the Munich market although it is only a domestic airport because it is within 100km (82km) of MUC, with a travelling time of 48 minutes. AGB is also closer to the city centre.

²¹ Individual Exemption Application by Malaysia Airlines Berhad and Singapore Airlines Limited which was closed on 20 July 2020.

Relevant Market	Affected Airport	All Airports in the Relevant Market
Paris	CDG	<p>CDG ORY BVA</p> <p>ORY and BVA are within 100km of the Paris city centre, serviced by major FSCs and LCCs with significant annual traffic in 2019. LBG is no longer a commercial airport, while the distance between XCR and the Paris city centre is too far (>150km, 2hrs+ car journey).</p>
Zurich	ZRH	<p>ZRH</p> <p>Basel Airport (“BSL”) is not included in the Zurich market as a sample flight of London – BSL and London – ZRH shows that the airfares are similar. The distance between both airports is 95.5km with a driving time of 1 hour and 12 minutes. BSL is about 1 hour away from the city centre by train. Due to the additional time and expenses that would be incurred to fly to BSL as compared to ZRH, a passenger travelling to Zurich will not likely view BSL as a substitutable airport to ZRH.</p>

Source: Commission’s analysis

APPENDIX VI
MARKET ANALYSIS OF THE SIGNIFICANT
RELEVANT MARKETS

APPENDIX VI: MARKET ANALYSIS OF THE SIGNIFICANT RELEVANT MARKETS

The Parties' combined market shares (%) in the Significant Relevant Markets from 2015 to 1Q22

No.	Relevant Market	2015	2016	2017	2018	2019	2020	2021	1Q22
1.	Penang – Frankfurt	[X]							
2.	Penang – Paris	[X]							
3.	Penang – Zurich	[X]							
4.	Penang – Munich	[X]							
5.	Penang – London	[X]							
6.	Kuala Lumpur – Berlin	[X]							
7.	Kuala Lumpur – Zurich	[X]							
8.	Penang – Manchester	[X]							
9.	Kota Kinabalu – London	[X]							

Source: Commission's analysis, AirportIS

Note: The market shares in red indicate a market share higher than 20%.

Breakdown of each Party's market share (%) in the Significant Relevant Markets in 2019

No.	Relevant Market	SQ	TR	LH	LX	OS	Parties' Total
1.	Penang – Frankfurt	[X]		[X]	[X]		[X]
2.	Penang – Paris	[X]		[X]	[X]	[X]	[X]
3.	Penang – Zurich	[X]		[X]	[X]		[X]
4.	Penang – Munich	[X]		[X]	[X]	[X]	[X]
5.	Penang – London	[X]		[X]	[X]	[X]	[X]
6.	Kuala Lumpur – Berlin	[X]	[X]	[X]	[X]	[X]	[X]
7.	Kuala Lumpur – Zurich	[X]		[X]	[X]	[X]	[X]
8.	Penang – Manchester	[X]		[X]	[X]		[X]
9.	Kota Kinabalu – London	[X]		[X]	[X]		[X]

Source: Commission's analysis, AirportIS

Note: The market shares in red indicate a market share higher than 20%.

Market concentration (HHI) of each Significant Relevant Market from 2015 to 1Q22

No.	Relevant Market	2015	2016	2017	2018	2019	2020	2021	1Q22
1.	Penang – Frankfurt	0.3826	0.5459	0.3708	0.2995	0.2681	0.4157	0.8039	0.3930
2.	Penang – Paris	0.3910	0.3615	0.4087	0.2688	0.2928	0.4257	0.3953	0.3941
3.	Penang – Zurich	0.7537	0.6824	0.5126	0.3799	0.3750	0.4982	0.5082	0.3552
4.	Penang – Munich	0.4859	0.4799	0.4376	0.3162	0.3607	0.5050	0.5072	0.5043
5.	Penang – London	0.3795	0.3492	0.3977	0.2259	0.2217	0.2268	0.4838	0.2941
6.	Kuala Lumpur – Berlin	0.1488	0.1611	0.2103	0.2105	0.1790	0.3056	0.4613	0.3125
7.	Kuala Lumpur – Zurich	0.1284	0.1274	0.1262	0.1398	0.1416	0.1965	0.2851	0.2777
8.	Penang – Manchester	0.2414	0.2022	0.2519	0.3181	0.3958	0.4793	0.4015	0.4957
9.	Kota Kinabalu – London	0.2970	0.2747	0.3889	0.3338	0.2689	0.3172	0.5624	0.4640

Source: Commission's analysis, AirportIS

Note: The numbers in red are HHIs that are higher than 0.25, which the Commission considers as an indicator of high concentration.

The total passenger growth, the Parties' passenger contribution, the Parties' combined market shares, and the market concentration in the Significant Relevant Markets

No.	Relevant Market	Total Passenger Growth (%) (2017 vs. 2019)	Pax contribution (2019)	Parties' Combined Passenger Market Share (2019)	Theoretical Post-JV HHI (2019)	Delta HHI (2019)
1.	Penang – Frankfurt	12.4%	0.6%	[✂]	0.3570	0.0889
2.	Penang – Paris	36.2%	0.5%	[✂]	0.3401	0.0473
3.	Penang – Zurich	33.3%	0.4%	[✂]	0.4668	0.0919
4.	Penang – Munich	-0.5%	0.6%	[✂]	0.4296	0.0690
5.	Penang – London	5.4%	2.7%	[✂]	0.2243	0.0026
6.	Kuala Lumpur – Berlin	-35.2%	1.1%	[✂]	0.2039	0.0250
7.	Kuala Lumpur – Zurich	37.5%	3.8%	[✂]	0.1700	0.0284
8.	Penang – Manchester	92.7%	0.5%	[✂]	0.4051	0.0094
9.	Kota Kinabalu – London	-1.9%	1.8%	[✂]	0.2699	0.0010

Source: Commission's analysis, AirportIS

Note: The numbers in red indicate those that are higher than a certain threshold in the Commission's analysis, i.e., the numbers in red for the passenger contribution indicate a passenger contribution higher than 0.5%, the numbers in red for the Parties' combined market shares indicate a market share higher than 20%, and the numbers in red for the theoretical post-JV HHI indicate HHIs that are higher than 0.25.

Summary of the market analysis for the Significant Relevant Markets in 2019

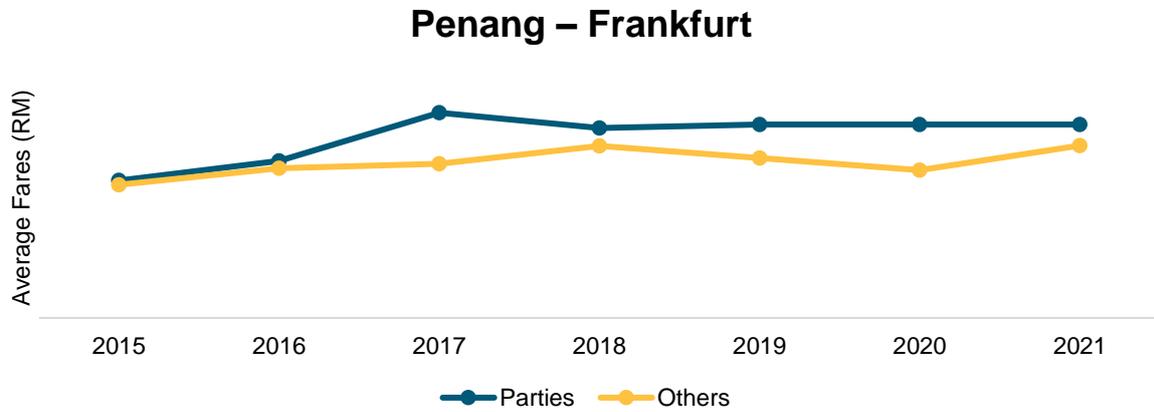
No.	Relevant Market	Post-JV HHI (>0.25)	Delta HHI (>0.1)	Market Share (>20%)	Largest market share by the Parties	Pax contribution (>0.5%)
1.	Penang – Frankfurt	✓		✓	✓	✓
2.	Penang – Paris	✓		✓	✓	✓
3.	Penang – Zurich	✓		✓	✓	
4.	Penang – Munich	✓		✓		✓
5.	Penang – London			✓		✓
6.	Kuala Lumpur – Berlin			✓		✓
7.	Kuala Lumpur – Zurich			✓	✓	✓
8.	Penang – Manchester	✓				✓
9.	Kota Kinabalu – London	✓				✓

Source: Commission's analysis

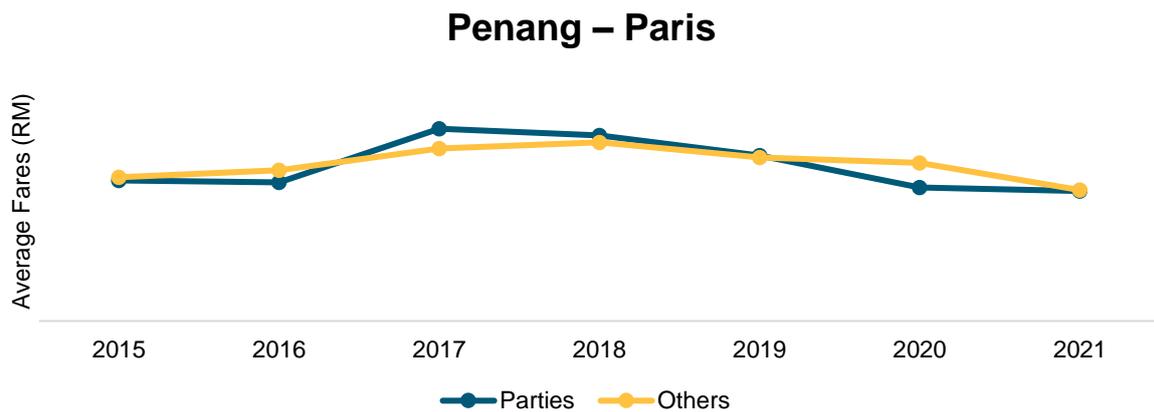
APPENDIX VII
AVERAGE ECONOMY FARES IN THE SIGNIFICANT
RELEVANT MARKETS

APPENDIX VII: AVERAGE ECONOMY FARES IN THE SIGNIFICANT RELEVANT MARKETS

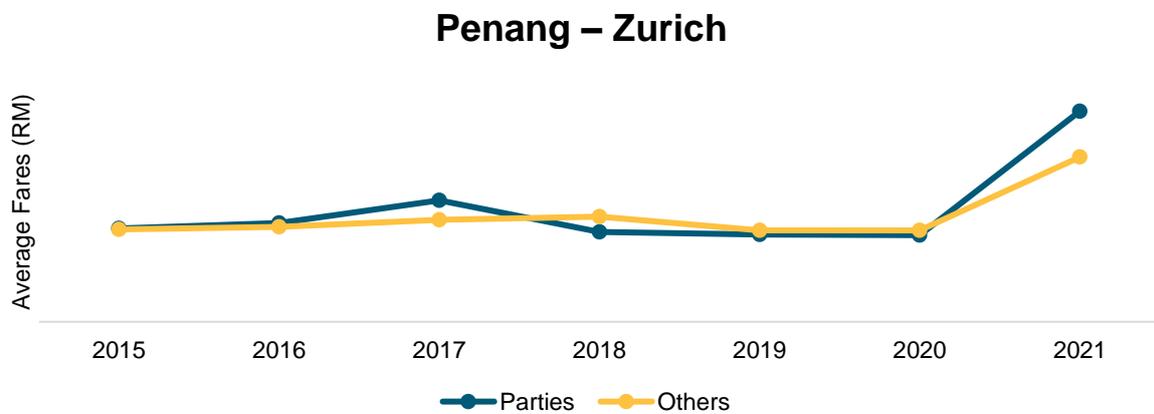
Charts of annual one-way average economy fares offered by the Parties and their competitors in the Significant Relevant Markets from 2015 to 2021



Source: Commission’s analysis, AirportIS

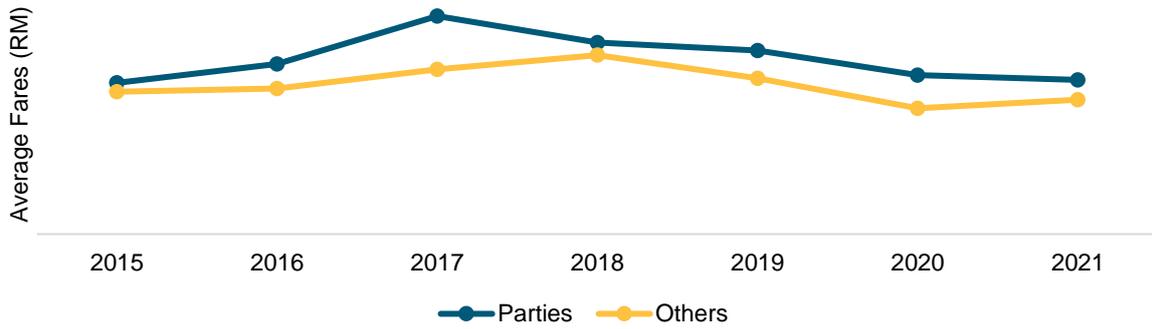


Source: Commission’s analysis, AirportIS



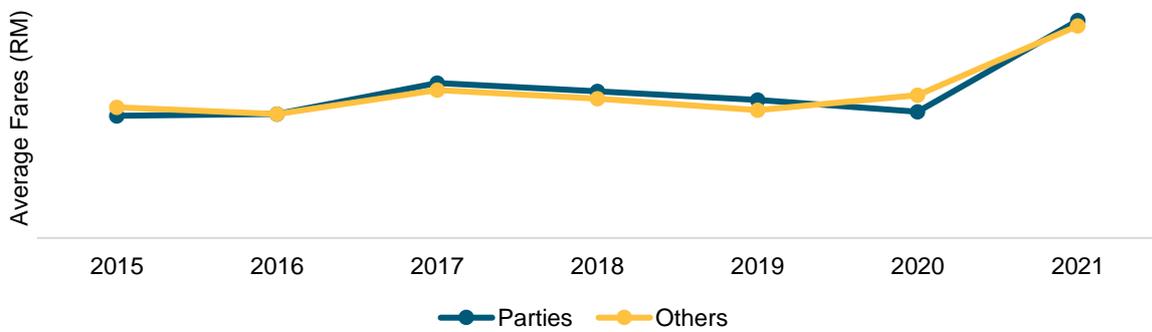
Source: Commission’s analysis, AirportIS

Penang – Munich



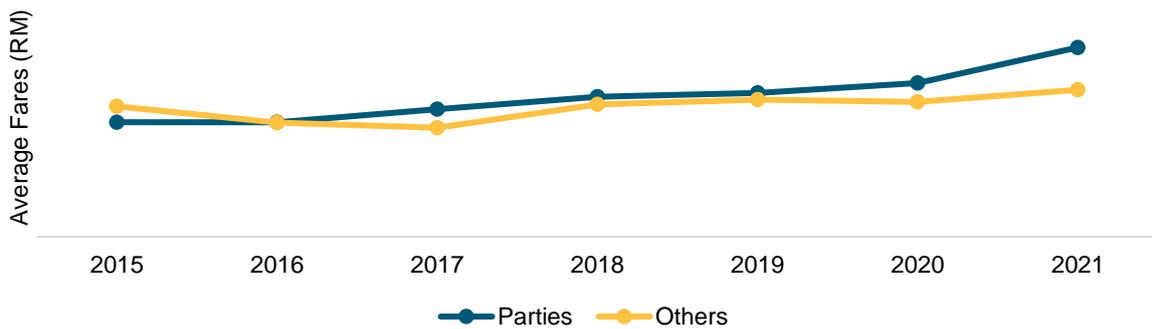
Source: Commission's analysis, AirportIS

Penang – London



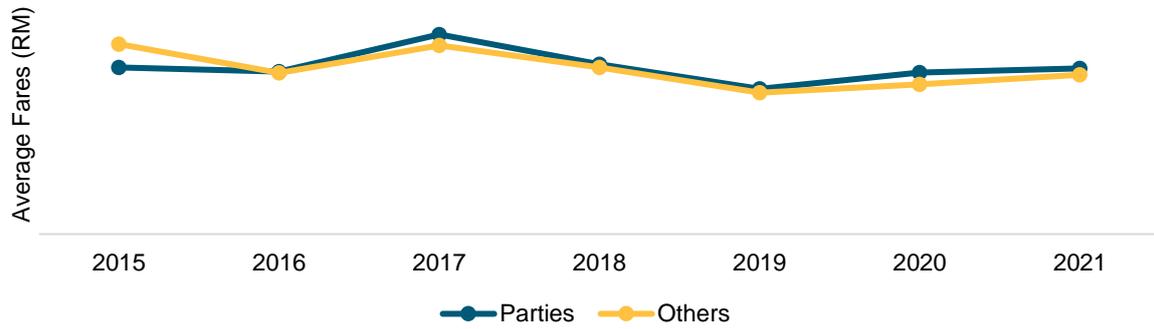
Source: Commission's analysis, AirportIS

Kuala Lumpur – Berlin



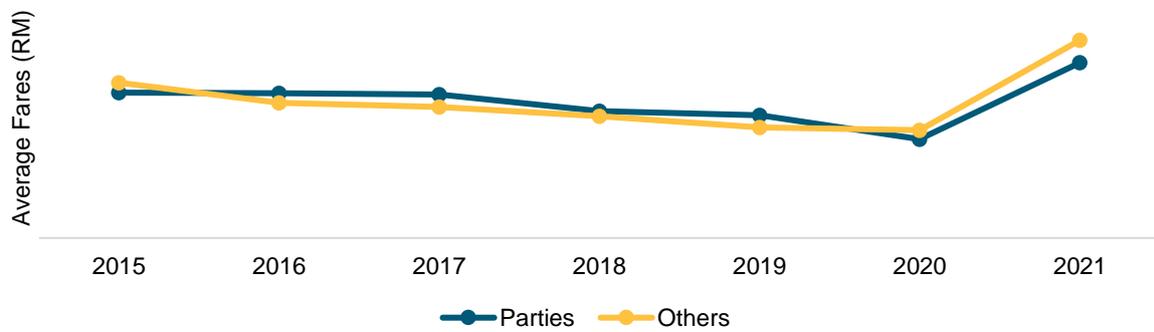
Source: Commission's analysis, AirportIS

Kuala Lumpur – Zurich



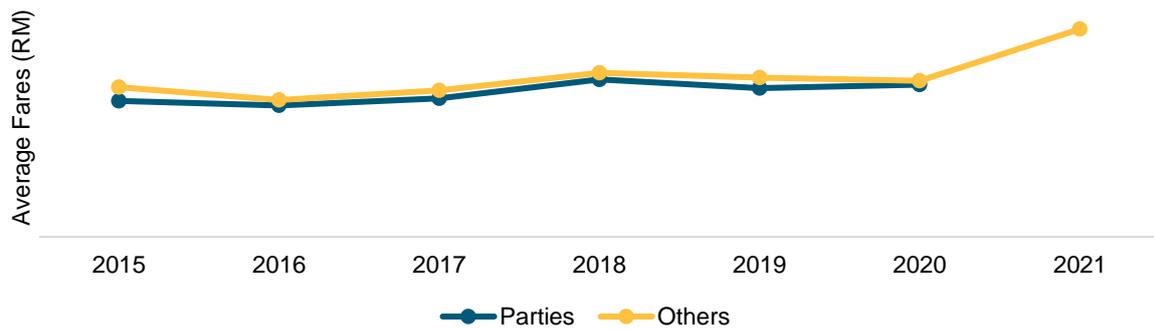
Source: Commission's analysis, AirportIS

Penang – Manchester



Source: Commission's analysis, AirportIS

Kota Kinabalu – London



Source: Commission's analysis, AirportIS

Charts of monthly one-way average economy fares offered by the Parties and other top carriers serving the route in the Significant Relevant Markets assessed in Stage 3 from 2015 to 2022

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