March 2023

Consultation Conclusions

Listing Regime for Specialist Technology Companies

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EXECUTIVE SUMMARY

Purpose

1. On 19 October 2022, the Exchange published a Consultation Paper seeking views on the Exchange's proposals to amend the Listing Rules to enable the listing of Specialist Technology Companies on the Main Board of the Exchange. The consultation period ended on 18 December 2022. This paper sets out conclusions to that consultation.

Introduction

2. The Exchange received 90 non-duplicate[1] responses to the Consultation Paper from a broad range of respondents.

3. After considering the feedback, the Exchange has decided to implement the proposals set out in the Consultation Paper broadly as proposed, with some amendments and clarifications to reflect comments made by respondents and to clarify the intent of some requirements. These amendments and clarifications are discussed in this Conclusions Paper and are highlighted in **Appendix IV** (Amendments to Main Board Listing Rules) and **Appendix V** (Guidance Letter for Specialist Technology Companies).

4. All the responses we received are available to view on the HKEX website (link) (except those from respondents who indicated that they do not want their responses to be published). The Exchange would like to thank all those who responded.

Summary

5. The Exchange will implement the proposals as set out in the Consultation Paper, subject to certain amendments. The key amendments are summarised below:

   (a) **Market capitalisation:** to address respondents' comments that the proposed minimum market capitalisation requirements of HK$8 billion (for Commercial Companies) and HK$15 billion (for Pre-Commercial Companies) could be lowered without compromising our regulatory aims, we have set the requirement at HK$6 billion (for Commercial Companies)[2] and HK$10 billion (for Pre-Commercial Companies)[3];

[1] Three responses were found to duplicate other responses and will not be counted for the purpose of a quantitative and qualitative analysis of the responses.

[2] See Section B(I) in Chapter 2 of this paper.

[3] See Section B(II) in Chapter 2 of this paper.

(b) **R&D expenditure ratio:**

(i) given the R&D expenditure ratio requirement of at least 50% may exclude Pre-Commercial Companies that are in an early commercialisation phase, we have set an alternative threshold of 30% for those that have already generated HK$150 million or more (but less than HK$250 million) revenue for the most recent audited financial year[4]; and

(ii) in addition, to cater for potential fluctuations in overall R&D and operating expenditure, we have modified the period of application of the ratio such that Specialist Technology Companies are required to meet the applicable percentage threshold: (1) on a yearly basis for at least two of the three financial years prior to listing; and (2) on an aggregate basis over all three financial years prior to listing[5];

(c) **Investments from Pathfinder SIIs:** in light of respondents' comments that the proposed indicative benchmark on meaningful investment from Pathfinder SIIs (i.e. two Pathfinder SIIs holding shares or convertible securities equivalent to 5% or more of the issued share capital of the listing applicant) would be too difficult to achieve for many applicants, we have revised the indicative benchmark to provide for more flexibility.

The revised benchmark requires investments from a group of two to five Sophisticated Independent Investors (each having invested in the listing applicant at least 12 months before the date of the listing application) that satisfy the following:[6]

(i) such investors in aggregate, (1) hold such amount of shares or securities convertible into shares equivalent to 10% or more of the issued share capital of the listing applicant as at the date of its listing application and throughout the pre-application 12-month period; or (2) have otherwise invested an aggregate sum of at least HK$1.5 billion in the shares or securities convertible into shares of the applicant at least 12 months prior to the date of the listing application (excluding any subsequent divestments made on or before the date of the listing application); and

(ii) at least two such investors (1) each hold such amount of shares or securities convertible into shares equivalent to 3% or more of the issued share capital of the listing applicant as at the date of its listing application and throughout the pre-application 12-month period; or (2) each have otherwise invested at least HK$450 million in the shares or securities convertible into shares of the applicant at least 12 months prior to the date of the listing application (excluding

[4] Pre-Commercial Companies with less than HK$150 million revenue for the most recent audited financial year will continue to be subject to the 50% threshold. See Section B(VII) in Chapter 2 of this paper.

[5] See Section B(VII) in Chapter 2 of this paper.

[6] See Section B(XI) in Chapter 2 of this paper.

any subsequent divestments made on or before the date of the listing application); and

(d) **Independent Price Setting Investors:** to address respondents' comments, we have revisited the types of independent investors that will be taken into account for the requirement of minimum allocation of the shares offered in an IPO to help ensure a robust IPO price discovery process for Specialist Technology Companies. A new defined term, "Independent Price Setting Investors", is used to define such investors which comprise (i) independent Institutional Professional Investors (as contemplated in the Consultation Paper); and (ii) other types of independent investors with AUM, fund size or investment portfolio size of at least HK$1 billion.[7]

Implementation of Rules

6. The Rules set out in **Appendix IV** of this Conclusions Paper, together with the Guidance Letter on Specialist Technology Companies that forms **Appendix V** of this paper, will come into effect on Friday, 31 March 2023.

Listing applications / enquiries

7. A Specialist Technology Company and its sponsor(s) may now submit formal pre-IPO enquiries regarding the interpretation of the Rules set out in this Conclusions Paper and their application to the prospective listing applicant's circumstances. Companies may submit a formal application for listing under the new regime on or after Friday, 31 March 2023.

[7] See Section E(I) in Chapter 2 of this paper.

CHAPTER 1: INTRODUCTION

Number and Nature of Respondents

8. A full list of respondents to the Consultation Paper is set out in **Appendix I**. A breakdown of respondents by category are set out in Table 1 and Table 2 below.[8]

Table 1: Institutional respondents by category

CATEGORY	NUMBER	%
Accounting Firms	4	5%
Corporate Finance Firms / Banks	12	14%
HKEX Participant	1	1%
Investment Firm Focusing on Listed Securities Investment	1	1%
Investment Firms Focusing on Private Equity / Venture Capital Investment	6	7%
Law Firms	23	27%
Listed Companies	5	6%
Professional Bodies / Industry Associations	19	23%
Prospective Listing Applicants	11	13%
Other Companies / Organisations	2	2%
TOTAL[9]	**84**	**100%**

Table 2: Individual respondents by category

CATEGORY	NUMBER	%
Corporate Finance Staff	2	33%
Staff at Investment Firms Focusing on Private Equity / Venture Capital Investment	1	17%
Lawyer	1	17%

[8] Due to rounding, the total percentage in each table may not add up to 100%.

[9] Total number excludes duplicated responses.

CATEGORY	NUMBER	%
Prospective Listing Applicant Staff	1	17%
Other Individual	1	17%
TOTAL[10]	**6**	**100%**

9. A quantitative analysis of all responses forms **Appendix II** to this paper. The methodology we used to analyse responses forms **Appendix III** to this paper.

[10] Total number excludes duplicated responses.

CHAPTER 2: MARKET FEEDBACK AND CONCLUSIONS

A. Specialist Technology

I. Definitions

Proposal

10. The Exchange proposed to:[11]

    (a) define "Specialist Technology Company" as "a company primarily engaged (whether directly or through its subsidiaries) in the research and development of, and the commercialisation and/or sales of, Specialist Technology Products within an acceptable sector of a Specialist Technology Industry";

    (b) define a "Specialist Technology Product" as "a product and/or service (alone or together with other products or services) that applies Specialist Technology"; and

    (c) define "Specialist Technology" as "science and/or technology applied to products and/or services within an acceptable sector of a Specialist Technology Industry".

Responses

11. 94% of respondents who commented (62 respondents) supported the proposed definitions of "Specialist Technology Company", "Specialist Technology Products" and "Specialist Technology"[12], while 6% of those who commented (four respondents) did not support these definitions.

Comments

12. Most respondents who commented agreed that the proposed definitions of "Specialist Technology Company", "Specialist Technology Products" and "Specialist Technology" were sufficiently clear and flexible for the purpose of setting the scope of the proposed regime.

13. Two respondents suggested removing the text "within an acceptable sector of a Specialist Technology Industry" from the definition of "Specialist Technology Company" to simplify the definition, as this text appeared to be redundant.

[11] Paragraph 96 of the Consultation Paper.

[12] Question 1 of the Consultation Paper.

Exchange conclusion

14. The Exchange has decided to adopt the proposed definitions without amendment. The text "within an acceptable sector of a Specialist Technology Industry" was intentionally included in the definition of "Specialist Technology Company" to ensure that the activities of an eligible company fall within an acceptable sector.

II. Specialist Technology Industries and Acceptable Sectors

Proposal

15. The Exchange proposed to publish a list of Specialist Technology Industries and acceptable sectors[13], with detailed descriptions of each[14], in a guidance letter published on the Exchange's website[15].

16. We proposed to update the guidance on the Specialist Technology Industries and acceptable sectors from time to time as necessary taking into account certain overriding principles.[16]

17. The Exchange also proposed to add new industries or sectors to the list of Specialist Technology Industries and acceptable sectors after consultation with the SFC and with its approval. When doing so, we would take into account any pre-IPO enquiry from potential listing applicants from the relevant industry or sector.[17]

18. We proposed that a Biotech Company relying on a Regulated Product as the basis of its listing application that fails to satisfy the requirements under Chapter 18A (and relevant guidance) is not permitted to submit an application under the proposed regime.[18]

Responses

19. 84% of respondents who commented (62 respondents) supported the proposed list of Specialist Technology Industries and acceptable sectors[19]. 16% of those who commented (12 respondents) did not support them.

[13] Box 1 on page 30 of the Consultation Paper.

[14] Paragraph 4 of the draft guidance that formed Appendix V of the Consultation Paper.

[15] Paragraph 97 of the Consultation Paper.

[16] Paragraph 101 of the Consultation Paper.

[17] Paragraph 102 of the Consultation Paper.

[18] Paragraph 98 of the Consultation Paper.

[19] Question 2 of the Consultation Paper.

Comments

General regulatory approach

20. Most respondents agreed with the Exchange's proposal to limit listings to companies whose activities fall within a list of Specialist Technology Industries and acceptable sectors, with the flexibility to amend the list over time.

21. Some respondents disagreed with this approach as they felt that subjective judgement would be needed to determine whether an applicant is eligible to list under the regime. Instead of carving out a regime dedicated to Specialist Technology Companies alone, they advocated a disclosure-based regime similar to that of the NASDAQ's and the UK Financial Conduct Authority's latest proposals[20] with more relaxed listing eligibility criteria. They believed that the responsibility of selecting suitable investments should be placed on investors themselves without the intervention of merit based judgements from regulators.

Specific suggestions for amendments

22. A majority of the respondents agreed with the proposed Specialist Technology Industries and the respective acceptable sectors as set out in the draft guidance letter.

23. Some respondents provided specific suggestions to include additional sectors or broaden the scope of those we had proposed. The key suggestions are set out below.

    (a) **"Next-generation information technology" industry:** one respondent suggested clarifying that "artificial intelligence" should also include learning facilitation and decision-making, image graphics, voice video, and natural language recognition processing technologies;

    (b) **"Advanced hardware" industry:**

        (i) one respondent suggested renaming the "advanced hardware" industry as "advanced hardware and software" because the acceptable sectors under this Specialist Technology Industry include sectors that involve the use of both advanced hardware and advanced software (e.g. the "quantum computing" and "metaverse technology" acceptable sectors); and

        (ii) some respondents suggested broadening the scope of "quantum computing" to include quantum communications and quantum precision measurement technologies;

[20] In the FCA Discussion Paper, the FCA proposed to establish one single segment that would feature one single set of eligibility criteria. It aimed to remove complexity in the existing structure of its listing regime and empower investors to conduct their own decision-making over the suitability of listed companies to meet their investment needs through clear and high quality disclosures. At the time of writing, the FCA has yet to publish a feedback paper on the FCA Discussion Paper.

(c) **"Advanced materials" industry:**

(i) One respondent suggested broadening the "smart glass" acceptable sector to include advanced inorganic materials and rename it as such, so that it covers special metals and alloys, special ceramics, and special glass; and

(ii) One respondent suggested adding "advanced composite materials" as an acceptable sector to cover high-performance composite materials and the advanced processing of composite materials; and

(d) **Other industries / sectors:**

(i) some respondents suggested including "big data analytics" as an acceptable sector of the "next-generation information technology" industry;

(ii) two respondents suggested including financial technology (FinTech) as a Specialist Technology Industry because of its high growth potential driven by an increased demand for digitised financial services; and

(iii) many respondents suggested including blockchain technology and digital asset related businesses as acceptable sectors within the "next-generation information technology" industry because of the sectors' rapid development in recent years.

24. A number of respondents sought clarification on whether a biotech company with a product other than a Regulated Product may apply to list under the proposed Specialist Technology Regime, rather than under the Biotech Company regime.

Applicants that do not fall within the scope of the existing list of Specialist Technology Industries and acceptable sectors

25. Some respondents asked the Exchange to clarify its procedure for making exceptions to the Specialist Technology Industry and acceptable sector requirements and its procedure for adding or removing such industries / sectors from our guidance.

26. These respondents suggested that the Exchange retain the discretion to allow an applicant to list, on a case-by-case basis following a pre-IPO consultation, if its industry or sector was not one of those included within the scope of the regime. They thought this should be possible without the Exchange having to amend and re-publish its guidance on Specialist Technology Industries and acceptable sectors.

27. A number of respondents that supported the Exchange's proposed approach suggested it devise a mechanism to review its list of Specialist Technology Industries and acceptable sectors periodically, so that the list would be constantly refreshed to reflect the latest Specialist Technology trends.

Exchange conclusion

General regulatory approach

28. The Exchange will adopt the approach proposed in the Consultation Paper and implement a separate listing regime for Specialist Technology Companies based on the industries and acceptable sectors that we will set out in published guidance.

29. We acknowledge that some subjective judgements may be needed to determine whether a new applicant falls within the scope of the Specialist Technology Industries and acceptable sectors. However, public investors in these companies would be subject to risks (e.g. the risk that the applicant never successfully commercialises and the difficulty in reaching a consensus on valuation) that do not apply, or do not apply to the same extent, to other issuers.[21] We believe these risks should be mitigated by additional safeguards that are applied only to Specialist Technology Companies, and this is best achieved within a separate listing regime.

Specific suggestions for amendments

30. The Exchange will adopt the proposed list of Specialist Technology Industries and acceptable sectors set out in the Consultation Paper with amendments to incorporate respondents' comments (see highlighted amendments in paragraph 7 of the Guidance Letter). We have not incorporated the respondents' comments referred to in paragraph 23(d) for the following reasons:

    (a) we have not included "big data analytics" or financial technology (FinTech) as separate Specialist Technology Industries or acceptable sectors. We take the view that most of these businesses involve the "downstream" application of Specialist Technology (e.g. cloud-based services and artificial intelligence technology) to the Specialist Technology Products (e.g. big data analytics solutions or FinTech software) sold by them. Accordingly, they would already be included within the regime without the need to include them as separate industries / sectors;

    (b) we take the view that companies (including some types of FinTech companies) that primarily facilitate transactions between service providers / product suppliers and customers and that generate revenue on a commission or transaction fee basis should not be included under the Specialist Technology Regime, as such revenue should not be regarded as revenue arising from the applicant's Specialist Technology business segment (see Note to Rule 18C.03(4)). This is because the business models of such companies are primarily based on their matching services and not the sale of Specialist Technology Products; and

    (c) blockchain and digital asset related businesses are also not included in the list of Specialist Technology Industries and acceptable sectors as our research finds that, at present, many blockchain technology companies listed in the US exhibit features that are inconsistent with the companies targeted by the Specialist Technology

[21] See the "Key Issues" chapter (Chapter 2) of the Consultation Paper for further information on these risks.

Regime. For example, it is noted that a large number of blockchain companies engage in crypto asset mining. Such companies' success is generally attributable to the expansion of mining capacity, rather than the application of new technology. Also, R&D does not appear to contribute significantly to such companies' expected value nor constitute a major activity and expense of such companies. Instead, they tend to have high costs of sales, which primarily comprise (a) energy and infrastructure costs; (b) depreciation and amortisation of fixed assets such as mining facilities; and (c) selling and marketing expenses.

31. We have also amended the Guidance Letter (see paragraph 9 of the Guidance Letter) to clarify that a company operating in the biotech industry that does not base its listing application on a Regulated Product (as defined in Chapter 18A of the Listing Rules) may apply to list under the Specialist Technology Regime as long as it meets the definition of a Specialist Technology Company. The proposed requirement relating to a Biotech Company relying on a Regulated Product (as referred to in paragraph 18)[22] is now also set out in the Guidance Letter (see paragraph 8 of the Guidance Letter).

Applicants that do not fall within the scope of the existing list of Specialist Technology Industries and acceptable sectors

32. We would like to clarify that an applicant falling outside the list of industries or acceptable sectors (as set out in the Guidance Letter published at the relevant time) may still be considered as "within an acceptable sector of a Specialist Technology Industry" if it can demonstrate that:

(a) it has high growth potential;

(b) its success can be demonstrated to be attributable to the application, to its core business, of new technologies and/or the application of the relevant science and/or technology within that sector to a new business model, which differentiates it from traditional market participants serving similar consumers or end users; and

(c) research and development significantly contributes to its expected value and constitutes a major activity and expense.

33. A potential applicant falling outside the existing list of Specialist Technology Industries or acceptable sectors but seeking to apply for listing under Chapter 18C must submit a pre-IPO enquiry to the Exchange to seek confidential guidance on whether it can be considered as "within an acceptable sector of a Specialist Technology Industry". In making the assessment, the Exchange will take into account all relevant facts and circumstances. To enable the Exchange to make a prompt assessment, an applicant should include in its submission all relevant facts with a meaningful and balanced discussion of its core business, technologies and innovations. The applicant should avoid making selective disclosures

[22] Such requirement was included as draft Note 3 to Rule 18C.03 in the draft Rules (Appendix IV of the Consultation Paper).

focusing only on favourable facts. Doing so is also likely to prolong the Exchange's assessment.

34. The Exchange will consult with the SFC, and seek its approval, before determining such a potential applicant to be "within an acceptable sector of a Specialist Technology Industry" and so eligible to submit a listing application under Chapter 18C.

35. The Exchange will update the list of Specialist Technology Industries and acceptable sectors in the Guidance Letter from time to time, as necessary, after consultation with the SFC and with its approval. One of the circumstances in which it may do so is following, or to accompany, the listing of an applicant from that new industry / sector. However, the Exchange reserves the right not to update the Guidance Letter in these circumstances if, for example, the applicant has characteristics that are not generally applicable to other companies in its industry / sector.

36. We have amended the Guidance Letter (see paragraphs 10 to 14 of the Guidance Letter) to reflect the above process. The Exchange believes this process will be flexible enough to cater for any emerging industries or sectors not currently included in the Guidance Letter. Accordingly, at this stage we do not propose to implement a mechanism to review the list periodically.

III. Companies with Multiple Business Segments

Proposal

37. We proposed that where an applicant seeking to list under the proposed regime has multiple business segments, some of which do not fall within one or more Specialist Technology Industries, the Exchange would, for the purpose of determining whether the company is "primarily engaged" in the relevant business[23], take into account the following:[24]

    (a) whether a substantial portion of the total operating expenditure of the company and senior management resources (including their time; number of directors and senior management personnel with relevant expertise and experience) is dedicated to the research and development of, and the commercialisation and/or sales of, Specialist Technology Product(s) in the company's Specialist Technology business segment(s) for at least three financial years prior to listing;

    (b) whether the basis for investors' valuation and the expected market capitalisation of the company is based primarily on the company's Specialist Technology business segment(s), rather than its other business segments or assets unrelated to its Specialist Technology business segment(s); and

[23] Part of the definition of "Specialist Technology Company" (see "Definitions" section of this paper).

[24] Paragraph 107 of the Consultation Paper.

(c) whether the proposed use of proceeds for listing would primarily be applied to its Specialist Technology business segment(s).

Responses

38. 89% of respondents who commented (57 respondents) supported this proposal[25], while 11% of those who commented (seven respondents) did not support it.

Comments

39. A majority of respondents agreed that companies with multiple business segments, some of which do not fall within one or more Specialist Technology Industries, should be allowed to list under the Specialist Technology Regime provided that they could demonstrate they are primarily engaged in the relevant Specialist Technology business.

40. Some respondents asked the Exchange to provide guidance on the three factors (see paragraph 37) that the Exchange would consider when determining whether a company is "primarily engaged" in a Specialist Technology business. In particular, these respondents were of the view that:

    (a) the meaning of "substantial portion", "based primarily on" and "primarily be applied to" should be elaborated, preferably with reference to quantitative thresholds to give more clarity;

    (b) the requirement to have "a substantial portion of … senior management resources … for at least three financial years prior to listing" should not be imposed as a strict requirement, as a majority of personnel involved in the R&D and sales of Specialist Technology Product(s) of a company often do not serve as directors or senior management personnel; and

    (c) it would be difficult to attribute the basis for investors' valuation to a company's particular business segment(s). It was noted that different valuation methodologies may be applied to different business models and the valuation of a company with multiple business segments may be based on the synergy across different business segments. A lack of clear guidance on what constitutes a primary basis for investors' valuation of a company may create uncertainty for listing applicants.

41. Two respondents asked the Exchange to clarify whether a company with multiple business segments where a substantial portion of its revenue is derived from non-Specialist Technology business segments could nevertheless be considered a Specialist Technology Company, if a substantial portion of its total operating expenditure is dedicated to its Specialist Technology business segments.

42. Two respondents suggested that listing applicants should provide a detailed and reasonable explanation as to why they have retained non-Specialist Technology business segments at the time of listing. They were concerned that such listing applicants may

[25] Question 3 of the Consultation Paper.

circumvent the Exchange's listing requirements by "packaging" non-Specialist Technology business segments.

Exchange conclusion

43. To provide flexibility to accommodate the different circumstances of new applicants, the Exchange does not intend to prescribe "bright line" percentage thresholds to determine whether a company is "primarily engaged" in a Specialist Technology business and will instead rely upon a holistic assessment of the non-exhaustive factors set out in the Guidance Letter.

44. In response to the comments made by respondents on staff resources (see paragraph 40(b) above), we have amended our requirements to state that the allocation of staff resources as a whole to R&D would be considered for the purpose of such assessment, rather than only senior management resources (see paragraph 16(a) of the Guidance Letter).

45. We will retain the valuation of an applicant's Specialist Technology business segment as a factor that the Exchange will take into consideration. The expected minimum market capitalisation requirements of the new regime are a very important safeguard and we believe this value should be primarily based on an applicant's Specialist Technology business to help prevent circumvention of this safeguard. New applicants and their advisers would have the freedom to provide a full explanation as to why they believe the expected market capitalisation is primarily based on an applicant's Specialist Technology business and how it demonstrates that the applicant is primarily engaged in a Specialist Technology business.

46. To provide further guidance, we have amended the Guidance Letter (see paragraph 16 of the Guidance Letter) to include the following as additional factors that the Exchange will take into account for the purpose of such an assessment:

    (a) the proportion of the revenue (if any) generated by the Specialist Technology business segment(s) relative to the total revenue of the company; and

    (b) the reason for retaining the non-Specialist Technology business segment(s) and the history of the company's operations.

47. We have also clarified in the Guidance Letter (see paragraph 17 of the Guidance Letter) that these factors are included for guidance only and are not intended to be exhaustive. The Exchange will adopt a holistic approach taking into account all the information provided and all relevant circumstances to determine whether it is satisfied that the company is "primarily engaged" in the relevant business.

48. In the case of an applicant with multiple business segments where a substantial portion of its revenue is derived from non-Specialist Technology-related business, for it to be considered "primarily engaged" in a Specialist Technology business, the Exchange will take into account other factors, such as its operating expenditure as stated in our proposals (see paragraph 37(a)) and assess holistically whether it is satisfied that the company is "primarily engaged" in the relevant business. The applicant would also be required to meet all other

applicable eligibility requirements, including our requirements relating to minimum R&D expenditure as a proportion of the total operating expenditure (see Section B(VII)).

49. As set out below (see Section B(VIII)), we will require ownership continuity and control for a Specialist Technology Company listing applicant in the 12 months prior to the date of its listing application and up until the time immediately before the offering and/or placing becomes unconditional. One of the purposes of this requirement is to prevent the "packaging" of businesses for listing. An applicant should disclose in its listing document the reason for retaining non-Specialist Technology business segments to explain why it should still be considered as a Specialist Technology Company, because this is necessary to enable potential investors to make a fully informed assessment of the applicant's activities and prospects. [26]

50. In view of the above and taking into account feedback from the respondents, we will adopt the proposal with the amendments referred to in paragraphs 44 and 46 to 47.

IV. Exchange's Right to Reject a Listing Application

Proposal

51. The Exchange proposed to retain the discretion to reject an application for listing from an applicant within an acceptable sector if it displays attributes inconsistent with the following principles:[27]

    (a) it has high growth potential;

    (b) its success can be demonstrated to be attributable to the application, to its core business, of new technologies and/or the application of Specialist Technology to a new business model, which also serves to differentiate it from traditional market participants serving similar consumers or end users; and

    (c) research and development significantly contributes to its expected value and constitutes a major activity and expense.

Responses

52. 86% of respondents who commented (56 respondents) supported this proposal[28], while 14% of those who commented (nine respondents) did not support it.

[26] Rule 11.07.

[27] Paragraphs 101 and 108 of the Consultation Paper, and draft Note 2 to Rule 18C.03(1) (see Appendix IV of the Consultation Paper).

[28] Question 4 of the Consultation Paper.

Comments

53. Many respondents agreed that the Exchange should retain the discretion to reject an application to help ensure market quality and investor protection.

54. However, respondents generally emphasised the importance of consistency and objectivity when assessing an applicant's eligibility to list, and some respondents were concerned that the application of the principles involves subjective judgements. In particular, some respondents were of the view that:

    (a) whether or not an applicant's business had "high growth potential" would involve subjective judgements unless quantitative thresholds were used as the basis of rejection, such as compound annual growth rate in revenue or other metrics. This would be particularly difficult for Pre-Commercial Companies as they may lack sufficient data to demonstrate their growth potential;

    (b) the requirement that R&D significantly contributes to an applicant's expected value and constitutes a major activity and expense would always be met if the applicant could meet the minimum R&D requirement (as a percentage of total operating expenditure) under the proposed Rules[29];

    (c) the Exchange may instead use its discretion to reject an application under Rule 8.04;

    (d) a new technology may not necessarily have a market in the traditional sense and so it would not be possible to "differentiate [itself] from traditional market participants serving similar consumers or end users". These respondents also asked the Exchange to clarify whether companies from sectors such as semiconductors and electric vehicles may fail to substantiate their alignment with this principle, as such sectors may no longer be considered "emerging sectors"; and

    (e) clearer guidance on the scenarios or grounds under which the Exchange may exercise its discretion to reject an application and the mechanism or decision-making process for appealing against such a rejection should be provided.

Exchange conclusion

55. We acknowledge that most listing applicants that are able to satisfy the "bright-line" eligibility requirements of the Specialist Technology Regime are likely to also display attributes that are consistent with our proposed principles.

56. However, there may be occasions when it would not be appropriate for an issuer to list under the regime even though they can meet the "bright line" requirements. The principles are intended to provide guidance to the market as to how we may exercise our existing power[30] (as noted by some respondents) to reject an application in such circumstances.

[29] Paragraph 138 of the Consultation Paper.

[30] See Rule 8.04.

They are deliberately subjective because they are to be applied only when "bright-line" eligibility requirements are insufficient to meet the objectives of the Specialist Technology Regime.

57. As stated in our Consultation Paper[31], it is not our intention to limit the regime to only those companies with leading-edge technology. For this reason we have modified part (b) of the principles to clarify that an applicant within the existing list of Specialist Technology Industries and acceptable sectors does not need to demonstrate that it uses a "new" technology or business model. We have done so by replacing (b) with the text: "*its success can be demonstrated to be attributable to the application, to its core business, of the relevant Specialist Technology*".

58. As the Exchange gains more experience listing Specialist Technology Companies, we may publish more guidance on the circumstances when we may exercise our discretion to reject an application.

59. In view of the above and taking into account feedback from the respondents, we will adopt the proposal with the amendments referred to in paragraph 57. The principles are set out in the Guidance Letter (see paragraphs 10 and 15 of the Guidance Letter) to provide flexibility for updating in the future.

V. Categorisation of Commercial / Pre-Commercial Companies

Proposal

60. The Exchange proposed to accommodate the listings of Commercial Companies and Pre-Commercial Companies, with more stringent requirements imposed on Pre-Commercial Companies than Commercial Companies.[32]

Responses

61. 96% of respondents who commented (64 respondents) supported the proposal to accommodate the listings of both Commercial Companies and Pre-Commercial Companies[33], while 4% of those who commented (three respondents) did not support it.

62. Of the respondents who supported the proposal to accommodate the listings of both Commercial and Pre-Commercial Companies, 93% of respondents who commented (57 respondents) supported the proposed approach to apply more stringent requirements to Pre-Commercial Companies[34], while 7% of those who commented (four respondents) did not support it.

[31] Paragraphs 103 to 105 of the Consultation Paper.

[32] Paragraph 113 of the Consultation Paper.

[33] Question 5 of the Consultation Paper.

[34] Question 6 of the Consultation Paper.

Comments

63. Respondents generally welcomed the Exchange's proposal to accommodate the listings of both Commercial Companies and Pre-Commercial Companies.

64. Few respondents thought that Pre-Commercial Companies would be unsuitable for listing on a public market because of their high investment risks. One respondent was of the view that it was not desirable to introduce the Specialist Technology Regime in Hong Kong, because of the higher risk profile of the Specialist Technology Companies as mentioned in the Consultation Paper.

65. Most respondents agreed that more stringent requirements should be applied to Pre-Commercial Companies as they are at an earlier stage of development and so carry higher investment risks.

66. Some respondents suggested that these additional requirements should focus on corporate governance and post-listing compliance rather than quantitative thresholds on the qualifications for listing. These respondents were concerned that the valuations of Pre-Commercial Companies may be overly speculative, as they lack a track record of commercialisation to support their valuations.

Exchange conclusion

67. In view of the majority support from respondents, we will adopt the proposal.

VI. Accessibility of Pre-Commercial Companies to All Investors

Proposal

68. The Exchange proposed that all investors, including retail investors, be allowed to subscribe for, and trade in, the securities of Pre-Commercial Companies.[35]

Responses

69. 97% of respondents who commented (59 respondents) supported this proposal[36], while 3% of those who commented (two respondents) did not support it.

Comments

70. A majority of respondents supported the proposal on the basis that it would provide more investment opportunities to all Hong Kong investors, including retail investors. They also thought the proposal is consistent with the Biotech Company listing regime. They believed

[35] Paragraph 114 of the Consultation Paper.

[36] Question 7 of the Consultation Paper.

additional disclosure requirements and warning statements would raise the investors' awareness of the investment risks related to Pre-Commercial Companies.

71. Two respondents objected to the proposal. These respondents were of the view that the proposed requirements for Pre-Commercial Companies were too stringent. They believed that a better approach would be to exclude retail investors from subscribing for, and trading in, the shares of Pre-Commercial Companies to allow the Exchange to impose less stringent listing requirements.

Exchange conclusion

72. In view of the majority support from respondents, we will adopt the proposal.

B. Qualifications for Listing

I. Minimum Expected Market Capitalisation: Commercial Companies

Proposal

73. The Exchange proposed that Commercial Company applicants must demonstrate a minimum expected market capitalisation of HK$8 billion at the time of listing.[37]

Responses

74. 20% of respondents who commented (16 respondents) supported the proposed minimum expected market capitalisation threshold for a Commercial Company listing applicant[38], while 80% of those who commented (66 respondents) did not support it.

Comments

75. None of the respondents suggested higher market capitalisation thresholds.

76. Only a minority of respondents believed that the proposed market capitalisation threshold was appropriate to safeguard the quality of the issuers, whereby:

    (a) one supporting respondent stated that the proposed threshold would: (i) better facilitate post-IPO trading liquidity, as a market capitalisation threshold above US$1 billion (equivalent to approximately HK$8 billion) would normally attract sufficient institutional investors' demand; and (ii) serve as a market driven approach for selecting quality issuers to be listed under the Specialist Technology Regime; and

    (b) some supporting respondents also cautioned that our proposed market capitalisation threshold may limit the number of applicants and suggested that the Exchange revisit the threshold if there are signs of it being too high to be competitive.

[37] Paragraph 120 of the Consultation Paper.

[38] Question 8 of the Consultation Paper.

77. Most respondents suggested lowering the minimum market capitalisation threshold, citing one or more of the following reasons:

(a) **Reasons applicable to both Commercial Companies and Pre-Commercial Companies:**

(i) **Limitation on the number of eligible applicants:** the proposed thresholds would exclude too many companies, leaving only a small number that would be eligible for listing under the regime. This may defeat the objective of attracting more Specialist Technology Companies to list in Hong Kong. A number of respondents stressed the importance of having a sufficient number of listings to form a critical mass to attract investors' interest, sustain their participation and build an investment eco-system for the Specialist Technology Regime to be successful;

(ii) **Risks of inflated valuation:** the high thresholds may put pressure on applicants to inflate their valuations to meet the requirements for listing, thereby putting investors in such companies at a heightened risk of overstated valuations; and

(iii) **A high valuation is not an assurance of quality**

(a) the valuation of a company can be affected by macroeconomic factors that are not necessarily relevant to the company's quality, including geopolitical and economic conditions, and market sentiment and confidence in a particular industry. In particular, while peak valuations were observed globally during 2020 and 2021 (which overlaps with the period of our Sample Cohort), valuations of technology companies declined significantly in 2022;

(b) the other proposed requirements of the Specialist Technology Regime (including R&D expenditure, additional disclosure and lock-ups) would be more effective than the minimum market capitalisation requirement to help ensure market quality, provide investor protection and maintain an orderly market;

(c) the market values of Specialist Technology Companies are more volatile when compared to companies in other industries, due to the inherent difficulty in determining their valuation (as stated in the Consultation Paper[39]). A high market capitalisation threshold would also increase the uncertainty of applicants' listing plans, especially in a volatile market. This is because an applicant that would have been able to meet the minimum market capitalisation threshold at the beginning of its preparation for listing may not be able to do so at the time of book building, due to market conditions.

[39] Paragraphs 69 to 74 of the Consultation Paper.

(b) **Reasons specific to Commercial Companies:**

(i) **The implied P/S ratio is too high:** the 32x price-to-sales ratio ("**P/S ratio**") implied by the HK$8 billion market capitalisation threshold and the HK$250 million Commercialisation Revenue Threshold is much higher than the average P/S ratio of Specialist Technology Companies, particularly under market conditions in 2022. Based on the trailing twelve-month P/S ratios of Hang Seng TECH Index constituent stocks and those of STAR Market issuers as at 31 October 2022, only a small number of listed issuers could achieve the implied 32x P/S ratio;

(ii) **Inconsistency with the threshold for Biotech Companies:** Commercial Companies have a track record of revenue that can be evaluated by potential investors and so should be subject to a less stringent minimum market capitalisation requirement than that proposed. Some respondents further argued that a Commercial Company should not be considered to have a higher risk profile than a pre-revenue Biotech Company (which can be listed with an expected market capitalisation as low as HK$1.5 billion at the time of listing); and

(iii) **Uncompetitive compared to equivalent requirements of other stock exchanges:** the proposed threshold was much higher than other stock exchanges' eligibility requirements with similar revenue requirements[40]. For example, respondents noted that Listing Criterion 2 of the STAR Market requires an applicant to have a minimum expected market capitalisation of RMB 1.5 billion (HK$1.74 billion) at the time of listing and revenue of RMB 200 million (HK$232 million) for the most recent year, together with safeguards centred around R&D investments.

78. 19 respondents suggested alternative minimum market capitalisation thresholds for Commercial Companies as summarised below:

	Commercial Companies
Range of suggested alternative market capitalisation thresholds	HK$1.5 billion to 6 billion
Most commonly suggested threshold	HK$4 billion

[40] See Table 3 on page 22 of the Consultation Paper and Appendix II to that paper for a comparison of non-profit-based and non-cash flow-based financial eligibility tests of selected exchanges.

Exchange conclusion

79. We note the strong view from most respondents (including buy-side and sell-side investors) who commented on the issue that the minimum market capitalisation requirement we proposed was too high.

80. In particular, we acknowledge that, in general, the market capitalisation of companies in the Specialist Technology Industries dropped significantly in 2022 due to macroeconomic factors. This means that the analysis of the Sample Cohort companies (listed between January 2019 and March 2022) for the purpose of our Consultation Paper may reflect a market capitalisation level that was higher than one under average market conditions.

81. We believe our Rules should be fit for purpose in the long term and for the majority of each macroeconomic cycle. For this reason, and having taken into consideration feedback from respondents, the Exchange has decided to lower the minimum expected market capitalisation requirement at the time of listing for Commercial Companies to HK$6 billion, which we believe would be a more appropriate level to cater for both peaks and troughs of a macroeconomic cycle.

82. The revised market capitalisation threshold also takes into account factors summarised in paragraphs 83 to 86 below.

Avoidance of circumvention of existing requirements

83. HK$6 billion represents the mid-point between the originally proposed HK$8 billion market capitalisation threshold and the HK$4 billion threshold under the existing Market Capitalisation / Revenue Test.

84. The Exchange is of the view that the threshold should be substantially higher than that under the existing Market Capitalisation / Revenue Test[41] to prevent the Specialist Technology Regime from being used as a circumvention of the HK$500 million revenue requirement under the existing test.

Institutional participation

85. We believe that a minimum threshold of HK$6 billion would still be high enough to help ensure institutional investor demand for securities of Commercial Companies. In addition to the support for the threshold by some of the institutional investors who responded to the Consultation Paper, our analysis shows that there is no significant difference in the number of institutional shareholders amongst the top ten shareholders of the Commercial Companies in the Sample Cohort with a market capitalisation meeting the market

[41] Rule 8.05(3).

capitalisation thresholds under our original and revised proposals[42], as illustrated in Table 3 below[43].

Table 3: Effect of adjusting the minimum market capitalisation threshold for Commercial Companies on the number of institutional shareholders amongst the top ten shareholders of the Commercial Companies in the Sample Cohort[44]

	Number of issuers	Average number of institutional shareholders amongst the top ten shareholders	Proportion of issuers with at least two institutional shareholders amongst the top ten shareholders (%)
(Under original proposal) Market capitalisation at the time of listing ≥ HK$8 billion	8	6.88	100% (8 out of 8)
(Under amended proposal) Market capitalisation at the time of listing ≥ HK$6 billion	11	6.00	100% (11 out of 11)

Revenue growth

86. Our analysis shows that the average revenue CAGR since listing[45] and the proportion of Commercial Companies in the Sample Cohort with revenue CAGR since listing of at least

[42] Our analysis covers the top ten shareholders, as of 31 December 2022, of Commercial Companies in the Sample Cohort. For the purpose of this analysis:

(a) "institutional shareholders" mean traditional money managers, pension funds, family offices/trusts, banks/investment banks, insurance companies, foundations/endowments, hedge funds, private equity / venture capital firms and sovereign wealth funds, holding shares in the relevant Commercial Company. Source: S&P Capital IQ (retrieved on 18 January 2023); and

(b) "Commercial Companies" mean Specialist Technology Issuers that had met the HK$250 million Commercialisation Revenue Threshold but had yet to meet the HK$500 million revenue threshold under our existing Market Capitalisation / Revenue Test or Market Capitalisation / Revenue / Cash Flow Test at the time of listing. We have identified 70 Commercial Companies within the Sample Cohort.

[43] The findings were similar for Specialist Technology Issuers in the Ineligible Sample Cohort.

[44] See footnote 42 for the methodology.

[45] Revenue CAGR since listing was derived from the growth of revenue of the relevant entity between (a) the most recent audited financial year prior to listing and (b) the latest audited financial year to date. Source: S&P Capital IQ (retrieved on 18 January 2023).

30%[46] would not be substantially lowered if we reduce the minimum market capitalisation threshold for Commercial Companies[47], as illustrated in Table 4[48].

Table 4: Effect of adjusting the minimum market capitalisation threshold for Commercial Companies on the revenue CAGR since listing of Commercial Companies in the Sample Cohort[49]

	Number of issuers	Average revenue CAGR since listing (%)	Proportion of issuers with revenue CAGR of ⩾ 30% since listing (%)
(Under original proposal) Market capitalisation at the time of listing ≥ HK$8 billion	8	157%	75% (6 out of 8)
(Under amended proposal) Market capitalisation at the time of listing ≥ HK$6 billion	11	125%	73% (8 out of 11)

II. Minimum Expected Market Capitalisation: Pre-Commercial Companies

Proposal

87. The Exchange proposed that Pre-Commercial Company applicants must demonstrate a minimum expected market capitalisation of HK$15 billion at the time of listing.[50]

Responses

88. 20% of respondents who commented (15 respondents) supported the proposed minimum expected market capitalisation threshold for a Pre-Commercial Company listing applicant[51], while 80% of those who commented (61 respondents) did not support it.

[46] Based on the preliminary discussions with our stakeholders, Specialist Technology Companies with revenue CAGR of over 30% are considered high growth and also as a positive investment characteristic by institutional investors.

[47] Our analysis covers the revenue CAGR (as defined in footnote 45) of Commercial Companies in the Sample Cohort. See also footnote 42 for the definition of Commercial Companies for the purpose of our analysis. Source: S&P Capital IQ (retrieved on 18 January 2023).

[48] The findings were similar for Specialist Technology Issuers in the Ineligible Sample Cohort.

[49] See footnote 47 for the methodology.

[50] Paragraph 120 of the Consultation Paper.

[51] Question 9 of the Consultation Paper.

Comments

89. Most respondents suggested lowering the minimum market capitalisation threshold for Pre-Commercial Companies, citing the reasons summarised in paragraph 77(a) above (applicable to both Commercial Companies and Pre-Commercial Companies). In addition, some gave one or more of the following reasons specific to Pre-Commercial Companies:

(a) **The implied P/S ratio is too high:** a P/S ratio of at least 60x at the time of listing, as implied by the HK$15 billion market capitalisation threshold and revenue of less than HK$250 million for the most recent audited financial year is too high, and is out of line with the average market capitalisation of Pre-Commercial Companies. Respondents believed very few Pre-Commercial Companies would be able to meet the proposed minimum market capitalisation requirement. Based on the average market capitalisation and the average trailing twelve-month P/S ratio of Pre-Commercial Companies listed on the STAR Market (i.e. STAR Market issuers with revenue of less than HK$250 million for the financial year ended 2021) as at 31 October 2022, only a small number of listed issuers could achieve the implied P/S ratio of 60x;

(b) **Inconsistency with the threshold for Biotech Companies:** the proposed minimum market capitalisation threshold for Pre-Commercial Companies is ten times the corresponding requirement for Biotech Companies (i.e. HK$1.5 billion). Whilst Biotech Companies are regulated by a Competent Authority regime, which is not applicable to most Specialist Technology Industries, some respondents argued that the presence of a Competent Authority regime does not mitigate the risk that a Biotech Company may not successfully commercialise its products or generate sufficient revenue to sustain its operations after listing. Accordingly, Pre-Commercial Companies should not be subject to a market capitalisation threshold that is too much higher than that for Biotech Companies; and

(c) **Uncompetitive with other stock exchanges:** the proposed minimum market capitalisation threshold was much higher than other stock exchanges' eligibility requirements for pre-revenue companies[52]. For example, Listing Criterion 5 of the STAR Market (which also does not require any track record of revenue or profit) requires an applicant to have a minimum expected market capitalisation of RMB 4 billion (HK$4.6 billion) at the time of listing.

[52] See Table 3 on page 22 of the Consultation Paper and Appendix II to that paper for a comparison of non-profit-based and non-cashflow-based financial eligibility tests of selected exchanges.

90. 20 respondents suggested alternative minimum market capitalisation thresholds for Pre-Commercial Companies as summarised below:

	Pre-Commercial Companies
Range of suggested alternative market capitalisation thresholds	HK$4 to 12 billion
Most commonly suggested threshold	HK$8 billion

Exchange conclusion

91. For the same reasons as set out in paragraphs 80 to 81 above for Commercial Companies, and having taken into consideration feedback from respondents, the Exchange has decided to lower the minimum expected market capitalisation requirement at the time of listing for Pre-Commercial Companies to HK$10 billion.

92. The revised market capitalisation threshold for Pre-Commercial Companies also takes into account factors as set out in paragraphs 93 to 95 below.

Absence of Competent Authority

93. The revised minimum market capitalisation threshold for Pre-Commercial Companies is almost seven times that for Biotech Companies. Applicants meeting the revised market capitalisation threshold would have a size beyond the level at which they would be considered "unicorns" within the investment industry (US$1 billion). Therefore, the revised requirement should still be sufficient to ensure that the Pre-Commercial Companies to be listed under the Specialist Technology Regime are at a relatively late stage of development at the time of their listing. This should still help to mitigate the risks associated with the absence of a Competent Authority regime i.e. the risk that investors may have no frame of reference to judge the stage of development of a Pre-Commercial Company applicant.

Institutional participation

94. We also believe that a minimum market capitalisation threshold of HK$10 billion would still be high enough to help ensure sufficient institutional investor demand for securities of Pre-Commercial Companies. In addition to the support for the revised threshold by some of the institutional investors who responded to the Consultation Paper, our analysis shows that there is no significant difference in the number of institutional shareholders amongst the top ten shareholders of the Pre-Commercial Companies in the Sample Cohort with a market

capitalisation meeting the minimum market capitalisation thresholds under our original and revised proposals[53], as illustrated in Table 5 below[54].

Table 5: Effect of adjusting the minimum market capitalisation threshold for Pre-Commercial Companies on the number of institutional shareholders amongst the top ten shareholders of Pre-Commercial Companies in the Sample Cohort[55]

	Number of issuers	Average number of institutional shareholders amongst the top ten shareholders	Proportion of issuers with at least two institutional shareholders amongst the top ten shareholders (%)
(Under original proposal) Market capitalisation at the time of listing ≥ HK$15 billion	7	6.57	100% (7 out of 7)
(Under amended proposal) Market capitalisation at the time of listing ≥ HK$10 billion	9	6.33	100% (9 out of 9)

Revenue growth

95. Our analysis shows that the average revenue CAGR since listing[56] and the proportion of Pre-Commercial Companies in the Sample Cohort with revenue CAGR since listing of at

[53] Our analysis covers the top ten shareholders, as of 31 December 2022, of Pre-Commercial Companies in the Sample Cohort. For the purpose of our analysis:

(a) "institutional shareholders" mean traditional money managers, pension funds, family offices/trusts, banks/investment banks, insurance companies, foundations/endowments, hedge funds, private equity / venture capital firms and sovereign wealth funds, holding shares in the relevant Pre-Commercial Company. Source: S&P Capital IQ (retrieved on 18 January 2023); and

(b) "Pre-Commercial Companies" mean Specialist Technology Issuers that had not met the HK$250 million Commercialisation Revenue Threshold at the time of listing. We have identified 126 Pre-Commercial Companies within the Sample Cohort.

[54] The findings were the same for Specialist Technology Issuers in the Ineligible Sample Cohort.

[55] See footnote 53 for the methodology.

[56] See footnote 45 above.

least 30%[57] would not be substantially lowered if we reduce the minimum market capitalisation threshold for Pre-Commercial Companies[58], as illustrated in Table 6 below[59].

Table 6: Effect of adjusting the minimum market capitalisation threshold for Pre-Commercial Companies on the revenue CAGR since listing of Pre-Commercial Companies in the Sample Cohort[60]

	Number of issuers	Average revenue CAGR since listing (%)	Proportion of issuers with revenue CAGR of ⩾ 30% since listing (%)
(Under original proposal) Market capitalisation at the time of listing ≥ HK$15 billion	7	79%[61]	50% (4 out of 8)
(Under amended proposal) Market capitalisation at the time of listing ≥ HK$10 billion	9	91%[62]	67% (6 out of 9)

III. Revenue Threshold

Proposal

96. The Exchange proposed that a Commercial Company must have revenue of at least HK$250 million for the most recent audited financial year:[63]

	Commercial Companies	*Pre-Commercial Companies*
Minimum revenue requirement for the most recent audited financial year	HK$250 million	No requirement

[57] See footnote 46 above.

[58] Our analysis covers the revenue CAGR (as defined in footnote 45) of Pre-Commercial Companies in the Sample Cohort. See also footnote 53 for the definition of Pre-Commercial Companies for the purpose of our analysis. Source: S&P Capital IQ (retrieved on 18 January 2023).

[59] The findings were the same for Specialist Technology Issuers in the Ineligible Sample Cohort.

[60] See footnote 58 for the methodology.

[61] After excluding two extreme data points with revenue CAGR of over 8000%. These two companies experienced spikes in revenue in percentage terms because of the small absolute amount of revenue (below HK$50 million) for the financial year prior to listing.

[62] See footnote 61 above.

[63] Paragraph 130 of the Consultation Paper.

Responses

97. 66% of respondents who commented (46 respondents) supported this proposal[64], while 34% of those who commented (24 respondents) did not support it.

Comments

98. A majority of respondents agreed that the proposed revenue requirement represents meaningful commercialisation of a Commercial Company. Several respondents supported the requirement on the basis that it is consistent with Listing Criterion 2 of the STAR Market[65].

99. No respondent suggested a higher Commercialisation Revenue Threshold.

100. Some respondents suggested lowering the proposed Commercialisation Revenue Threshold for the following reasons:

(a) a lower revenue threshold (suggestions ranging from HK$100 million to HK$200 million) would be sufficient to demonstrate that an applicant has meaningfully commercialised its products / services;

(b) the non-profit-based and non-cash flow-based financial eligibility tests of NASDAQ, NYSE, SGX and LSE do not put in place any revenue threshold[66]. The proposed Commercialisation Revenue Threshold, in combination with the originally proposed market capitalisation threshold of HK$8 billion for Commercial Companies, may dissuade potential candidates from applying to list in Hong Kong; and

(c) the amount of revenue indicating a meaningful commercialisation threshold varies by industry and so a one-size-fits-all threshold is not appropriate.

101. Some respondents suggested that the Exchange retain the discretion to grant exemptions, on a case-by-case basis, to applicants that marginally miss the required revenue level to list as a Commercial Company if they could demonstrate unique features.

102. Two respondents suggested relaxing the requirement by applying it to an applicant's entire track record period rather than only its most recent audited financial year.

[64] Question 10 of the Consultation Paper.

[65] Under Listing Criterion 2 of the STAR Market, a new applicant must have: (a) an expected market capitalisation of at least RMB1.5 billion (HK$1.7 billion) at the time of listing; (b) revenue of RMB200 million (HK$232 million) for the most recent year; and (c) R&D investment constituting at least 15% of total revenue for the last three years. For details, see Article 2.1.2 of the STAR Market Rules.

[66] See footnote 40 above.

Exchange conclusion

103. As stated in the Consultation Paper, the purpose of the Commercialisation Revenue Threshold is to identify the companies that have genuinely commercialised their Specialist Technology Products and ensure that Pre-Commercial Companies are subject to more stringent requirements.

104. The Exchange acknowledges that companies in different sectors may demonstrate their commercialisation status through different performance metrics. However, introducing alternative tests for each industry would significantly increase the complexity, and reduce the clarity, of our requirements. The application of a single test for all industries is also consistent with the Exchange's existing profit and revenue based financial eligibility tests[67].

105. The Exchange may waive, modify or not require compliance with the Rules in individual cases (to suit the circumstances of a particular case), as a variety of circumstances may exist which require it to make ad hoc decisions.[68] The Exchange will retain this power with regards to the Specialist Technology Regime. However, as the Commercialisation Revenue Threshold is designed to be a "bright line" test, the Exchange would not wish to undermine the clarity and certainty this provides for listing applicants by waiving the requirement in marginal cases.

106. In view of the majority support from respondents, we will adopt the proposal.

IV. Requirement on the Source of Revenue

Proposal

107. The Exchange proposed that only revenue arising from a company's Specialist Technology business segment(s) (excluding any inter-segmental revenue from other business segments of the applicant), and not items of revenue and gains that arise incidentally or from other businesses (such as rental income from property investment), would be recognised for the purpose of the proposed Commercialisation Revenue Threshold.[69] We proposed to use the same method to recognise revenue as the existing Alternative Tests.[70]

Responses

108. 94% of respondents who commented (60 respondents) supported this proposal[71], while 6% of those who commented (four respondents) did not support it.

[67] Rule 8.05.

[68] Rule 2.04.

[69] Paragraph 132 of the Consultation Paper.

[70] Paragraph 133 of the Consultation Paper.

[71] Question 11 of the Consultation Paper.

Comments

109. Most respondents considered it reasonable to only consider revenue arising from the Specialist Technology business segment(s) for the purpose of the Commercialisation Revenue Threshold.

110. Opposing respondents disagreed with the requirement for the following reasons:

(a) inter-segmental revenue should be taken into account because: (i) revenue from various business segments may not be clearly delineated because of the nature of a Specialist Technology Product; and (ii) no other major stock exchange (including the STAR Market) has a similar requirement; and

(b) items of revenue and gains that arise incidentally or from other businesses should also be included if the majority of such products and/or services are sold to third parties on fair commercial terms.

111. Two respondents sought clarification on whether revenue from multiple Specialist Technology business segments may be considered in aggregate.

Exchange conclusion

112. We believe that our proposals help minimise the risk of circumvention of the Commercialisation Revenue Threshold, a safeguard intended to distinguish Commercial Companies from Pre-Commercial Companies, by applicants with multiple business segments. The exclusion of inter-segmental revenue (e.g. sales by a Specialist Technology business segment to a non-Specialist Technology business segment of the group) for the purpose of the source of revenue requirement is consistent with this intention. We also note that such inter-segmental sales would be eliminated for the purpose of consolidated financial statements.

113. The exclusion of revenue and gains that arise incidentally is consistent with the existing requirement under the Alternative Tests, which provides that only revenue arising from the principal activities of the new applicant and not items of revenue and gains that arise incidentally will be recognised[72].

114. Revenue from multiple Specialist Technology business segments of an applicant can be aggregated for the purpose of determining whether the company meets the Commercialisation Revenue Threshold.

115. In view of the majority support from respondents, we will adopt the proposal.

[72] See Rule 8.05(4).

V. Revenue Growth

Proposals

116. The Exchange proposed that a Commercial Company must demonstrate year-on-year growth of revenue derived from the sales of Specialist Technology Product(s) throughout its track record period, with allowance for temporary declines in revenue due to economic, market or industry-wide conditions.[73]

117. We also proposed that the reasons for, and remedial steps taken (or to be taken) to address, any downward trend in the Commercial Company's annual revenue must be explained to the Exchange's satisfaction and disclosed in the Listing Document.[74]

Responses

118. 83% of respondents who commented (55 respondents) supported the proposal referred to in paragraph 116[75], while 17% of those who commented (11 respondents) did not support it.

119. 89% of respondents who commented (58 respondents) supported the proposal referred to in paragraph 117[76], while 11% of those who commented (seven respondents) did not support it.

Comments

120. Many respondents agreed that the proposed requirement would help demonstrate a new applicant's growth potential as well as the commercial viability of its product(s) and/or service(s).

121. However, some respondents noted that declines in revenue may be the result of factors other than one-off macroeconomic conditions, such as a company's product life cycles and marketing strategies. They also commented that a Specialist Technology Company that is the pioneer in its own industry may have difficulty attributing declines in revenue to industry-wide conditions due to the absence of industry peers.

122. Some respondents had reservations about the revenue growth requirement because companies in some acceptable sectors may not record year-on-year revenue growth throughout the track record period (e.g. aerospace technology developers may record "lumpy" revenue at a certain time point during the three-year track record period). However, such past performance does not imply that these companies would have low growth potential upon listing.

[73] Paragraph 135 of the Consultation Paper.

[74] Paragraph 135 of the Consultation Paper.

[75] Question 12(a) of the Consultation Paper.

[76] Question 12(b) of the Consultation Paper.

Exchange conclusion

123. Having considered respondents' feedback, we acknowledge that factors other than economic, market and industry-wide conditions may result in temporary declines in the revenue growth of a Specialist Technology Company over its track record period. Consequently, we will amend our Guidance Letter to state that the Exchange will, on a case-by-case basis, also accept other factors as the reason for a downward trend in revenue growth. This is as long as these factors are temporary and outside of the applicant's control.

124. In view of the above and taking into account feedback from the respondents, we will adopt the proposals with the amendment described in paragraph 123 (see paragraph 19(c) of the Guidance Letter).

VI. Minimum R&D Period

Proposal

125. The Exchange proposed that a Specialist Technology Company listing applicant must have been engaged in the R&D of its Specialist Technology Product(s) for a minimum of three financial years prior to listing.[77]

Responses

126. 77% of respondents who commented (51 respondents) supported the proposal on the minimum period of engagement in R&D[78], while 23% of those who commented (15 respondents) did not support it.

Comments

127. A majority of respondents found the minimum R&D engagement period of three financial years to be a reasonable length to demonstrate the sustainable growth of a Specialist Technology Company.

128. A number of respondents asked the Exchange to shorten the minimum R&D engagement period for Specialist Technology Companies to two financial years. They noted the shorter track record period of two financial years for Biotech Companies, and the shorter minimum R&D requirement for Biotech Companies of 12 months prior to listing[79]. In particular, these respondents argued that a Commercial Company with a proven record of commercialisation should not be subject to an R&D engagement period requirement longer than that required for a Biotech Company.

[77] Paragraph 138 of the Consultation Paper.

[78] Question 13 of the Consultation Paper.

[79] Rule 18A.03(3) and paragraph 3.2(c) of Guidance Letter HKEX-GL92-18 (Guidance on Suitability for Listing of Biotech Companies).

129. A few respondents emphasised the importance of flexibility and asked the Exchange to consider accepting a shorter R&D engagement period of two years in exceptional circumstances.

130. Two respondents further noted that a listing applicant may have completed R&D before the start of the track record period and may seek to apply for listing to finance its production and commercialisation. It asked the Exchange to clarify whether exemptions may be granted in such circumstances.

Exchange conclusion

131. The minimum R&D engagement period of 12 months required for Biotech Companies matches the circumstances of these companies, as other safeguards influence their stage of development (e.g. they are required to have completed Phase I clinical trials or at least one clinical trial conducted on human subjects to be eligible for listing).

132. The Exchange's proposals are designed both for Commercial Company listing applicants and for Pre-Commercial Company listing applicants that are at a relatively late stage of development. Therefore, the Exchange would expect them to have been engaged in R&D for the entirety of their minimum pre-IPO track record period of three financial years.

133. A majority of stakeholders we had preliminary discussions with for the purpose of our Consultation Paper considered R&D to be an essential component of a Specialist Technology Company. Some stated that a Specialist Technology Company should always be engaged in R&D. We concur with this view and, consequently, we would also expect a Commercial Company to have been engaged in R&D throughout its track record period. It should be noted that one of the principles for considering whether an applicant falling outside the list of Specialist Technology Industries and acceptable sectors is suitable for applying for listing under the Specialist Technology Regime (see paragraph 32) is that R&D significantly contributes to the expected value and constitutes a major activity and expense of the applicant.

134. As proposed in the Consultation Paper[80], the Exchange may accept a shorter trading record of at least two financial years in exceptional circumstances. If the Exchange does so, the minimum research and development period required will also be shortened to the same period.

135. In view of the above and taking into account feedback from the respondents, we will adopt the proposal with the amendment referred to in paragraph 134 (see Note 2 to Rule 18C.04).

[80] See paragraph 147 of the Consultation Paper.

VII. Minimum R&D Expenditure

Proposals

136. The Exchange proposed to impose the following requirements on the amount of a Specialist Technology Company's investment on the R&D of its Specialist Technology Product(s):[81]

	Commercial Companies	*Pre-Commercial Companies*
Minimum total R&D investment (as a percentage of total operating expenditure) for each of the three financial years prior to listing	15%	50%

137. We further proposed that, for the purpose of determining the amount of qualifying R&D investment and the total operating expenditure under the proposed expenditure ratio test in paragraph 136:[82]

(a) the amount of R&D investment for a period includes costs that are directly attributable to the Specialist Technology Company's R&D activities during the period, including development costs for the period that have been capitalised as intangible assets for accounting purposes, but excluding general, administrative or other costs that are not clearly related to R&D activities;

(b) the Exchange expects the amount of R&D investment to primarily comprise the following costs:

(i) the costs of personnel engaged in R&D activities;

(ii) the costs of R&D conducted by others on the company's behalf (including consulting or testing fees);

(iii) the depreciation, service fees or other directly attributable costs of equipment or facilities used in R&D activities (including data centre operating costs, cloud-based service fees, rentals, utilities and maintenance costs);

(iv) the amortisation of intangibles used in R&D activities; and

(v) the costs of materials consumed in R&D activities.

If any other type of costs is included as qualifying R&D costs, the basis on which such costs are directly attributable to the company's R&D activities must be clearly explained;

[81] Paragraph 138 of the Consultation Paper.

[82] Paragraph 141 of the Consultation Paper.

(c) the amount of R&D investment should exclude the initial recognition of any fixed assets relating to the company's R&D activities (e.g. capital expenditures for acquiring an R&D centre); and

(d) the total operating expenditure for a period is the sum of the total expenses of the company as reflected in the financial statements of the company during the period, excluding any expense of a financial nature, and including any such costs that have not been recognised as expenses during the period but qualify as R&D investment as described in paragraph 137(b) above.

Responses

138. 71% of respondents who commented (48 respondents) supported the proposed requirement on the minimum amount of R&D investment for a Commercial Company[83], while 29% of those who commented (20 respondents) did not support it.

139. 48% of respondents who commented (31 respondents) supported the proposed requirement on the minimum amount of R&D investment for a Pre-Commercial Company[84], while 52% of those who commented (34 respondents) did not support it.

140. 75% of respondents who commented (52 respondents) supported the proposed method for determining the amount of qualifying R&D investment and the total operating expenditure referred to in paragraph 137 above[85], while 25% of those who commented (17 respondents) did not support it.

Comments

General regulatory approach

141. Respondents generally considered it reasonable to use a bright line expenditure ratio test to assess the level of investment by a listing applicant in the R&D of its Specialist Technology Product(s).

142. However, some respondents believed that the determination of a quantitative threshold for the expenditure ratio test was arbitrary and commented that the amount of R&D expenditure may vary across companies in different Specialist Technology Industries. They stated that listing applicants with businesses in capital intensive industries (e.g. advanced hardware) generally have a higher R&D expenditure ratio than others. Such respondents suggested applying a qualitative assessment of an applicant's R&D capability instead.

[83] Question 14(a) of the Consultation Paper.

[84] Question 14(b) of the Consultation Paper.

[85] Question 15 of the Consultation Paper.

143. The following alternatives to an expenditure ratio test were suggested:

(a) putting in place a quantitative rather than percentage threshold on the absolute amount of R&D expenditure;

(b) setting tiered percentage thresholds tailored for different sectors; or

(c) providing qualitative guidance on the expected level of R&D engagement rather than imposing a bright line test.

Period of application of the expenditure ratio test

144. Some respondents were concerned that the proposed application of the expenditure ratio test to each of the three financial years prior to listing was too stringent. They emphasised the importance of building flexibility into the Rules to cater for fluctuations during the track record period. They thought this was also necessary to cater for listing applicants that may have completed the bulk of R&D during the first one to two years of their track record period, and have subsequently moved towards the commercialisation life cycle phase during which a surge in sales and marketing expenses may dilute the R&D expenditure ratio.

145. Accordingly, these respondents suggested that the R&D expenditure ratio test be amended such that either of the following would apply:

(a) a minimum average percentage requirement over the three financial years prior to listing; or

(b) a minimum requirement on the aggregate R&D expenditure over the three financial years prior to listing.

Quantitative threshold

146. A majority of respondents agreed with the proposed 15% threshold for Commercial Companies.

147. However, by a small margin, the proposed 50% threshold for Pre-Commercial Companies did not receive majority support (see paragraph 139). Most respondents thought that such threshold was too high and would exclude too many applicants.

148. They generally took the view that an R&D expenditure ratio of 30% to 40% would be a more reasonable threshold for Pre-Commercial Companies.

Components of the R&D expenditure ratio

149. Most respondents agreed with the proposed method for determining the amount of qualifying R&D investment and the total operating expenditure of a Specialist Technology Company.

150. Some respondents commented as follows:

(a) **Fixed assets:** the initial recognition of any fixed assets relating to a company's R&D activities should not be excluded from the amount of qualifying R&D investment. This is because the costs of R&D essential facilities or equipment may represent a considerable portion of the company's R&D investment, and the exclusion of such costs would substantially understate the company's actual R&D investment;

(b) **Financing costs:** the financing costs on borrowings designated for R&D purposes should not be excluded from the total operating expenditure;

(c) **Further guidance required on the calculation:**

(i) if the capitalisation and amortisation of the same R&D expenditure happened within the three-year trading record period, counting the subsequent amortisation as qualifying R&D investment would amount to double-counting. A respondent suggested the Exchange to clarify its requirements, in this regard, with illustrative examples to explain the calculation of the expenditure ratio test for both Commercial Companies (e.g. treatment of the cost of sales) and Pre-Commercial Companies (e.g. scenarios involving the capitalisation of R&D investment during the trading record period); and

(ii) there is no clear definition of operating expenditure under the Listing Rules or accounting standards. To avoid confusion in the market, the Exchange should provide further guidance on the definition or scope of operating expenditure;

(d) **Share-based payment:** it could be common for R&D experts or scientists to receive shares or an equity interest in the listing applicant as part of their remuneration packages, or for individuals with employee / owner dual capacity involved in R&D activities to be issued with shares or convertible instruments of the listing applicant at a discounted amount. This might result in material amounts of share-based payment expenses recognised in the statement of profit or loss. This raised the question of whether such expenses would qualify as "R&D Investment" and/or be included in the "operating expenditure" under the expenditure ratio test; and

(e) **Cost of sales:** two respondents sought clarification on whether the cost of sales would be included for the purpose of determining the total operating expenditure.

Exchange conclusion

General regulatory approach

151. A bright line expenditure ratio test provides an objective metric for evaluating a company's R&D and provides clarity and certainty to listing applicants. Although we acknowledge that levels of R&D expenditure may vary depending on a company's stage of development and industry, setting qualitative guidance on the expected level of R&D engagement or setting tiered thresholds tailored to the particular industry of a listing applicant would increase the complexity and reduce the clarity of our requirements. Therefore, we are of the view that

the same expenditure ratio test should be applied to all companies across different industries. This is also consistent with our existing Main Board Eligibility Tests.

152. We have decided to use the term "R&D expenditure" (instead of "R&D investment" as set out in the Consultation Paper) to describe the amount spent on R&D which forms the numerator of the expenditure ratio, for consistency with the denominator of that ratio (i.e. total operating expenditure).

Period of application of the expenditure ratio test

153. Having considered respondents' feedback, the Exchange acknowledges the need for flexibility to cater for fluctuations in the overall expenditure and the ratio attributable to R&D.

154. Accordingly, the Exchange has modified the proposal (see Rule 18C.04(3)) to instead require a company to meet the applicable percentage threshold:

(a) on a yearly basis for at least two of the three financial years prior to listing; and

(b) on an aggregate basis over all three financial years prior to listing.

155. The additional requirement on the overall ratio (as referred to in paragraph 154(b)) is intended to reduce the risk of manipulation by way of allocating expenses to particular financial years to achieve a higher ratio for that year.

156. If the Exchange accepts a shorter trading record period in exceptional circumstances (see paragraph 134), the applicant must meet the R&D expenditure ratio on a yearly basis for each of the most recent two financial years prior to its listing.

Quantitative threshold

157. Regarding Pre-Commercial Companies, it was the Exchange's intention to require a Pre-Commercial Company to be primarily engaged in R&D and raising funds for R&D to bring its Specialist Technology product(s) and/or service(s) to commercialisation. Therefore we continue to believe it is reasonable to require such companies to demonstrate that their total R&D expenditure represents a substantial portion of their total operating expenditure prior to listing.

158. We acknowledge the possibility that some of these companies may already be in an early commercialisation phase, in which case they may incur more operating expenditure relative to their R&D expenditure towards the end of their track record periods. Accordingly, the Exchange has set an alternative R&D expenditure ratio threshold of 30% for Pre-Commercial Companies that have generated revenue of at least HK$150 million but less than HK$250 million for the most recent audited financial year. Pre-Commercial Companies with revenue of less than HK$150 million for the most recent audited financial year will continue to be subject to the 50% threshold.

159. The R&D expenditure ratio threshold for Commercial Companies will remain unchanged in view of the majority support from the respondents.

Components of the R&D expenditure ratio

160. With respect to the proposed method for determining the amount of qualifying R&D expenditure and the total operating expenditure:

(a) **Fixed assets:**

(i) we would expect the depreciation of relevant fixed assets to be included in the amount of R&D expenditure (see paragraph 137(b)(iii) above) as depreciation records the deployment of the economic value (over time) of the underlying assets, and so would be more relevant to the entity's R&D expenditure for the relevant period; and

(ii) in contrast, capital expenditure for acquiring fixed assets (such as the real estate for R&D facilities) is excluded from both the amount of qualifying R&D expenditure and the total operating expenditure for the purpose of determining the R&D expenditure ratio, as, unlike the related depreciation, such capital expenditure is not normally regarded as operating in nature. In addition, inclusion of such capital expenditure may result in double counting, and could produce anomalous results or be used for the purpose of deliberate circumvention of our R&D expenditure ratio requirement;

(b) **Financing costs:** expenses of a finance nature are expressly excluded from the calculation of total operating expenditure as how a company finances its R&D activities (whether by way of equity or debt or working capital) does not impact a company's R&D effort. We have also clarified in the Guidance Letter (see paragraph 23(c) of the Guidance Letter) that such expenses should also be excluded from the calculation of R&D expenditure, to ensure consistency in the components of the numerator and the denominator of the R&D expenditure ratio;

(c) **Share-based payments:** as share-based incentives are part of the relevant personnel's remuneration, related payments should be included in the calculation of R&D expenditure and total operating expenditure; and

(d) **Cost of sales:** we have also clarified in the Guidance Letter (see paragraph 24 of the Guidance Letter) that the cost of sales should be excluded from the calculation of total operating expenditure (i.e. the denominator of the R&D expenditure ratio) for the following reasons:

(i) it would ensure consistency in the method of calculating the R&D expenditure ratio for all Specialist Technology Companies irrespective of their level of revenue (as the cost of sales generally increases with the amount of revenue generated); and

(ii) including the cost of sales in the total operating expenditure may make it more difficult for a company to meet the R&D expenditure ratio requirement as its revenue increases. Our proposals aim to attract Specialist Technology Companies with high growth potential, and therefore we do not wish to deter Specialist Technology Companies that have a relatively higher level of revenue from applying to list under the Specialist Technology Regime.

161. We have provided some illustrative examples of the calculation of the R&D expenditure ratio in the Guidance Letter (see the Appendix to the Guidance Letter).

162. In view of the above and taking into account feedback from the respondents, we will adopt the proposals with the amendments referred to in paragraphs 152, 154, 156, 158, 160 and 161 (see Rule 18C.04(2), Rule 18C.04(3), Notes to Rule 18C.04, paragraphs 23 to 24 of the Guidance Letter, and the Appendix to the Guidance Letter).

VIII. Operational Track Record and Management Continuity

Proposal

163. The Exchange proposed to require a Specialist Technology listing applicant to have been in operation in its current line of business for at least three financial years, prior to listing, under substantially the same management.[86]

164. As with other issuers seeking to list under our existing Main Board Eligibility Tests, the Exchange proposed to accept a shorter trading record of at least two financial years in exceptional circumstances.[87]

Responses

165. 82% of respondents who commented (53 respondents) supported this proposal[88], while 18% of those who commented (12 respondents) did not support it.

Comments

166. Most respondents agreed that there should be a minimum operational track record and management continuity requirement for Specialist Technology Companies.

167. However, some respondents suggested shortening the minimum trading record period to two financial years to align with: (a) the operational track record requirement for Biotech Companies; and (b) the period for which the financial statements of "emerging growth companies" are to be provided prior to listing in the US.

[86] Paragraph 145 of the Consultation Paper.

[87] Paragraph 147 of the Consultation Paper.

[88] Question 16 of the Consultation Paper.

Exchange conclusion

168. As mentioned elsewhere in this paper, we expect Commercial Companies and relatively late stage Pre-Commercial Companies to list under the Specialist Technology Regime. We therefore do not see a practical difficulty in requiring these companies to have a track record of operation of at least three financial years. We note that almost all Specialist Technology Issuers in the Sample Cohort had an operational track record of at least three financial years at the time of listing.

169. We stated in our Consultation Paper that investors and market practitioners may have more difficulty in assessing a Specialist Technology Company's technical capabilities and commercial viability, in the absence of reliable external milestones on the development progress of their products provided by a Competent Authority regime.[89] Therefore we believe it is reasonable to require Specialist Technology Companies to have a longer track record than that required for Biotech Companies to help mitigate this risk, and provide the market with additional information on their history of development.

170. We may accept a shorter trading record of at least two financial years, on a case-by-case basis in exceptional circumstances, by applying the same approach as the existing exemption.[90] This means that we may grant the exemption if the Exchange is satisfied that the listing of the issuer is desirable, in the interests of the issuer and investors, and that investors have the necessary information available to arrive at an informed judgement concerning the issuer and the securities for which listing is sought.[91] Where the accountants' report covers only two financial years, the issuer should also apply for a waiver or exemption from strict compliance with the relevant requirements under the Listing Rules or the Third Schedule of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) (as the case may be).

171. In view of the majority support from respondents, we will adopt the proposal.

IX. Ownership Continuity

Proposal

172. The Exchange proposed to require that there must be ownership continuity and control for a Specialist Technology Company listing applicant in the 12 months prior to the date of the listing application.[92]

[89] See paragraphs 79 to 82 of the Consultation Paper.

[90] Rule 8.05B(3).

[91] Rule 8.05B(3).

[92] Paragraph 148 of the Consultation Paper.

Responses

173. 97% of respondents who commented (61 respondents) supported this proposal[93], while 3% of those who commented (two respondents) did not support it.

Comments

174. Most respondents agreed that the ownership continuity and control requirement would help demonstrate sustainability in a listing applicant's strategic direction.

175. A few respondents objected to the proposal for the following reasons:

(a) some Specialist Technology Companies may have no controlling shareholder. This is particularly the case for Mainland China-based companies, which normally have a scattered ownership structure; and

(b) there could be a change in ownership continuity as a result of dilution of shareholding. For example, multiple pre-IPO fundraising rounds may dilute the shareholding of founder(s) and early investors. Such a dilution may be exacerbated by the Exchange's third party investment requirements (see Section B(XI)below).

Exchange conclusion

176. We note that the comments made by respondents are relevant to many different types of companies and not unique to Specialist Technology Companies. This being the case, the Exchange will apply its existing Rules and guidance when assessing a Specialist Technology Company's ownership continuity. Accordingly:

(a) where a Specialist Technology Company does not have a controlling shareholder, the ownership continuity requirement will be assessed by reference to the single largest shareholder[94];

(b) a change in controlling shareholder(s) will not always render the listing applicant ineligible for listing. In the case of a change in ownership continuity as a result of a dilution in shareholding, a listing applicant can rebut the presumption that there has been a material change in influence on management by demonstrating that there was no such change[95]; and

[93] Question 17 of the Consultation Paper.

[94] Paragraph 4.1(ii) of Guidance Letter HKEX-GL89-16 (Guidance on issues related to "controlling shareholder" and related Listing Rules implications).

[95] Paragraph 2.3 of Guidance Letter HKEX-GL89-16 (Guidance on issues related to "controlling shareholder" and related Listing Rules implications).

(c) ownership continuity and control should be demonstrated up until the time immediately before the offering and/or placing becomes unconditional[96].

177. In view of the majority support from respondents, we will adopt the proposal with clarification that the Exchange will apply the same guidance as it has published on the ownership continuity and control requirement as set out in Rules 8.05(1)(c), 8.05(2)(c) and 8.05(3)(c) for the purpose of this ownership continuity requirement, and to clarify that the ownership continuity requirement applies to the period described in paragraph 176(c) (see paragraph 19(b) of the Guidance Letter).

X. Definition of "Sophisticated Independent Investor"

Proposals

178. The Exchange proposed to require an applicant applying to list under the proposed regime to have received meaningful investment from Sophisticated Independent Investors.[97]

Independence requirement

179. The Exchange proposed that a Sophisticated Independent Investor must not be a core connected person of the listing applicant for independence purpose. A sophisticated investor who is a substantial shareholder of the applicant can be considered a Sophisticated Independent Investor if it is a core connected person only because of the size of its shareholding in the applicant. However, a person who is a controlling shareholder (or within the group of persons who are considered as controlling shareholders) of the applicant will not be considered as having met this independence requirement.[98]

Definition of a "sophisticated investor"

180. In assessing whether an investor is a 'sophisticated investor', we proposed that the Exchange consider this on a case-by-case basis by reference to the investor's relevant investment experience, knowledge and expertise in the relevant field which could be demonstrated by its net assets, AUM, size of its investment portfolio or track record of investments, where applicable.[99]

181. For illustrative purpose, we said that the Exchange would generally consider the following as examples of the types of "sophisticated investors":

(a) an asset management firm with AUM of, or a fund with a fund size of, at least HK$15 billion;

[96] Paragraph 4.1(i) of Guidance Letter HKEX-GL89-16 (Guidance on issues related to "controlling shareholder" and related Listing Rules implications).

[97] Paragraph 167 of the Consultation Paper.

[98] Paragraphs 155 to 157 of the Consultation Paper.

[99] Paragraph 159 of the Consultation Paper.

(b) a company having a diverse investment portfolio size of at least HK$15 billion;

(c) an investor of any of the types above with AUM, fund size or investment portfolio size (as applicable) of at least HK$5 billion where that value is derived primarily from Specialist Technology investments; and

(d) a key participant in the relevant upstream or downstream industry with substantial market share and size, as supported by appropriate independent market or operational data.[100]

182. The Exchange also proposed to define "investment portfolio" for the purpose of paragraphs 181(b) and (c) as the aggregate value of investments in investee companies as determined under the prevailing accounting standards. The Exchange would not consider consolidated subsidiaries to be investee companies.[101]

Responses

183. 91% of respondents who commented (69 respondents) supported that an applicant applying to list under the proposed regime must have received meaningful investment from Sophisticated Independent Investors[102], while 9% of those who commented (seven respondents) did not support it.

184. Of the respondents who supported the proposal that an applicant applying to list under the proposed regime must have received meaningful investment from Sophisticated Independent Investors:

(a) 89% of respondents who commented (50 respondents) supported the proposed independence requirements for a Sophisticated Independent Investor[103], while 11% of those who commented (six respondents) did not support them.

(b) 57% of respondents who commented (35 respondents) supported the proposed definition of a sophisticated investor (including the definition of investment portfolio)[104], while 43% of those who commented (26 respondents) did not support it.

Comments

General approach

185. Most of the respondents agreed with our reasons for a requirement on meaningful investment from Sophisticated Independent Investors.

[100] Paragraph 160 of the Consultation Paper.

[101] Paragraph 161 of the Consultation Paper.

[102] Question 18 of the Consultation Paper.

[103] Question 19 of the Consultation Paper.

[104] Question 20 of the Consultation Paper.

186. However, some respondents disagreed with this view, for the following reasons:

(a) the investments made by Sophisticated Independent Investors are mostly driven by a desire for a high investment return, with protective terms to guard against potential losses (through, for example, redemption clauses or valuation adjustment terms). This being the case, it should not be used as a proxy for listing suitability. These respondents thought that putting in place additional corporate governance requirements (e.g. a risk committee composed entirely of INEDs) would be a more effective approach to safeguarding the interests of investors (including retail investors);

(b) many Specialist Technology Companies grow naturally by product diversification and market expansion, without having received any investment from major investment funds. Such companies would be barred from listing under the Specialist Technology Regime and may choose to list on other major stock exchanges in the US and Mainland China instead, as they do not impose a similar requirement on third party investment; and

(c) one respondent (representing multiple clients) noted that, although the Exchange also imposes a sophisticated investor requirement on Biotech Companies, the post-listing performance of Biotech Companies did not appear to support the purported benefits of third party investment requirement, as Biotech Company shares had performed poorly since listing.

Exemptions

187. Some respondents suggested providing exemptions from the third-party investment requirement in the following circumstances:

(a) **For Commercial Companies that have demonstrated a proven track record of substantial revenue and demand for their Specialist Technology Products:** respondents believed this would provide sufficient support for the company's valuation and commercial viability without the need for "meaningful" sophisticated investor participation.

(b) **For spin-offs:** it was noted that the Biotech Company regime provides an exemption from its third party investment requirement if an applicant is able to demonstrate a reasonable degree of market acceptance for its R&D and products.[105] One respondent believed that, in principle, a similar exemption should be applied to Specialist Technology Companies; and

(c) **For Specialist Technology Companies which have been listed on overseas exchanges and are applying for listing under the Specialist Technology Regime:** for homecoming issuers which have been listed on overseas exchanges, investors who would otherwise qualify as Sophisticated Independent Investors may have

[105] Paragraph 3.2(g) of Guidance Letter HKEX-GL92-18 (Guidance on Suitability for Listing of Biotech Companies).

already exited / disposed of their positions to a threshold below the "meaningful investment" benchmarks at the time of the listing in Hong Kong.

Independence requirement

188. A majority of the respondents supported the independence requirement for Sophisticated Independent Investors as they thought this was key to supporting a listing applicant's valuation and business potential.

189. A few respondents sought clarification on whether the following investors would be considered as having met the independence requirement:

(a) **Investor with board representation:** a sophisticated investor who has board representation as a director or as an observer;

(b) **Controlling shareholder:**

(i) a controlling shareholder at the time of the listing application, who subsequently holds less than 30% of the new applicant's issued share capital and is therefore no longer a controlling shareholder at the time of listing; and

(ii) a sophisticated investor who has signed an acting-in-concert agreement with the founder(s) to support the management of a Specialist Technology Company, and so would be subject to the same level of economic risk as other investors, and is only holding a minority shareholding within the group of controlling shareholders, should be considered independent.

190. A few respondents suggested the independence of a Sophisticated Independent Investor be determined at the time of its investment, instead of at the time of the listing application or listing. They believed this would be consistent with the intent of the proposal to provide objective validation on the basis that the investor has conducted independent extensive due diligence checks at the time of the investment. The sophisticated investor's subsequent relationship with the Company (becoming a controlling shareholder or otherwise as a result of its investment(s)) should be disregarded.

Definition of a "sophisticated investor"

Size thresholds

191. Most respondents agreed with the proposed size thresholds as they could meaningfully reflect an investor's experience and understanding of the relevant Specialist Technology Industry.

192. A number of respondents considered the proposed quantitative thresholds (HK$15 billion and HK$5 billion, as the case may be) to qualify as a "sophisticated investor" too high. They commented that:

(a) the AUM and fund size threshold of HK$15 billion is excessively high, particularly taking into account the shrinking value of investments held by asset or fund managers in adverse market conditions. Also, respondents noted that these thresholds would be significantly higher than those required under the Biotech Company regime (HK$1 billion) and the SPAC regime (HK$8 billion);

(b) the proposed thresholds would exclude specialist funds and family offices, which have increasingly played active roles in investing in technology companies, notwithstanding that they are also equipped with professional knowledge and experience;

(c) the proposed thresholds give large asset management funds or corporations an upper hand and more bargaining power in negotiating investment terms to the disadvantage of listing applicants. Respondents thought smaller firms were often able to work better with the founders and/or management of investee companies towards these companies' growth and development; and

(d) there appears to be no correlation between the size or scale of third party investors and their ability to conduct due diligence checks on investee companies. Instead, respondents believed the expertise of third party investors to evaluate Specialist Technology Companies is more important.

193. To broaden the accessibility to Specialist Technology Companies of funding from external investors, respondents who considered the HK$15 billion AUM and fund size threshold too high suggested lower thresholds and/or further expanding or modifying the illustrative examples as follows:

(a) lowering the threshold to HK$8 billion, to be consistent with that required under our SPAC regime, having regard to the general fall in AUM of sophisticated investors under prevailing market conditions;

(b) lowering the threshold to HK$10 billion, which should be indicative of sufficient resources to carry out extensive research and rigorous due diligence checks on listing applicants; or

(c) adding an additional category of investors or investment funds with AUM or an investment portfolio of at least HK$1 billion.

194. A few respondents asked us to provide guidance on the timing at which the proposed size thresholds should be determined (i.e. whether at the time of the listing application or the end of the last financial year prior to the listing application).

Key market participants

195. With regard to the Consultation Paper's illustrative example of key market participants[106], some respondents suggested removing the requirement for a key market participant to have substantial market share. This is because some Specialist Technology Industries (or their respective downstream and upstream industries) are highly fragmented, and a market player with substantial market share may not exist.

196. One respondent thought it unnecessary to require a key market participant to be in the relevant downstream or upstream industry, as it is not uncommon for a Specialist Technology Company to receive investment from a major technology company which is outside of its Specialist Technology Industry / sector.

Meaning of investment portfolios

197. A majority of respondents agreed with the proposed definition of investment portfolio.

198. Two respondents disagreed with the exclusion of consolidated investee companies when calculating the investment portfolio of a corporate investor for the purpose of the illustrative examples of the types of investors that would be considered sophisticated.[107] They were of the view that the exclusion would make the size thresholds more difficult to meet. They thought that it was not meaningful to distinguish between external and consolidated investments as an associate investee company may eventually become a consolidated investee company.

Exchange conclusion

General approach

199. The Exchange will impose the requirement that Specialist Technology Companies must demonstrate meaningful investment from Sophisticated Independent Investors. The proposed requirement helps to ensure applicants have received investment from investors that have the experience and resources to conduct due diligence checks and have taken on sufficiently substantial investment risks. We believe this is particularly necessary for Pre-Commercial Companies in the absence of a Competent Authority regime.

200. We agree with the importance of good corporate governance. However, we do not agree that suitability for listing could be better safeguarded through the imposition of additional INED requirements as suggested by some respondents (see paragraph 186(a) above) as they are not inter-changeable with the third party investor requirement.

[106] See paragraphs 160(d) and 166 of the Consultation Paper.

[107] See paragraphs 181(b) and (c) above.

201. Although Sophisticated Independent Investors would be motivated to maximise the value of their investments in a Specialist Technology Company, their participation demonstrates faith in the company's prospects (particularly those that invested at the early stage of a company's development, at a time when the possibility of realising the investment via an IPO is uncertain). By placing their own capital at risk, these investors provide a valuable source of independent third party support. Also, their interests as investors are closer (although not identical) to the interests of public investors. Additional INED requirements could not provide these benefits.

202. Regarding respondents' comments on the recent performance of Biotech Companies (see paragraph 186(c) above), the phenomenon could be a result of multiple factors, including the wider economic and market conditions. Also, we wish to clarify that the sophisticated investor requirements of the Biotech Company regime and the Specialist Technology Regime are not meant to provide any assurance as to a company's investment performance.

Exemptions

203. At this stage, we do not intend to provide a general exemption from the meaningful third party investment requirement for:

    (a) Commercial Companies that have demonstrated a strong track record of commercial success through sales and revenue. Such companies would instead be able to apply for listing via the existing Main Board Eligibility Tests outside the Specialist Technology Regime; and

    (b) a Specialist Technology Company that is applying for listing by way of a spin-off from a parent company listed on the Exchange. Whilst a similar exemption is provided for Biotech Companies, such spin-offs occur relatively rarely and so the Exchange believes that it is more appropriate to consider possible exemptions as and when such cases arise under its general waiver powers[108].

204. For applicants listed on other stock exchanges applying to list under the Specialist Technology Regime in Hong Kong, we acknowledge the possibility that the shareholding of Sophisticated Independent Investors at the relevant times (e.g. the time of the Chapter 18C listing application) may not strictly comply with the indicative benchmarks set out in the Guidance Letter. In assessing whether such an applicant has received meaningful investment from Sophisticated Independent Investors for the purpose of Rule 18C.05, the Exchange has clarified that it will consider, on a case-by-case basis, the specific circumstances of the applicant, including, without limitation, the shareholding of Sophisticated Independent Investors before and at the time of the applicant's overseas listing and at the time of the Chapter 18C listing application (see paragraphs 44 to 45 of the Guidance Letter).

[108] See Rule 2.04

Independence requirement

Timing for determining independence

205. The Exchange is of the view that the independence of a Sophisticated Independent Investor should be determined as at the date of the signing of the definitive agreement for the relevant investment in an applicant, and up to listing.

206. Accordingly, an investor with a 30% holding or more in the applicant at the time of its listing application would not be considered independent and would be excluded from the definition of a Sophisticated Independent Investor.

Investors with board representation

207. We would not classify a sophisticated investor with board representation as a core connected person (and therefore excluded from the definition of a Sophisticated Independent Investor), unless the investor is a "close associate" of the director.

Controlling shareholders and founders

208. In addition to controlling shareholders, the following persons would not be considered as independent:

(a) founder(s) of a Specialist Technology Company and their respective close associates; and

(b) any persons deemed by the Exchange to be not independent for the purpose of this requirement based on the facts and circumstances of an individual case. For example, a person who has an acting-in-concert agreement or arrangement with the founder(s) or controlling shareholder(s) of a Specialist Technology Company normally will not be considered as independent. This is because we would regard a surrender by an investor of its voting power to a founder or controlling shareholder as inconsistent with the expectation that a Sophisticated Independent Investor would exercise independent judgement and act independently.

Definition of a "Sophisticated Independent Investor"

Size thresholds

209. As set out in the Consultation Paper, the thresholds the Exchange will use for the definition of Sophisticated Independent Investors were indicative benchmarks for illustrative purposes only. As noted by some respondents, the Exchange proposed to take a flexible approach. So, it is possible for investors of a type that is not included in the illustrative examples to satisfy the "Sophisticated Independent Investor" requirement. This could be satisfied on the basis that the applicant can demonstrate, in the particular circumstances of an individual case, that these investors have relevant investment experience, knowledge and expertise. We have clarified our approach in the Guidance Letter (see paragraph 35 of the Guidance Letter).

210. We have also amended the Guidance Letter to clarify that an applicant must disclose: the size (and the basis for determination) of the AUM, the fund or the investment portfolio (as the case may be); and any other information relevant to the Sophisticated Independent Investors in the Listing Document to substantiate that they have the relevant investment experience, knowledge and expertise to be considered sophisticated.

211. Where the actual size of the AUM, fund or investment portfolio and such other relevant information cannot be disclosed with precision for confidentiality reasons, the Exchange will consider accepting alternative disclosure appropriate to the circumstances on a case-by-case basis, taking into account the factors set out in the relevant guidance[109] that the Exchange has published.

212. Such information (as referred to in paragraphs 210 and 211) should be given as of:

    (a) a date which is no more than six months prior to the date of the signing of the definitive agreement for the investors' relevant investment in the applicant to demonstrate that they have achieved the relevant scale at that time, as the rationale of the requirement is to help ensure that these investors have an established scale and resources to carry out extensive research and rigorous due diligence on their investment targets at that time[110]; and

    (b) a date which is no more than six months prior to the date of the listing application, such that potential investors would be aware of any changes to the Sophisticated Independent Investors' scale prior to listing.

Key market participants

213. The Exchange will take into account all relevant facts and circumstances of a relevant market participant with reference to the supporting industry and/or market data in determining whether it is a sophisticated investor. We believe that an investor with a meaningful market position and industry knowledge will help provide credible third party support on the commercial viability of the applicant's Specialist Technology Products.

214. We have amended the wording "substantial market share" as "meaningful market share". This is because an investor's market share may vary according to its individual circumstances, and it would not be necessary for an investor to have a large percentage of market share in all cases. An investor that operates in a very fragmented market may have a relatively small market share that may still be considered "meaningful" when compared with its industry peers.

[109] Paragraphs 28 to 30 of Guidance Letter HKEX-GL98-18 (Guidance on disclosure in listing documents – listing applicants' names; statistics and data quoted; listing document covers; non-disclosure of confidential information; and material changes after trading record period).

[110] See Paragraph 163 of the Consultation Paper.

Meaning of investment portfolios

215. Consolidated subsidiaries are excluded from investee companies for the purpose of the definition of "investment portfolio" as they are controlled by the investors and therefore included in the investors' operating results. Consequently, the inclusion of such investments in the definition would not serve the objective of the test, which is to determine the extent of relevant investment (as opposed to operating) experience, knowledge and expertise in the relevant field.

216. For interests in associates or joint ventures, the relevant carrying amounts would be those determined in accordance with the prevailing accounting standards, irrespective of whether such interests are equity-accounted or measured at fair value through profit or loss. In addition, notwithstanding the references to the values prescribed under the prevailing accounting standards, the Exchange is prepared to consider other measures of investment values that may not be reflected in the investor's financial statements, such as fair values of the investments as supported by independent valuation.

217. In view of the majority support from respondents, we will adopt the proposal with the amendments described in paragraphs 204, 205, 208 to 212, 214 and 216 (see paragraphs 28 to 30, 32, 33, 35 to 36 and 44 to 45 of the Guidance Letter).

XI. Minimum Investment Requirement

Proposals

218. As an indicative benchmark, the Exchange proposed to consider an applicant meeting the following requirements as having received "meaningful investment" as referred to in paragraph 178:[111]

    (a) third party investment from at least two Sophisticated Independent Investors who have invested at least 12 months before the date of the listing application, each holding such amount of shares or securities convertible into shares equivalent to 5% or more of the issued share capital of the listing applicant as at the date of the listing application and throughout the pre-application 12-month period (referred to as "**Pathfinder SIIs**"); and

    (b) the investment from all Sophisticated Independent Investors should result in them holding, in aggregate, such amount of shares or securities convertible into shares equivalent to at least the percentage of the issued share capital of the applicant at the time of listing set out in Table 7.

[111] Paragraph 167 of the Consultation Paper.

Table 7: Proposed Aggregate Investment Benchmark

Expected market capitalisation of the Specialist Technology Company at the time of listing	Minimum total investment from all Sophisticated Independent Investors as a percentage of the issued share capital of the Specialist Technology Company at the time of listing	
	Commercial Companies	*Pre-Commercial Companies*
HK$8 billion or more but less than HK$20 billion (*Commercial Companies*) HK$15 billion or more but less than HK$20 billion (*Pre-Commercial Companies*)	20%	25%
HK$20 billion or more and less than HK$40 billion	15%	20%
HK$40 billion or more	10%	15%

219. We also proposed to count investments by Sophisticated Independent Investors made before listing and any offer shares issued to Sophisticated Independent Investors in the IPO, towards the minimum Aggregate Investment Benchmark.

Responses

220. Of the respondents who supported the proposal referred to in paragraph 178, 42% of respondents who commented (28 respondents) supported the proposed minimum investment requirement referred to in paragraph 218(a)[112], while 58% of those who commented (39 respondents) did not support it.

221. Of the respondents who supported the proposal referred to in paragraph 178, 63% of respondents who commented (36 respondents) supported the proposed minimum investment requirement referred to in paragraph 218(b)[113], while 37% of those who commented (21 respondents) did not support it.

Comments

222. A majority of respondents expressed concerns on the proposal relating to Pathfinder SIIs, as summarised below.

[112] Question 21 of the Consultation Paper.

[113] Question 22 of the Consultation Paper.

Timing of investment by Pathfinder SIIs

223. Some respondents considered the pre-application 12-month period too onerous and/or arbitrary on the following grounds:

(a) it is longer than the six-month period prior to listing as required under the Biotech Company regime;

(b) Specialist Technology Companies have different funding needs and considerations. For example, some of them grow rapidly or are established by wealthy founders, and so may not have previously received significant private equity investment for their development;

(c) the requirement would unnecessarily delay listing applications, and also undermine the Exchange's competitiveness as neither NASDAQ nor the STAR Market sets any requirement or benchmark indicator on third party investments or the length of such investments; and

(d) subsequent funding rounds (within the pre-application 12-month period) should also be taken into account as an indication of the Specialist Technology Companies' product marketability.

224. Accordingly, these respondents suggested a shorter period (such as six months prior to a listing application or 12 months prior to listing). One of the respondents thought the investment holding period should not be made mandatory, and should only be a factor in considering whether the relevant investment is meaningful.

225. Some respondents suggested modifying the timing at which the 5% threshold should be determined from the date of the listing application to the time of the relevant investment, with an additional requirement that the relevant securities must not have been disposed of thereafter.

Number and shareholding percentage of Pathfinder SIIs

226. A number of respondents objected to the requirement for two Pathfinder SIIs to hold shares or convertible securities equivalent to 5% or more of the issued share capital of the listing applicant as at the date of the listing application, citing one or more of the following reasons:

(a) the requirement would be too challenging to achieve, particularly for listing applicants with a high expected market capitalisation;

(b) it was not uncommon for a Specialist Technology Company to undertake several rounds of fundraising activities before an IPO. As a result, the shareholding of a Sophisticated Independent Investor would likely have been diluted over time, even though it had previously acquired a substantial stake in the company at an earlier stage; and

(c) other investor protection measures in place, such as the Aggregate Investment Benchmark for all Sophisticated Independent Investors, together with the minimum allocation to Independent Institutional Investors, should be sufficient to provide validation for listing applicants.

227. In view of the above, the respondents suggested the following alternative proposals:

(a) reducing the number of Pathfinder SIIs meeting the 5% shareholding threshold from two to one;

(b) reducing the 5% shareholding threshold to 3% for both Pathfinder SIIs;

(c) adopting a sliding scale of minimum shareholding for Pathfinder SIIs based on the expected market capitalisation of the listing applicant, given the increasing difficulties in acquiring a substantial stake with a higher market capitalisation;

(d) requiring the investment threshold(s) to be met, in aggregate, by two or more Sophisticated Independent Investors (e.g. 10% shareholding by two Sophisticated Independent Investors) as some companies may have more than one Pathfinder SII, each holding smaller shareholding.[114] Such proposal could provide a stronger validation of the listing applicant as it means due diligence checks from a broader pool of Sophisticated Independent Investors; or

(e) requiring the 5% shareholding threshold to be met with reference to the average of the end-of-month shareholding percentages throughout the pre-application 12-month period, so as to allow Sophisticated Independent Investors who temporarily fail to meet the 5% shareholding threshold due to a dilution of interests to top up subsequently within the pre-application 12-month period.

Aggregate Investment Benchmark

228. A majority of respondents supported this proposal, particularly as offer shares issued to Sophisticated Independent Investors in the IPO could be included for the purpose of meeting the proposed threshold.

229. Some respondents considered the proposed Aggregate Investment Benchmark (as set out in Table 7) to be too high, and are concerned that they would exclude too many applicants, in light of the prevailing volatile market conditions. A few respondents found an assessment of the aggregate investment from all Sophisticated Independent Investors unnecessary and/or thought that the proposed thresholds should all be lowered by at least 5% (for both Commercial Companies and Pre-Commercial Companies).

[114] A number of options were raised by respondents, including the aggregate investment of at least 10% of the listing applicant's issued share capital as at the date of the listing application to be held by two to five Sophisticated Independent Investors; the Exchange having the discretion to allow one Pathfinder SII to meet the 5% shareholding threshold, and another 5% shareholding threshold to be met by a number of highly reputable investors; or imposing less stringent requirements on the second Sophisticated Independent Investor.

230. Some respondents agreed with the Aggregate Investment Benchmark provided that the market capitalisation requirement is lowered.

Timing of Aggregate Investment Benchmark assessment

231. Two respondents commented that the Aggregate Investment Benchmark should only be assessed at the time of the listing application, given the potential unanticipated fluctuation in the expected market capitalisation between the time of the listing application and the time of listing.

Exchange conclusion

Timing of investment by Pathfinder SIIs

232. The requirement that Pathfinder SIIs invested in a Specialist Technology Company at least 12 months before the date of the listing application is to help ensure genuine market support for the company's quality and valuation by investors who have taken on significant investment risk, because their investment was made at a time when the prospects of a forthcoming IPO were relatively uncertain. Investment decisions made by later-stage investors (especially those made in contemplation of a forthcoming IPO) will not provide the same level of third party support.

233. The pre-application 12-month period is more stringent than the six months required for Biotech Companies, because of the lack of a Competent Authority regime for most Specialist Technology Industries.

234. We wish to clarify that the timing of investment for the purpose of the Pathfinder SIIs requirement should be determined by reference to the date of irrevocable settlement, consistent with our existing guidance on pre-IPO investment.[115]

Number and shareholding percentage of Pathfinder SIIs

235. In response to the strong views on this matter from respondents (see paragraphs 226 and 227), we have amended the indicative benchmark on meaningful investment from Pathfinder SIIs to provide more flexibility.

236. The revised benchmark requires investments from a group of two to five Sophisticated Independent Investors (each having invested in the listing applicant at least 12 months before the date of the listing application) that satisfy the following:

(a) such investors, in aggregate, (i) hold such amount of shares or securities convertible into shares equivalent to 10% or more of the issued share capital of the listing applicant as at the date of its listing application and throughout the pre-application 12-month period; or (ii) have otherwise invested an aggregate sum of at least HK$1.5 billion in the shares or securities convertible into shares of the applicant at least 12

[115] Paragraph 2.5 of Guidance Letter HKEX-GL43-12 (Guidance on Pre-IPO investments).

months prior to the date of the listing application (excluding any subsequent divestments made on or before the date of the listing application); and

(b) at least two such investors (i) each hold such amount of shares or securities convertible into shares equivalent to 3% or more of the issued share capital of the listing applicant as at the date of its listing application and throughout the pre-application 12-month period; or (ii) each have otherwise invested at least HK$450 million in the shares or securities convertible into shares of the applicant at least 12 months prior to the date of the listing application (excluding any subsequent divestments made on or before the date of the listing application).

237. The revised benchmarks address concerns that the percentage thresholds may be too onerous for applicants with a very high market capitalisation by providing an absolute amount of investment threshold as an alternative to the originally proposed percentage threshold.

238. To provide flexibility for Pathfinder SIIs with a small percentage shareholding (for example, because their shareholding has been diluted due to multiple rounds of fundraising over time), we will apply a 10% shareholding threshold that must be met by two to five Pathfinder SIIs in aggregate.

239. However, to ensure that there are at least two Pathfinder SIIs holding a substantial stake, we will require that they each hold shares or convertible securities equivalent to at least 3% of the issued share capital of the listing applicant, or have each invested at least HK$450 million, as of the relevant period.

240. We wish to emphasise that the Pathfinder SII investment requirements are indicative benchmarks only. The Exchange may accept fluctuations in the shareholding of the Pathfinder SIIs taking into account all the relevant circumstances of a particular case. We have amended the Guidance Letter to include the following non-exhaustive examples where such fluctuations may be accepted:

(a) **Temporary dilution during the pre-application 12-month period:** where the Pathfinder SII(s)' shareholding meets the relevant threshold at the time of listing application and on average (i.e. 12-month average of the shareholding as of each month-end) throughout the pre-application 12-month period (i.e. we would accept temporary failures to meet the 10% or the 3% thresholds during the pre-application 12-month period if this average is met); and

(b) **Temporary dilution pending top-up investment:** where (i) the Pathfinder SII(s)' shareholding is diluted due to investments made by other investors during the pre-application 12-month period; (ii) the relevant Pathfinder SII (or in the case of the aggregate threshold referred to in paragraph 236(a), at least one Pathfinder SII within the group) has committed irrevocably to top up its investment before the listing application by an amount that would have resulted in the Pathfinder SII(s) meeting the relevant indicative benchmark as at the date of the listing application had such top-up been completed; and (iii) the top-up will be completed before the date of listing.

241. We have also clarified in the Guidance Letter that the Exchange will consider on a case-by-case basis whether investments in an applicant held by different funds managed by the same fund manager, or by different entities wholly-owned by the same investor can be aggregated as investments made by one Pathfinder SII. Non-exhaustive factors that the Exchange will take into account include the shareholding structure of the investor entities, and how investment decisions are made.

Securities convertible into shares

242. We have also clarified in the Guidance Letter that, in the case of a Sophisticated Independent Investor holding securities convertible into shares in an applicant (such as convertible or exchangeable bonds, notes or loans or convertible preference shares), only the investment in the securities to be converted at, or before, listing will be counted when considering whether the meaningful investment requirement is met. The applicant must also disclose this information in the Listing Document.

243. This clarification is to prevent circumvention of our requirements through the lending of money to the applicant to satisfy the meaningful investment requirement (e.g. by way of convertible securities with a redemption feature). Such investors would not have taken on the level of investment risk expected of a Sophisticated Independent Investor.

Aggregate Investment Benchmark

244. In view of the majority support from the respondents on the Aggregate Investment Benchmark for the aggregate investment from all Sophisticated Independent Investors, we will adopt the proposal but with adjustment to the expected market capitalisation tiers (as set out in Table 8 below) to reflect our adjustment to the minimum market capitalisation requirements for listing applicants (see Sections B(I) and (II) above).

Table 8: Revised Aggregate Investment Benchmark for the investment from all Sophisticated Independent Investors

Expected market capitalisation of the applicant at the time of listing	**Minimum total investment from all Sophisticated Independent Investors as a percentage of the issued share capital of the applicant at the time of listing**	
	Commercial Companies	*Pre-Commercial Companies*
HK$6 billion or more but less than HK$15 billion *(Commercial Companies)* HK$10 billion or more but less than HK$15 billion *(Pre-Commercial Companies)*	20%	25%
HK$15 billion or more and less than HK$30 billion	15%	20%
HK$30 billion or more	10%	15%

245. We have also clarified in the Guidance Letter that the Aggregate Investment Benchmark can be met by the issue of offer shares to Sophisticated Independent Investors in the IPO, regardless of whether or not such investors held securities in the Specialist Technology Company before listing.

246. Where pre-IPO and cornerstone investments made by Sophisticated Independent Investors are insufficient to satisfy the Aggregate Investment Benchmark, the Exchange would be prepared to allow an applicant to proceed to listing on the condition that sufficient offer shares would be allocated to Sophisticated Independent Investors participating as placees under the placing tranche to satisfy the Aggregate Investment Benchmark (referred to as "**SII Placees**"), in which case the listing applicant, the overall coordinator(s) and the sponsor(s) should provide an undertaking in this regard and such undertaking should also be disclosed in the Listing Document.

247. In such cases:

(a) the Exchange will only accept placees that clearly fall within the illustrative examples of the Sophisticated Independent Investors (as set out in paragraph 32 of the Guidance Letter). To avoid any delay to listing, where an applicant plans to rely on an allocation to be made to a Sophisticated Independent Investor which is a key market participant (as referred to in paragraph 32(d) of the Guidance Letter), the listing applicant must submit the relevant information on such Sophisticated Independent Investor(s) to which it intends to allocate offer shares as placees for the above purpose well in advance so that the Exchange can have sufficient time to assess whether such placee(s) may be regarded as Sophisticated Independent Investors (as described in paragraph 213 above); and

(b) the Specialist Technology Company must confirm in the allotment results announcement that the investment from all Sophisticated Independent Investors has met the Aggregate Investment Benchmark. It must also disclose in the allotment results announcement the identities of the SII Placees, the number of shares held by them, and other relevant information of the SII Placees as required to be disclosed in a Listing Document (see paragraph 36 of the Guidance Letter) to substantiate that they have the relevant investment experience, knowledge and expertise to be considered sophisticated. This information should be given as of a date that is no more than six months prior to the date of listing.

248. We have also clarified in the Guidance Letter that the Aggregate Investment Benchmark is calculated as a percentage of the issued share capital of the applicant before the exercise of any over-allotment option (see paragraph 37(b) of the Guidance Letter).

Timing of Aggregate Investment Benchmark assessment

249. Compliance with the Aggregate Investment Benchmark will be assessed at the time of listing. Similarly, the tier of the Aggregate Investment Benchmark that should apply to a Specialist Technology Company will be determined with reference to the expected market capitalisation at the time of listing (e.g. based on the final offer price and offer size) (instead of at the time of listing application as suggested by some respondents) to take into account

demand from public investors. If the applicable tier of the Aggregate Investment Benchmark were to be determined at the time of listing application, it would have been based on the estimated market capitalisation at that time only, and so would not have reflected actual demand from public investors.

250. In view of the above, we will adopt the minimum third-party investment proposal with amendments and clarifications made to the Pathfinder SII investment requirements and the Aggregate Investment Benchmark set out in paragraphs 234, 236, and 240 to 248 above (see paragraphs 37 to 43 of the Guidance Letter).

C. Additional Qualification Requirements for Pre-Commercial Companies

I. Primary Reason for Listing

Proposal

251. The Exchange proposed that a Pre-Commercial Company must have as its primary reason for listing the raising of funds for the R&D of, and the manufacturing and/or sales and marketing of, its Specialist Technology Product(s) to bring them to commercialisation and achieving the Commercialisation Revenue Threshold.[116]

Responses

252. 95% of respondents who commented (60 respondents) supported this proposal[117], while 5% of those who commented (three respondents) did not support it.

Comments

253. The proposal received majority support from respondents who generally thought the requirement formed a reasonable basis on which Pre-Commercial Companies should be permitted to list.

254. Some respondents, while supporting the proposal, considered the requirement overly general and subjective. They recommended clearer guidance on the percentage of the IPO proceeds required to be applied to developing an applicant's Specialist Technology Product(s).

255. A respondent commented that some Specialist Technology Companies may have completed their R&D before seeking to raise funds at IPO to finance their production and commercialisation. It therefore suggested the requirement be revised as follows: "a Pre-Commercial Company applicant must have as its primary reason for listing the raising of funds for the R&D of and/or the manufacturing and/or sales and marketing of its Specialist Technology Product(s) to bring them to commercialisation and achieving the Commercialisation Revenue Threshold".

Exchange conclusion

256. A Pre-Commercial Company applicant may demonstrate its compliance with this requirement by its planned use of proceeds. However, the Exchange does not intend to prescribe further requirements on the level of proceeds that should be used, as Pre-

[116] Paragraph 174 of the Consultation Paper.

[117] Question 23 of the Consultation Paper.

Commercial Companies may have various priorities for their use of proceeds, depending on their individual circumstances.

257. As mentioned in paragraph 133 above, the Exchange considers continuous R&D to be one of the primary attributes of a suitable Specialist Technology Company. On this basis, we would expect a Pre-Commercial Company to have been engaged in R&D throughout the entirety of its track record period and will use part of the proceeds raised at IPO for the continuous R&D of its Specialist Technology Product(s).

258. In view of the majority support from respondents, we will adopt the proposal.

II. Path to Achieving the Commercialisation Revenue Threshold

Proposals

259. The Exchange proposed that a Pre-Commercial Company must demonstrate to the Exchange, and disclose in its Listing Document, a credible path to the commercialisation of its Specialist Technology Product(s), appropriate to the relevant Specialist Technology Industry, that will result in it achieving the Commercialisation Revenue Threshold.[118]

260. For such purpose, the Exchange proposed that a credible path could be demonstrated, for example, by:[119]

    (a) binding contracts or non-binding framework agreements, with reasonably sufficient details on the timeframe and milestones for commercialisation, in respect of the Specialist Technology Product(s) that the applicant has in place; and

    (b) such binding contracts or non-binding framework agreements being arranged with a reasonable number of independent customers for the development, testing or sales of the Specialist Technology Product(s), with a substantial potential aggregate contract value realisable within 24 months from the date of listing. The Exchange may, under exceptional circumstances, accept that a credible path is demonstrated by a binding contract or non-binding framework agreement with an expected timeframe of more than 24 months, in which case an independent customer engaged in such arrangement must also be a highly reputable customer.

261. For the purpose of the examples referred to in paragraph 260(b), the Exchange proposed that:[120]

    (a) a customer would not be considered independent if it is a core connected person of the applicant, except that a customer who is a substantial shareholder of the applicant would be considered as having met this independence requirement if it is a core connected person merely by reason of the size of its shareholding in the applicant. A

[118] Paragraph 175 of the Consultation Paper.

[119] Paragraphs 176 to 178 of the Consultation Paper.

[120] Paragraph 179 of the Consultation Paper.

customer who is the controlling shareholder (or within the group of persons who are considered as controlling shareholders) of the applicant would not be considered as having met this independence requirement; and

(b) "a highly reputable customer" means:

(i) a key market participant in the relevant upstream or downstream industry with substantial market share, as supported by appropriate independent market or operational data; or

(ii) a State or State corporation as defined under Rule 1.01.

262. In addition, we proposed that a Pre-Commercial Company applicant must also: [121]

(a) explain and disclose, in detail, the timeframe for, and impediments to, achieving the Commercialisation Revenue Threshold; and

(b) to the extent that its working capital (after taking into account the listing proceeds) is insufficient to meet its needs before it achieves the Commercialisation Revenue Threshold, describe the potential funding gap and how it plans to further finance its path to achieving the Commercialisation Revenue Threshold after listing.

Responses

263. 98% of respondents who commented (63 respondents) supported the proposal referred to in paragraph 259 on a credible path to commercialisation [122], while 2% of those who commented (one respondent) did not support it.

264. Of the respondents who supported the proposal referred to in paragraph 259 on a credible path to commercialisation, 83% of respondents who commented (50 respondents) supported the proposed examples referred to in paragraphs 260 and 261 (including the definition of "highly reputable customer") for demonstration of a credible path to commercialisation [123], while 17% of those who commented (ten respondents) did not support it.

265. 94% of respondents who commented (58 respondents) supported the proposed disclosure requirement referred to in paragraph 262(a) [124], while 6% of those who commented (four respondents) did not support it.

[121] Paragraph 175 of the Consultation Paper.

[122] Question 24 of the Consultation Paper.

[123] Question 25 of the Consultation Paper.

[124] Question 26(a) of the Consultation Paper.

266. 95% of respondents who commented (59 respondents) supported the proposed disclosure requirement referred to in paragraph 262(b)[125], while 5% of those who commented (three respondents) did not support it.

Comments

Examples for demonstrating a path to achieving the Commercialisation Revenue Threshold

267. A majority of respondents supported imposing a requirement for Pre-Commercial Company applicants to demonstrate a credible commercialisation path for its Specialist Technology Product(s). They believed this would be material for investors' assessment of its growth and prospects.

268. A majority of respondents supported the examples, noting that they were only illustrations of how a company could demonstrate a credible path to reaching the Commercialisation Revenue Threshold.

269. Some respondents objected to the proposed examples or else sought clarification on them, citing one or more of the following reasons:

(a) **Diversity of Pre-Commercial Companies' circumstances:**

(i) it may be difficult for Pre-Commercial Companies to have contracts with a substantial potential aggregate contract value (some respondents thought this means HK$250 million) realisable within 24 months from the date of listing, as their business plans may change from time to time, especially in light of their need to test the market in order to determine the right path to commercialisation. It is also common that commercialisation is implemented by stages. For example, it is possible for Pre-Commercial Companies to have co-development arrangements signed with key industry players, and only to have revenue-generating orders upon successful development; and

(ii) depending on the nature of different Specialist Technology Industries, it may not be the market practice to enter into agreements before a product is commercialised;

(b) **Retail customers:** the requirement for binding or non-binding agreements does not accommodate companies targeting retail customers;

(c) **Meaning of "highly-reputable customer":** some respondents are concerned that the meaning of a "highly-reputable customer" is too narrow and prescriptive, effectively dictating the manner in which Pre-Commercial Company applicants should pursue commercialisation, regardless of whether this is appropriate to the relevant industry or business. These respondents thought the Exchange should consider expanding the definition by including "upstream" or "downstream" customers with

[125] Question 26(b) of the Consultation Paper.

growing market share, unique market position and/or a solid financial background; and

(d) **Commercially sensitive / confidential information:** details on the timeframe and milestones for commercialisation, and details of customer contracts are often commercially sensitive and/or subject to confidentiality obligations under the relevant agreements (especially those entered into with government authorities). Such disclosures could therefore compromise the listing applicants' competitiveness which may deter them from seeking to list on the Exchange.

Disclosure on the timeframe for, and impediments to, achieving the Commercialisation Revenue Threshold

270. Most respondents agreed with the proposals on the relevant disclosures, including timeframe for, and impediments to, achieving the Commercialisation Revenue Threshold, and the potential funding gap and plans for further financing for a Pre-Commercial Company applicant. They agreed that the disclosures are necessary for investors to make informed investment decisions especially with the heightened risk of failure to commercialise.

Exchange conclusion

Further clarification on the examples provided

271. The Consultation Paper provided illustrative examples of how a listing applicant may demonstrate its path to achieving the Commercialisation Revenue Threshold. If the examples do not suit a Pre-Commercial Company's circumstances, it may demonstrate its path to commercialisation through other means with alternative evidence to support its credibility.

272. We have not included co-development arrangements signed with key industry players (see paragraph 269(a)(i)) as an illustrative example, as such agreements may not always be reliable evidence of a credible path to commercialisation, depending on the stage of development of the Specialist Technology Product.

273. In line with the clarification made on assessing the independence of a Sophisticated Independent Investor (see paragraphs 205 to 208), the Exchange has clarified in the Guidance Letter (see paragraph 50(a) of the Guidance Letter) that the independence of a customer referred to in the example will be determined as at the date of the signing of the relevant contract or framework agreement with an applicant and up to listing, and the same criteria as those used for Sophisticated Independent Investors will be applied to the assessment of the independence of a customer.

274. The description of a "highly-reputable customer" is non-exhaustive and we will take into account all relevant facts and circumstances of a listing applicant and the relevant Specialist Technology Industry and market when applying this term (see paragraph 50(b) of the Guidance Letter).

275. On the same basis as the similar term used for assessing whether an investor is a Sophisticated Independent Investor (see paragraph 214), we have amended the Guidance Letter (see paragraph 50(b)(i) of the Guidance Letter) to amend the reference to "substantial market share" in our requirement as "meaningful market share and size" instead.

Alternative ways of demonstrating a credible path to achieving the Commercialisation Revenue Threshold

276. A Pre-Commercial Company applicant will not be required to have signed agreements with an aggregate contract value of at least HK$250 million (being the Commercialisation Revenue Threshold) realisable within 24 months of listing.

277. If a Pre-Commercial Company chooses to demonstrate its path to achieving the Commercialisation Revenue Threshold by providing evidence of binding contracts or non-binding framework agreements, and those contracts/agreements meet the requirements of the "credible path" examples in the Guidance Letter (e.g. with a substantial potential aggregate contract value realisable within 24 months from the date of listing), the Exchange would consider the Pre-Commercial Company to have demonstrated a "credible path".

278. If the value of those contracts/agreements is insufficient to demonstrate its path to achieving the Commercialisation Revenue Threshold, or otherwise do not meet all the requirements of the "credible path" examples in the Guidance Letter, then the applicant should describe how it plans to achieve the Commercialisation Revenue Threshold in its Listing Document.

279. The Exchange acknowledges that the circumstances of listing applicants are different, and so has clarified in the Guidance Letter that applicants may propose alternative disclosure to demonstrate a credible path to achieving the Commercialisation Revenue Threshold as required under Rule 18C.06.

280. For Pre-Commercial Companies targeting retail customers, with whom they may not directly enter into contracts, a credible path to achieving the Commercialisation Revenue Threshold could be demonstrated, for example, by reference to the number of retail customers indicating their interests in the applicant's Specialist Technology Product(s), as supported by appropriate evidence such as confirmed orders.

281. The Exchange will adopt a holistic approach taking into account all the information provided and all relevant circumstances to determine whether it is satisfied that a Pre-Commercial Company has demonstrated a credible path to achieving the Commercialisation Revenue Threshold (as required under Rule 18C.06).

Commercially sensitive / confidential information

282. Issues regarding the disclosure of commercially sensitive or otherwise confidential information would not be unique to Specialist Technology Companies. Consequently, the Exchange will apply its existing practice to such matters.

283. A Pre-Commercial Company applicant may apply for disclosure relief in accordance with the Exchange's existing guidance.[126] The Exchange will consider such applications on a case-by-case basis having regard to, among other matters, (a) whether the inconvenience caused to the applicant by the disclosure outweighs the investors' information needs; (b) whether the alternative information disclosed in the listing document provides investors with sufficient, true and accurate information to enable them to make a properly informed assessment of the issuer and its securities as a whole.

284. As it is a listing requirement, the Exchange will apply a high bar in its assessment of an application for disclosure relief regarding a Pre-Commercial Company's credible path to achieving the Commercialisation Revenue Threshold. For example, in applying the existing guidance to determine whether to allow an applicant not to disclose relevant commercially sensitive information, the Exchange would expect the applicant to demonstrate that disclosure would be seriously detrimental, or competitively harmful, to the applicant (e.g. the information is a trade secret), and the omission of information is not likely to mislead investors with regard to the applicant's facts and circumstances, knowledge of which is essential for the informed assessment of the applicant and its securities.

Balanced disclosure

285. As noted by a respondent, disclosures regarding an applicant's path to achieving the Commercialisation Revenue Threshold will be forward-looking and so subject to uncertainty. Pre-Commercial Company applicants should exercise caution in making such disclosures in its Listing Documents and make underlying material assumptions as appropriate to ensure the disclosures are not misleading. The Exchange has highlighted this in the Guidance Letter (see paragraph 48 of the Guidance Letter).

286. In view of the majority support from respondents, we will adopt the proposals with the clarifications referred to in paragraphs 273 to 275, 277 to 281 and 285 (see paragraphs 48 to 53 of the Guidance Letter).

III. Enhanced Working Capital Requirement

Proposal

287. The Exchange proposed that a Pre-Commercial Company applicant must have available working capital to cover at least 125% of its group's costs for at least the next 12 months (after taking into account the IPO proceeds of the applicant), and these costs must substantially consist of the following: (a) general, administrative and operating costs; and (b) R&D costs. [127]

[126] Paragraphs 28 to 30 of Guidance Letter HKEX-GL98-18 (Guidance on disclosure in listing documents – listing applicants' names; statistics and data quoted; listing document covers; non-disclosure of confidential information; and material changes after trading record period).

[127] Paragraph 182 of the Consultation Paper.

Responses

288. 90% of respondents who commented (56 respondents) supported this proposal[128], while 10% of those who commented (six respondents) did not support it.

Comments

289. A majority of respondents supported the proposal as it is in line with the enhanced working capital requirement for Biotech Companies.

290. Several respondents who were investment firms focusing on private equity or venture capital investment suggested imposing a longer period of 24 months or else for the whole period until the Commercialisation Revenue Threshold was met. They believed this would be indicative of a healthy financial position.

291. One respondent opposed the requirement on the grounds that it would interfere with the business judgement of management on the use of the majority of its own resources.

292. One respondent believed that marketing and related costs should also be included for the purpose of the working capital requirement.

Exchange conclusion

293. As stated in the Consultation Paper, the proposed requirement is consistent with that applicable to Biotech Companies[129] and aims to mitigate the risk that a Pre-Commercial Company will not be able to meet its operational expenses in the first year after listing without the support of revenue and/or profit[130] (i.e. that the company does not fail soon after its listing).

294. We do not consider it appropriate to impose a working capital requirement over a period longer than 12 months for Pre-Commercial Companies given the inherent uncertainties that would arise for such a period. Rather than mandating a more stringent working capital requirement, we will require a Pre-Commercial Company to disclose how it plans to finance its path to meeting the Commercialisation Revenue Threshold in its Listing Document (see paragraph 262(b)).

295. A Pre-Commercial Company that forecasts to carry on marketing and related activities in the 12-month period following listing should include marketing costs and related expenses as operating costs in determining its satisfaction of the working capital requirements.

296. In view of the majority support from respondents, we will adopt the proposal.

[128] Question 27 of the Consultation Paper.

[129] Rule 18A.03(4).

[130] Paragraph 183 of the Consultation Paper.

D. Other Comments on Qualification Requirements

I. Other Qualification Requirements Suggested by Respondents

In addition to responses to the questions raised in the Consultation Paper, the Exchange received the following suggestions from respondents.

Comments

Expert advice

297. Some respondents suggested that the Exchange consider asking applicants to provide a feasibility report prepared by an independent expert in support of the credibility of applicants' commercialisation path, or engaging reputable organisations or persons in new technology areas, such as renowned academic institutes and major information technology platform organisations to assess the truthfulness or accuracy of the claims made by applicants in their Listing Documents.

Additional INED/ corporate governance requirements

298. Several respondents suggested requiring Specialist Technology Companies (particularly Pre-Commercial Companies) to have at least one INED with relevant technology background or expertise. They thought this may be beneficial because most Specialist Technology Products do not require the validation/approval of a Competent Authority before commercialisation, which increases the difficulty for investors to assess the claims made by the companies as to their capabilities.

299. These respondents thought that having such an INED could help assess the technological development of the company for the benefit of outside shareholders. This INED could also monitor the gap between the company's working capital and the funding it would need to achieve the Commercialisation Revenue Threshold.

300. One respondent suggested requiring INEDs to disclose their views on a Specialist Technology Company in a similar manner to their confirmation that a connected transaction is fair and reasonable and in the interests of shareholders as a whole.[131]

301. A few respondents suggested Specialist Technology Companies (especially Pre-Commercial Companies) be required to establish a special board committee, whereby:

    (a) one respondent suggested such a committee oversee matters relating to Specialist Technology, particularly R&D, and an applicant's path to the commercialisation of its Specialist Technology Product(s). They were of the view that the high risk nature of Specialist Technology Companies warrants such a committee at a board level, similar to a risk committee for licensed banks. They proposed that this committee be chaired by an INED with sufficient knowledge and experience in the relevant Specialist

[131] See Rules 14A.40(3) and 14A.55(3).

Technology Industry. Another respondent suggested a similar risk committee be established, with at least one INED member, for the purpose of overseeing and managing the risks associated with the Specialist Technology Company; and

(b) another respondent suggested requiring an advisory committee or strategic development committee comprised of INEDs and non-executive directors and other advisors with relevant knowledge, as appropriate.

Exchange conclusion

Expert advice

302. In formulating its Specialist Technology Regime proposals, the Exchange considered the possibility of requiring applicants to produce a feasibility report on the capabilities of their Specialist Technology Product(s) and, for Pre-Commercial Companies, their path to commercialisation.

303. Following preliminary discussions with stakeholders, the Exchange decided not to put forward this proposal. Many Specialist Technology Companies may operate in niche and/or emerging industries and these companies may have difficulties in identifying suitable experts to produce such a report. Also, any expert advice may be circumscribed by liability considerations and confidentiality concerns (e.g. with regards to the technical details of the relevant Specialist Technology and trade secrets). The Exchange was concerned that publishing such circumscribed reports may have the unintended consequence of providing a misleading depiction of a company and its prospects.

304. The Exchange concluded that the existing sponsor's due diligence requirements would provide sufficient protection against false or misleading claims made by an applicant regarding the technical capabilities and commercial viability of its Specialist Technology Product(s) as disclosed in its Listing Document.

305. The Exchange also does not plan to form its own advisory panel of experts, with standing members, similar to the Biotech Advisory Panel[132], which currently provides expert advice on listing applications by Biotech Companies. Given that the scope of the Specialist Technology Regime covers a wide range of industries, sectors and technologies, we do not believe it would be possible to form a panel that could provide the breadth of advice that would be required.

306. Instead, the Exchange will consult relevant professional parties, such as academic institutions, to leverage their expertise and experience during the vetting process of individual applications, on a case-by-case basis as required.

[132] The Biotech Advisory Panel is a panel of experienced participants in the biotech industry formed by the Exchange for the purpose of providing advice relating to Biotech Companies. The function of the members of the Panel is advisory only and members will be consulted (by the Exchange, the Listing Committee or the SFC) on an individual and "as needed" basis.

Additional INED / corporate governance requirements

307. We do not intend to implement the suggestion to require Specialist Technology Companies to appoint at least one INED with relevant technology expertise, or to form a special board committee to oversee matters relating to the development of an issuer's Specialist Technology Product(s).

308. Due to the emerging and highly technical nature of many Specialist Technology Industries, there is a risk that the technological expertise of an INED or a special board committee appointed to satisfy any such requirement may not be directly relevant to the activities of a Specialist Technology Company. Consequently, the appointment of such persons may give false comfort to investors, potentially undermining the effectiveness of this requirement as a safeguard.

309. We also note the concerns that some Specialist Technology Companies may have difficulties in sourcing suitable persons who both have the necessary expertise and are willing to be appointed as INEDs to fulfil such a requirement, particularly for companies in emerging / niche Specialist Technology Industries; and that the appointment of such an INED or board committee, with a remit to oversee the development of its Specialist Technology Product(s), may increase the risk of a company's proprietary technology falling into the hands of a competitor or becoming public.

310. This being the case, we will instead rely upon existing requirements set out in the Rules, including the Code Provision in the Corporate Governance Code that INEDs (and other non-executive directors) should make a positive contribution to the development of the issuer's strategy and policies through independent, constructive, and informed comments.[133]

II. Specialist Technology Companies with a WVR Structure

Proposal

311. The Exchange proposed to apply the existing WVR Listing Rule requirements and the relevant guidance[134] to a Specialist Technology Company applying to list with a WVR structure[135]. In particular, such applicant is likely required to meet the HK$40 billion market capitalisation threshold[136] which applies to applicants with a WVR structure but without HK$1 billion revenue for the most recent audited financial year.

[133] Code Provision C.1.7 of Part 2 of the Corporate Governance Code (Appendix 14 to the Listing Rules).

[134] See Guidance Letter HKEX-GL93-18 (Guidance on Suitability for an applicant (other than Grandfathered Greater China Issuers or Non-Greater China Issuers with a weighted voting rights ("WVR") structure applying for (i) a dual primary listing under Chapter 19 that meet the conditions set out in Rule 8A.46; or (ii) a secondary listing under Chapter 19C) to list with a WVR structure in compliance with Chapter 8A).

[135] Paragraphs 186 to 188 of the Consultation Paper.

[136] Rule 8A.06.

Comments

312. Some respondents commented that many Specialist Technology Companies have adopted a WVR structure to allow the founders to maintain their control as their shareholding had been diluted following multiples rounds of fundraising from investors to support their development, and may wish to continue such structure at and after listing. They considered such structure beneficial for a company's continuous growth and success, as it could stabilise the long term development of Specialist Technology Companies.

313. However, they were of the view that the current HK$40 billion market capitalisation threshold[137] would be too high for a Specialist Technology Company applicant without a sizeable revenue or profit to meet. They also noted that the market capitalisation thresholds for companies listing with a WVR structure on the STAR Market are much lower[138], and asked the Exchange to lower the market capitalisation threshold or grant a waiver from meeting such threshold for Specialist Technology Companies seeking to list with a WVR structure.

Exchange conclusion

314. As stated in the Consultation Paper[139], our existing WVR Listing Rule requirements were the outcome of a robust consultation process as part of the 2018 Listing Reforms. The Exchange intended to limit applicants with a WVR structure to those established and high-profile companies that have already received substantial third-party investment given the inherent expropriation and entrenchment risks associated with a WVR structure.[140]

315. The WVR requirements apply equally to all listing issuers, including Biotech Companies. Biotech Company listing applicants, like many Specialist Technology Companies, are also at a relatively early stage of development and so cannot demonstrate HK$1 billion revenue for their most recent audited financial year. Consequently, they are also required to have a market capitalisation of at least HK$40 billion to list with a WVR structure.

316. For the above reasons we do not intend to provide any concessions from our WVR Listing Rule requirements for Specialist Technology Companies.

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[137] This is based on the assumption that the company was not eligible to list under Rule 8.05(3) and therefore could not meet Rule 8A.06(2), which requires a minimum market capitalisation of HK$10 billion at the time of listing and revenue of HK$1 billion for the most recent audited financial year.

[138] Rule 2.1.4 of the STAR Market Rules requires a listing applicant with a WVR structure to have either (a) an expected market capitalisation of RMB10 billion; or (b) an expected market capitalisation of RMB5 billion with revenue for the most recent year of at least RMB500 million.

[139] Paragraph 186 of the Consultation Paper.

[140] See paragraphs 98 to 100; and 110 of the Consultation Paper on a Listing Regime for Companies from Emerging and Innovative Sectors.

E. IPO Requirements

I. Minimum Allocation to "Independent Price Setting Investors"

Proposals

317. The Exchange proposed to give Independent Institutional Investors a minimum allocation of offer shares in the IPOs of Specialist Technology Companies to help ensure a robust price discovery process.[141]

318. We proposed:[142]

(a) to define Independent Institutional Investors as Institutional Professional Investors that participate in the placing tranche of an IPO (whether as cornerstone investor or otherwise);

(b) to exclude the following investors from the definition:

(i) corporate professional investors and individual professional investors[143].

(ii) core connected persons of the applicant; and

(iii) existing shareholders and any of their close associates.

Responses

319. 87% of respondents who commented (60 respondents) supported the proposal referred to in paragraph 317 on a minimum allocation to Independent Institutional Investors[144], while 13% of those who commented (nine respondents) did not support it.

320. Of the respondents who supported the proposal referred to in paragraph 317 on a minimum allocation to Independent Institutional Investors, 68% of respondents who commented (39 respondents) supported the proposed definition of Independent Institutional Investors[145], while 32% of those who commented (18 respondents) did not support it.

Comments

General approach

321. A majority of respondents supported the proposal as they thought that the minimum

[141] Paragraph 199 of the Consultation Paper.

[142] Paragraphs 201 and 202 of the Consultation Paper.

[143] Professional investors referred to in the SFO PI Rules (see the Note to Table 8 on page 89 of the Consultation Paper).

[144] Question 28 of the Consultation Paper.

[145] Question 29 of the Consultation Paper.

allocation requirement would utilise the professional experience and industry expertise of Independent Institutional Investors to facilitate the price discovery of Specialist Technology Companies. Some respondents commented that this would help mitigate the risk of price volatility shortly after an IPO, as Independent Institutional Investors are more likely to have higher risk tolerance and longer investment horizons than other investors.

322. A few respondents objecting to the minimum allocation requirement were of the view that Independent Institutional Investors could always choose to participate as cornerstone investors to ensure that they receive a meaningful allocation at an IPO, so it is not necessary to specify a minimum allocation to them. They thought that the IPO price discovery process should be driven purely by market dynamics instead.

Definition of Independent Institutional Investors

323. Most respondents found the proposed definition of Independent Institutional Investors appropriate and clearly differentiable from other professional investors.

324. A number of respondents commented that the definition should not exclude corporate professional investors and/or individual professional investors (see paragraph 318(b) above) on the following grounds:

(a) corporate and individual professional investors are equally equipped with investment knowledge and experience in Specialist Technology Industries and businesses to contribute to a robust price discovery process; and

(b) corporate professional investors, high net worth individuals or family offices usually take up sizeable allocations in an IPO. Therefore, excluding them from the 50% minimum allocation requirement may dampen their participation in an IPO and create too high a hurdle for applicants and intermediaries to attain through the bookbuilding process.

325. Some respondents suggested that the Exchange should also allow, on a case-by-case basis, experienced corporate professional investors (such as the investment arm of group companies specialising in innovative technology sectors) and highly reputable individuals (such as the founders or senior executives of prominent technology companies) to be included in the definition of Independent Institutional Investors for the purpose of counting towards the 50% minimum allocation requirement.

Assessment of independence

326. Some respondents commented that the existing shareholders of a Specialist Technology Company should not be excluded from the definition of Independent Institutional Investors. Two respondents thought that only those that are considered part of a group of controlling shareholders should be excluded. In their opinion, those that do not hold any seat on a Specialist Technology Company's board would have similar level of access to the issuer's information and influence on the issuer's activities as other public institutional investors.

Exchange conclusion

General approach

327. Although we acknowledge that the minimum allocation requirement would increase the burden on bookbuilding, we believe this would be worthwhile to achieve a more robust price discovery process for Specialist Technology Companies, in light of the inherent difficulty of valuing these companies.[146]

328. As noted by a majority of the respondents, the Exchange believes that the minimum allocation requirement would help ensure that the offer price of a Specialist Technology Company applicant is determined with the benefit of professional experience and industry expertise by investors that are both independent and have sufficient resources to conduct due diligence on, and thorough research into, the Specialist Technology Company's capabilities and performance.

329. The requirements should also increase the influence on IPO pricing by such experienced independent investors as price makers, and reduce the influence on pricing by investors who are price takers. Contrary to the view of some respondents (see paragraph 322), the minimum allocation requirement seeks to encourage more experienced independent investors to invest in an IPO and give them more bargaining power in determining the IPO price, so that they no longer need to participate as cornerstone investors just to ensure that they receive a meaningful allocation in the IPO.[147]

Definition of Independent Price Setting Investors

330. We acknowledge that some corporate and individual professional investors may have specialist investment knowledge and experience with regard to Specialist Technology Companies. Accordingly, we have revisited the types of independent investors that will be taken into account for the minimum allocation requirement. A new defined term, "Independent Price Setting Investors", is used to define such investors, which comprise: (a) independent Institutional Professional Investors (as contemplated in the Consultation Paper); and (b) other types of independent investors with AUM, fund size or investment portfolio size of at least HK$1 billion.

331. To facilitate our vetting process, we have also amended the Placing Guidelines to require the placee list[148] to be submitted to the Exchange to contain the relevant information demonstrating compliance with the minimum allocation requirement, with identification of the placees who fall within the definition of Independent Price Setting Investors. The Exchange reserves the right to require further information on those placees as it may consider necessary for the purpose of establishing the basis on which such placees fall within such definition.

[146] Paragraphs 69 to 73 of the Consultation Paper.

[147] Paragraphs 190 to 192 of the Consultation Paper.

[148] As required to be submitted under Paragraph 11 of the Placing Guidelines.

Assessment of independence

332. We will adopt the proposed independence requirement for the reasons below:

(a) core connected persons will not be considered as Independent Price Setting Investors as we wish to ensure that this definition is robust enough to minimise the influence of "friends and family" investors whose primary objective may be to support the listing, and who are relatively insensitive to the level at which the IPO is priced; and

(b) existing shareholders and their close associates will also not be considered as Independent Price Setting Investors to help ensure a market driven IPO valuation. As stated in the Consultation Paper[149], pre-IPO investors are incentivised to negotiate for the highest IPO valuation to maximise the return from their previous investment in a company. Consequently, their interests are not necessarily aligned with those of public investors. This would be true irrespective of whether they held a board seat or received the same information as public investors after listing.

333. In light of the above, we have (a) replaced "independent Institutional Professional Investors" with "independent price setting investors" in Rule 18C.08, with its definition (see paragraph 330) set out in the Guidance Letter (see paragraphs 55 to 58 of the Guidance Letter); and (b) amended the Placing Guidelines as referred to in paragraph 331 (see paragraph 11A of Appendix 6 to the Listing Rules).

II. Percentage of Allocation to Independent Price Setting Investors

Proposals

334. The Exchange proposed that a Specialist Technology Company must ensure that at least 50% of the total number of shares offered in the initial public offering (excluding any shares to be issued pursuant to the exercise of any over-allotment option) is taken up by Independent Institutional Investors.[150]

Listing by De-SPAC Transaction

335. We proposed to apply the above requirement to a Specialist Technology Company listing by way of a De-SPAC Transaction, such that at least 50% of the total number of shares issued by the Successor Company as part of the De-SPAC Transaction (excluding any shares issued to the existing shareholders of the De-SPAC Target as consideration for acquiring the De-SPAC Target) would need to be taken up by Independent Institutional Investors. The existing independent third party investor requirement[151] for a De-SPAC Transaction would continue to apply. [152]

[149] Paragraph 74 of the Consultation Paper.

[150] Paragraph 200 of the Consultation Paper.

[151] Rule 18B.41.

[152] Paragraph 203 of the Consultation Paper.

Listing by introduction

336. We proposed that, in the case of a Specialist Technology Company seeking to list by introduction, the Exchange would consider granting waivers, on a case-by-case basis, from the requirement for the applicable minimum allocation of offer shares to Independent Institutional Investors.

337. We further proposed that such an applicant must demonstrate that it is expected to meet the applicable minimum market capitalisation at the time of listing, having regard to its historical trading price (for at least a six-month period) on a Recognised Stock Exchange with sufficient liquidity and a large investor base (a substantial portion of which are independent Institutional Professional Investors).[153]

Responses

338. Of the respondents who supported the proposal referred to in paragraph 317 on a minimum allocation to Independent Institutional Investors:

    (a) 60% of respondents who commented (34 respondents) supported the proposed percentage allocation referred to in paragraph 334 [154], while 40% of those who commented (23 respondents) did not support it.

    (b) 68% of respondents who commented (36 respondents) supported the proposal referred to in paragraph 335 for a Specialist Technology Company listing by way of a De-SPAC Transaction[155], while 32% of those who commented (17 respondents) did not support it.

339. 92% of respondents who commented (56 respondents) supported the proposal referred to in paragraph 336 for a Specialist Technology Company seeking to list by introduction[156], while 8% of those who commented (five respondents) did not support it.

Comments

Minimum allocation threshold

340. A majority of respondents agreed with the proposed 50% minimum allocation threshold. They were of the view that the proposed threshold was reasonable to ensure meaningful participation by Independent Institutional Investors to justify the expenditure on the due diligence and analysis of the listing applicant.

[153] Paragraph 204 of the Consultation Paper.

[154] Question 30 of the Consultation Paper.

[155] Question 31 of the Consultation Paper.

[156] Question 32 of the Consultation Paper.

341. A number of respondents considered the 50% threshold too high, particularly when combined with the proposed narrow definition of Independent Institutional Investors (see Section E(I) above) and the relatively cautious investment approach of Institutional Professional Investors, particularly following the recent economic downturn.

342. These respondents further commented such a requirement could undermine the attractiveness of the Specialist Technology Regime as it could result in:

(a) undue restriction of non-retail investors who are also not Independent Institutional Investors (e.g. corporate investors). The respondents stated that these types of investors usually take up a significant portion of offer shares in an IPO. They commented that, if the maximum Clawback Mechanism of 20% was triggered, such investors would only be left with 30% of the total offer shares; and

(b) a concentrated and restrictive investor base, which may distort the price discovery process (as the offer price may be set by a few large Independent Institutional Investors) and may lead to low liquidity and high price volatility in the Specialist Technology Companies' shares after the IPO.

343. Some of these respondents suggested imposing a lower minimum allocation threshold, ranging from 15% to 40%. Alternatively, some suggested a sliding scale of minimum allocation thresholds based on the expected market capitalisation of the Specialist Technology Company applicants.

Listing by De-SPAC Transaction

344. A majority of respondents supported the proposal, as they generally considered that the listing of a Specialist Technology Company by way of a De-SPAC Transaction is, in substance, identical to the listing under Chapter 18C, and it is reasonable that the same approach is applied with respect to minimum allocation to Independent Institutional Investors in these two types of situations.

345. Respondents who considered the 50% minimum allocation threshold too high (see paragraph 334) disagreed with the proposed treatment of De-SPAC Transactions for similar reasons, and requested a lower allocation threshold for a Successor Company's shares.

346. Two respondents thought that the existing SPAC requirements afforded investors adequate protection without the minimum allocation requirement. These included the requirements with regards to third party investment and the approval of De-SPAC Transactions by shareholders consisting of professional investors, and the restriction on SPAC shares trading to professional investors only.

Listing by introduction

347. The proposal regarding Specialist Technology Companies listed by introduction received majority support from the respondents. They commented that, as Specialist Technology Companies would have been subject to a price discovery process at the time of listing on other exchanges, it was not necessary to fulfil the minimum allocation requirement at the time of listing in Hong Kong. They added that there would be sufficient publicly available information on such companies (including price and trading history) for investors to objectively assess the reasonableness of their valuations.

Exchange conclusion

Minimum allocation threshold

348. We acknowledge that the allocation percentage we proposed would be more challenging to achieve than for IPOs outside the Specialist Technology Regime. However, we believe that the benefits of a mechanism that produces a more robust price over the long term will outweigh these short term additional burdens.

349. Our free float requirement for Specialist Technology Companies (see Section E(IV)), when combined with our existing distribution requirements[157] and our Placing Guidelines, should help mitigate the risks of a concentrated investor base, low liquidity and high price volatility after listing.

350. In view of the majority support for the proposal, we will set the minimum allocation threshold percentage at 50%, as set out in the Consultation Paper. To address some of the concerns that the minimum allocation threshold would be too difficult to meet, we will expand the types of independent investors that can be taken into account for the purpose of determining compliance with the minimum allocation threshold requirement (see paragraph 330).

Listing by De-SPAC Transaction

351. We acknowledge that De-SPAC Transactions are already subject to rigorous Listing Rule requirements to help support the valuation of a Successor Company by independent sophisticated investors. However, due to the inherent difficulty of valuing Specialist Technology Companies, we believe that it is necessary to apply additional safeguards if such a company is a De-SPAC Target.

352. In view of the majority support for the proposed minimum allocation threshold, we will adopt the proposal as set out in the Consultation Paper. The requirement is now set out in the Guidance Letter (see paragraph 59 of the Guidance Letter).

[157] Including the Rule 8.08(3) requirement that not more than 50% of the securities in public hands at the time of listing can be beneficially owned by the three largest public shareholders.

Listing by introduction

353. For Specialist Technology Companies seeking listing by introduction, we have clarified in the Guidance Letter that we will take a holistic approach when considering waiver applications from the minimum allocation requirement. This now states that we will take into account the Specialist Technology Company's investor base, historical trading price, and turnover as non-exhaustive factors when considering such waivers.

354. We have also replaced the reference to "Recognised Stock Exchange" with "another stock exchange", to be consistent with the wording of the existing Rule requirement on listing by introduction.[158] The Guidance Letter also provides that such other stock exchange is one with sufficient liquidity and a large investor base.

355. In view of the majority support for the proposed minimum allocation threshold, we will adopt the proposal with the amendments referred to in paragraphs 353 and 354. The requirement is now set out in the Guidance Letter (see paragraph 60 of the Guidance Letter).

III. Initial Retail Allocation and Clawback Mechanism

Proposals

356. The Exchange proposed to put in place a new initial retail allocation and Clawback Mechanism for Specialist Technology Companies to help ensure a robust price discovery process.

357. We proposed to apply the initial retail allocation and Clawback Mechanism as set out in Table 9 to the initial listings of Specialist Technology Companies.[159]

Table 9: Initial allocation and Clawback Mechanism specific to Specialist Technology Companies

	Initial	**No. of times (x) of over-subscription in the public subscription tranche**	
		10x to less than 50x	*50x or more*
Minimum retail allocation as a percentage of total offer shares	5%	10%	20%

[158] Rule 7.14(1).

[159] Paragraph 205 of the Consultation Paper.

Responses

358. 82% of respondents who commented (49 respondents) supported the proposal referred to in paragraph 356 on a new initial retail allocation and Clawback Mechanism[160], while 18% of those who commented (11 respondents) did not support it.

359. Of the respondents who supported the proposal referred to in paragraph 356 on a new initial retail allocation and Clawback Mechanism, 87% of respondents who commented (40 respondents) supported the proposed initial allocation and Clawback Mechanism referred to in paragraph 357[161], while 13% of those who commented (six respondents) did not support them.

Comments

General approach

360. A majority of respondents supported the application of a new initial retail allocation mechanism to Specialist Technology Companies. They generally agreed that the proposal was important to ensure a meaningful level of participation from investors who are price makers, and so would benefit the price discovery process. Some respondents also highlighted that the revised mechanism represented a suitable adjustment to the risk appetite for Specialist Technology Companies.

361. Respondents who opposed the new mechanism were concerned that restricting retail participation may affect post-listing liquidity in Specialist Technology Companies, and that this approach was inconsistent with the Exchange's approach on the matter for Biotech Companies.

362. Some respondents asked that, instead of applying a new retail allocation and Clawback Mechanism specifically to Specialist Technology Companies, the Exchange should review the current mechanism and adopt a unified approach to improve the price discovery process of all listings.

Initial retail allocation and clawback rates

363. Although the majority of respondents thought that the proposed retail allocation and clawback rates were reasonable, a few respondents suggested the following alternative percentage thresholds:

    (a) some respondents suggested a further reduction of the initial allocation and maximum clawback rates to 5%, 7.5%, and 10%, respectively, which were in line with a typical PN18 waiver[162]; and

[160] Question 33 of the Consultation Paper.

[161] Question 34 of the Consultation Paper.

[162] See HKEx Listing Decision HKEx-LD60-1 (May 2008).

(b) some respondents agreed with the proposed initial allocation percentage, but suggested increasing the maximum clawback rates to 15% and 30% in case of an over-subscription of ten but less than 50 times, and 50 times or more, respectively.

Exchange conclusion

364. The proposed clawback rates are relatively higher than those under a typical PN18 waiver because we have taken into account the potentially higher retail investor demand for Specialist Technology Companies.

365. We do not consider it necessary to further increase the clawback rates because we aim to ensure that a sufficient portion of offer shares are available to investors in the placing tranche who participate in the bookbuilding process. We believe the proposed rates strike the right balance between achieving a robust price discovery process and accommodating retail demand.

366. In view of the majority support from respondents, we will adopt the Consultation Paper proposals (including the initial retail allocation and clawback rates as set out in Table 9 above).

IV. Minimum Free Float Requirement

Proposal

367. The Exchange proposed that a Specialist Technology Company seeking an initial listing must ensure that a portion of its issued shares with a market capitalisation of at least HK$600 million is free from any disposal restrictions (whether under: contract; the Listing Rules; applicable laws; or otherwise) upon listing (referred to as its "free float").[163]

Responses

368. 62% of respondents who commented (39 respondents) supported this proposal[164], while 38% of those who commented (24 respondents) did not support it.

Comments

369. Respondents supporting the proposal acknowledged that the minimum free float requirement would be able to facilitate post-listing liquidity in the shares of Specialist Technology Companies and mitigate market manipulation and price volatility concerns.

370. Some respondents suggested lowering the free float requirement if the minimum market capitalisation thresholds were to be reduced. The revised thresholds they suggested ranged from HK$300 million to HK$450 million.

[163] Paragraph 206 of the Consultation Paper.

[164] Question 35 of the Consultation Paper.

371. Some respondents objected to expressing the free float requirement in absolute dollar terms. They asked the Exchange to consider the free float requirement as a percentage of the market capitalisation of a new applicant to avoid unfairness to Specialist Technology Company applicants with a lower market capitalisation at the time of listing.

372. A few respondents suggested relaxing the free float requirement for PRC issuers because their pre-IPO securities are subject to disposal restrictions by law[165] and would not be eligible for inclusion in the proposed free float.

373. One respondent commented that the definition of "free float" should exclude shares that are not tradable on the Exchange (such as unlisted shares of PRC issuers), as those shares would not contribute to post-listing liquidity.

Exchange conclusion

374. The minimum free float requirement was proposed as an absolute dollar amount to represent the baseline value of securities that the Exchange considers will provide sufficient post-IPO liquidity to aid the price discovery of the securities of Specialist Technology Companies.

375. Despite the reduction in the minimum market capitalisation requirement (see Sections B(I) and (II) above), we believe that HK$600 million is still an appropriate minimum value for this purpose, particularly in view of the inherent difficulties of valuing Specialist Technology Companies (see paragraphs 69 to 74 of the Consultation Paper).

376. We decided not to adopt a percentage based minimum free float requirement because this would cause the minimum dollar amount of free float required to increase with the market capitalisation of a Specialist Technology Company. Requiring free float above a minimum dollar value amount should not be necessary to ensure post-IPO liquidity and may dissuade large scale Specialist Technology Company applicants from listing in Hong Kong. Our proposed approach is also consistent with the existing public float requirement for Biotech Companies, which is also expressed as a baseline dollar value.[166]

377. We note that:

    (a) of the 142 new listings on the Exchange between 2019 and 2022 with a market capitalisation of HK$6 billion or more at the time of listing, 140 (99%) had a free float of HK$600 million or more at the time of listing[167]; and

[165] Article 141 of the PRC Company Law.

[166] Rule 18A.07.

[167] Source: Float data available on S&P Capital IQ (retrieved on 18 January 2023).

(b) with regard to PRC issuers, of the 33 H share listings between 2019 and 2022 with a market capitalisation of HK$6 billion or more at the time of listing, 17 (52%) had free float of HK$600 million or above at listing[168].

378. Accordingly, whilst the percentage of PRC issuers that satisfy our minimum free float requirements may be lower compared to other listed issuers, the Exchange does not envisage that most Specialist Technology Companies would encounter undue difficulties.

379. We have also clarified in the Rules (see Rule 18C.10) that the free float is to be calculated by reference to the shares listed on the Exchange only. Accordingly, shares that are not listed on the Exchange (such as unlisted shares of a PRC issuer, or shares of a PRC issuer which are listed on a Mainland China stock exchange i.e. A shares) will not be counted.

380. Applicants with securities listed on another stock exchange (which are or represent, shares in the same class as the shares for which listing is sought on the Exchange) must have due regard to whether there will be an open market in the securities for which listing is sought and, where necessary, must make appropriate arrangements to facilitate the liquidity of their shares to meet Hong Kong market demand. This is to ensure that the trading of the securities for which listing is sought is conducted in a fair and orderly manner and in the case of a listing accompanied by an offer, this will also be one of the factors that the Exchange will take into account when assessing whether the size of an offer may give rise to orderly market concerns (see Section E(V) below).

381. Specialist Technology Companies seeking to list by introduction must continue to comply with existing guidance on liquidity arrangements to meet Hong Kong market demand during the initial period of listing[169].

382. In view of the majority support from respondents, we will adopt the proposal with the amendment referred to in paragraph 379 (see Rule 18C.10) and the additional guidance on the matter referred to in paragraph 380 (see paragraphs 62 to 64 of the Guidance Letter).

V. Offer Size

Proposal

383. The Exchange proposed that the listing of a Specialist Technology Company should be accompanied by an offer (including both the placing tranche and the public subscription tranche) of a meaningful size and reserve the right not to approve the listing of a Specialist Technology Company if the offer size is not significant enough to facilitate post-listing liquidity, or may otherwise give rise to orderly market concerns.[170]

[168] This is based on our estimate of the free float of such PRC issuers with reference to the value of their offer shares.

[169] Guidance Letter HKEX-GL53-13 (Liquidity arrangements for issuers seeking to list by introduction where the securities to be listed are already listed on another stock exchange).

[170] Paragraph 208 of the Consultation Paper.

Responses

384. 68% of respondents who commented (44 respondents) supported this proposal[171], while 32% of those who commented (21 respondents) did not support it.

Comments

385. Supportive respondents commented that the approach is consistent with the Exchange's power to suspend the trading of, or delist, any securities where the Exchange considers it necessary for the protection of investors or the maintenance of an orderly market.[172] They agreed that an IPO with a small offer size would give rise to concerns as to whether the bookbuilding process was robust enough to aid proper price discovery.

386. A number of respondents (including those who supported the proposal) sought clarification on the Exchange's application of the proposed requirement and asked the Exchange to provide offer size parameters (with reference to a company's market capitalisation) as guidance.

387. Some respondents objected to the proposal. They believed it was unnecessary to impose such requirement as offer sizes should be driven by market dynamics, investor appetite and other commercial considerations. Some respondents believed post-listing liquidity concerns were sufficiently addressed by the minimum free float requirement (see Section E(IV)).

388. A few respondents added that the discretion given to the Exchange to withhold listing approval based on an insufficient offer size would add greater uncertainty to the listing process and make the regime uncompetitive with other markets.

Exchange conclusion

389. As stated in the Consultation Paper[173], the Exchange's principal function is to provide a fair, orderly and efficient market for the trading of securities. The Specialist Technology Regime, as with all other Listing Rules, is designed to not only ensure the suitability of an applicant for listing, but also that the issue of securities is conducted in a fair and orderly manner.[174]

390. We acknowledge that, as mentioned by respondents, the offer size depends on a number of factors. Consequently, we do not wish to impose any "bright line" parameter in this regard. We will assess whether an offer size is meaningful on a case-by-case basis, taking into account all relevant circumstances of each individual applicant.

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[171] Question 36 of the Consultation Paper.

[172] Rule 6.01.

[173] Paragraph 209 of the Consultation Paper.

[174] Rule 2.03(1) and (2).

391. The main rationale of this requirement is to help ensure that the offer size would be meaningful, when viewed together with the requirement for a minimum allocation to Independent Price Setting Investors (see Sections E(I) and (II) above), to minimise the risk of such requirement being met artificially by a small number of Independent Price Setting Investors with a small aggregate investment, which is not conducive to the price discovery process[175].

392. Accordingly, we have revised the wording of the Listing Rules to clarify this by replacing "to facilitate post-listing liquidity" with "to facilitate price discovery".

393. As stated above (see paragraph 380), for applicants with securities listed on another stock exchange (that are in the same class as the shares for which listing is sought on the Exchange), we will take into account the demand in the Hong Kong market when assessing whether the offer size may give rise to orderly market concerns.

394. In view of the majority support from respondents, we will adopt the proposal with the amendments as stated in paragraph 392 above (see Rule 18C.11).

VI. IPO Disclosure Requirements

Proposal

395. The Exchange proposed that a Specialist Technology Company make certain additional disclosures in its Listing Document to facilitate IPO investors' assessment of its financial position and prospects.[176]

Responses

396. 97% of respondents who commented (62 respondents) supported this proposal[177], while 3% of those who commented (two respondents) did not support it.

397. In addition, 13% of respondents who commented (eight respondents) provided suggestions for additional information that a Specialist Technology Company should include in its Listing Document in order to allow an investor to properly assess and value the company[178], while 87% of those who commented (54 respondents) did not provide suggestions.

Comments

398. A majority of the respondents supported the additional disclosure requirements. A number of respondents stated that these would provide useful information for investors to help them assess a Specialist Technology Company's current financial position and future prospects.

[175] Paragraphs 209 and 210 of the Consultation Paper.

[176] See paragraphs 217 and 218 of the Consultation Paper and paragraph 32 of the draft guidance letter in Appendix V of the Consultation Paper.

[177] Question 37 of the Consultation Paper.

[178] Question 38 of the Consultation Paper.

They believed this would be particularly important as such companies may not have generated significant revenue and/or profit.

399. One respondent was concerned that the disclosure requirements proposed would result in issuers taking a "box-checking" approach to meet the requirements and providing generic disclosure rather than meaningful information. Such respondent preferred a principle-based approach to disclosure based on materiality.

400. Some respondents provided comments on certain proposed disclosure requirements:

(a) **Expected market share:** two respondents objected to the requirement to disclose a listing applicant's expected market share for a reasonable future period. They believed that this would be subject to a variety of factors (such as the future operational and financial developments of the listing applicant's competitors) which were difficult to predict;

(b) **Concerns on disclosing commercially sensitive terms:** a few respondents commented that the details of contracts with customers are sometimes subject to confidentiality obligations. Disclosing the detailed terms of the contracts / framework agreements may risk disclosing commercially sensitive terms / trade secrets to the company's competitors. This may deter an applicant from choosing Hong Kong as its listing venue; and

(c) **Details of Specialist Technology Products:** one respondent suggested clarifying that an applicant is only required to disclose details with respect to key "Specialist Technology Products" that it considers material to its business and future growth, rather than every possible Specialist Technology Product, to avoid overwhelming investors with extraneous details.

401. Some respondents suggested requiring the following additional disclosures:

(a) the technical capabilities of the Specialist Technology Products in comparison to similar products already launched in the market;

(b) a description of how the "key persons" have made a material contribution to the past performance of a Specialist Technology Company, its current financial position and future prospects; and

(c) additional disclosures on R&D expenditure given the importance of R&D for Specialist Technology Companies.

Exchange conclusion

402. As stated in the Consultation Paper[179], the proposed strengthened specific disclosures aim to facilitate potential investors' assessment of a Specialist Technology Company's financial

[179] Paragraph 212 of the Consultation Paper.

position and prospects. This is particularly important for Specialist Technology Companies because of the heightened difficulty in reaching a consensus on their valuations[180]. Also, as these companies may operate in emerging industries, investors may be unfamiliar with their products/services and the potential market for them.

403. Setting particular additional disclosure requirements for companies in specialist fields is also consistent with our approach to Biotech Companies[181] and mineral companies[182].

404. Having taken into account the respondents' feedback, we will adopt the proposal with some clarification amendments (see highlighted amendments in paragraph 70 of the Guidance Letter). The key amendments are as follows:

(a) **Expected market share** (paragraph 70(f)(iii) of the Guidance Letter)**:** we have clarified in the Guidance Letter that an applicant may choose to provide a qualitative disclosure of its expected market share for a reasonable future period by reference to its expected competitive landscape, together with the relevant risks, impediments and assumptions on which that disclosure is based. The rationale for this requirement is to help investors better understand how the applicant intends to penetrate its expected addressable market.

(b) **Examples of key business model metrics** (paragraph 70(g)(ii) of the Guidance Letter)**:** annual recurring revenue and contribution margin are removed from the examples of key metrics recommended for disclosure, as the calculation methodology for such metrics vary among companies and the management's interpretation of the components to be included in the calculation could be subjective. Accordingly, there is a risk that such metrics could be manipulated to paint an overly optimistic picture of a company's expected revenue generating and profit making ability;

(c) **Details of Specialist Technology Products:** we have clarified in the Guidance Letter that certain detailed disclosure is only applicable to an applicant's key Specialist Technology Products; and

(d) **Warning Statement** (paragraphs 70(l) and (m)(iv) of the Guidance Letter)**:** we have provided sample wording for the warning statement to be included on the cover or inside front cover of the Listing Documents of all Specialist Technology Companies, including the additional warning statement for Pre-Commercial Companies.

405. With respect to respondents' concerns on disclosing commercially sensitive terms, an issuer may apply for disclosure relief under our existing guidance (see paragraphs 282 to 284 above).

[180] See paragraphs 69 to 73 of the Consultation Paper.

[181] See Rules 18A.04 to 18A.06, and Guidance Letter HKEX-GL107-20 (Guidance on disclosure in listing documents for Biotech Companies).

[182] See Rules 18.06 to 18.09.

406. With respect to the additional disclosures suggested by some respondents (see paragraph 401):

(a) the Exchange does not consider it necessary to impose an additional requirement on the technical capabilities of the Specialist Technology Products in comparison to similar products already launched in the market, as Specialist Technology Companies are subject to the existing and new requirements relating to the disclosure of competitive landscape[183];

(b) we have expanded the requirement relating to the disclosure of relevant experience of the Specialist Technology Company's directors and senior management in the R&D, manufacturing and commercialisation of the relevant Specialist Technology Products (see paragraph 70(h)(v)(4) of the Guidance Letter) to cover other key persons that are subject to post-IPO lock-up requirements (see Section F(II)); and

(c) we have strengthened the disclosure on R&D (see paragraph 70(h) of the Guidance Letter).

VII. Subscription of IPO Shares by Existing Shareholders

Proposals

407. The Exchange proposed to allow existing shareholders (including controlling shareholders) of a Specialist Technology Company to participate in its IPO provided that the company complies with: our existing public float requirement; the requirement for minimum allocation to Independent Institutional Investors (see paragraph 334); and the minimum free float requirement (see paragraph 367).[184]

408. We also proposed that:

(a) the "Existing Shareholders Conditions" referred to in the HKEX guidance letter HKEX-GL85-16[185] do not apply to a Specialist Technology Company, such that:

(i) an existing shareholder holding less than 10% of shares[186] in the Specialist Technology Company may subscribe for shares in the IPO as either a cornerstone investor or as a placee.

In the case of subscription as a placee, the applicant and its sponsor must confirm that no preference in allocation was given to the existing shareholder. In the case of subscription as a cornerstone investor, the applicant and its

[183] See Guidance Letter HKEX-GL86-16 (Guide on Producing Simplified Listing Documents Relating to Equity Securities for New Applications) and paragraph 70(f)(ii) of the Guidance Letter.

[184] Paragraph 224 of the Consultation Paper.

[185] Paragraph 4.20 of Guidance Letter HKEX-GL85-16 (Guidance on placing to connected clients, and existing shareholders or their close associates, under the Rules).

[186] The 10% is measured before the IPO.

sponsor must confirm that no preference was given to the existing shareholder other than the preferential treatment of assured entitlement at the IPO price and the terms must be substantially the same as other cornerstone investors; and

(ii) an existing shareholder holding 10% or more of shares in the Specialist Technology Company may subscribe for shares in the IPO as a cornerstone investor; and

(b) where allocations will be made to core connected persons, the Specialist Technology Company must apply for, and the Exchange will ordinarily grant, a related Rule 9.09 waiver, if applicable.

Responses

409. 95% of respondents who commented (61 respondents) supported the proposal referred to in paragraph 407 to allow existing shareholders to subscribe for shares in an IPO[187], while 5% of those who commented (three respondents) did not support it.

410. Of the respondents who supported the proposal referred to in paragraph 407 to allow existing shareholders to subscribe for shares in an IPO, 98% of respondents who commented (57 respondents) supported the conditions referred to in paragraph 408[188], while 2% of those who commented (one respondent) did not support it.

Comments

411. Supporting respondents agreed that participation by the existing shareholders of a Specialist Technology Company in the IPO would demonstrate their ongoing commitment to the future development of, and their confidence in the prospects of, the Specialist Technology Company. They also found the proposal reasonable as it was consistent with the current provisions applicable to Biotech Companies.

412. Most respondents agreed with the proposed conditions for existing shareholders to subscribe for shares in the IPO of a Specialist Technology Company. They noticed that the proposed conditions would protect the interests of independent investors, help provide fair allocation and support the granting of the necessary Rule waivers.

Exchange conclusion

413. In view of the majority support from respondents, we will adopt the proposal with minor amendments to clarify the requirements in relation to an existing shareholder who wishes to exercise a contractual anti-dilution right (if any) to subscribe for shares in the IPO (see paragraph 72 of the Guidance Letter).

[187] Question 39 of the Consultation Paper.

[188] Question 40 of the Consultation Paper.

F. Post-IPO Requirements

I. Post-IPO Lock-ups: Controlling Shareholders

Proposal

414. The Exchange proposed that the Specialist Technology Company securities held by its controlling shareholder be subject to a lock-up period of 12 months (for a Commercial Company) and 24 months (for a Pre-Commercial Company).[189]

Responses

415. 81% of respondents who commented (52 respondents) supported the proposed post-IPO lock-up period on the securities of the controlling shareholders of a Commercial Company[190], while 19% of those who commented (12 respondents) did not support it.

416. 76% of respondents who commented (47 respondents) supported the proposed post-IPO lock-up period on the securities of the controlling shareholders of a Pre-Commercial Company[191], while 24% of those who commented (15 respondents) did not support it.

Comments

417. Respondents who supported the proposal agreed that a longer lock-up period than that currently imposed would give assurance to potential investors that the controlling shareholders are committed to the company's long-term development. They believed this was important for Specialist Technology Companies as they are more likely to be at an early stage of development. These respondents also observed that the proposed lock-up period is less stringent than that imposed by the STAR Market and so put Hong Kong in a competitively advantageous position.

Commercial Companies

418. Of those respondents who did not support the proposal, some suggested applying the existing lock-up restrictions under the current Rules.[192]

Pre-Commercial Companies

419. A number of respondents thought that the 24-month lock-up period proposed for the shares held by the controlling shareholders of Pre-Commercial Companies was too long. Suggestions for shortened lock-up periods ranged from 12 to 18 months.

[189] Paragraph 240 of the Consultation Paper.

[190] Question 41(a) of the Consultation Paper.

[191] Question 41(b) of the Consultation Paper.

[192] Rule 10.07.

420. A few respondents suggested extending the lock-up period for such controlling shareholders to 36 months, or aligning the lock-up period with the timeframe for reaching the Commercialisation Revenue Threshold.

Distinguishing different types of controlling shareholders

421. Some respondents considered that a distinction should be made between a controlling shareholder that is:

(a) **akin to a founder / key person**: in which case a "key person" lock-up period would be justifiable (see paragraphs 426 to 427 below); and

(b) **a passive institutional investor:** who is considered as a controlling shareholder only because of pre-IPO rounds of fundraising or the unwinding of a WVR structure before listing, and who was not involved in an applicant's operations. They believed that such controlling shareholders should only be subject to the usual lock-up restriction.[193]

422. They commented that longer lock-up restrictions could render the requirement impracticable for passive institutional investors to participate in Specialist Technology Companies' fundraising and might discourage certain companies from seeking to list on the Exchange.

Exchange conclusion

423. The Exchange believes that a longer lock-up period should be imposed on the controlling shareholders of Specialist Technology Companies for the reasons we stated in the Consultation Paper and stated by respondents supporting our proposals.

424. The Exchange will apply the lock-up requirements equally to all types of controlling shareholders. This is because the lock-up requirements result from the shareholders' positions of control and the responsibilities that accompany those positions. The circumstances by which a shareholder became a controlling shareholder are not relevant to the imposition of such lock-up. We also note that it is rare for a passive institutional investor to become a controlling shareholder of a Specialist Technology Company.

425. In view of the majority support from respondents, we will adopt the proposal with a consequential amendment to reflect how Note 3 to Rule 10.07(2) would apply to the controlling shareholder(s) of a Pre-Commercial Company (see Rule 18C.13(3)).

[193] Rule 10.07.

II. Post-IPO Lock-ups: Key Persons

Proposals

426. The Exchange proposed that the following key persons be subject to a restriction on the disposal of their holdings after listing:[194]

(a) founders;

(b) beneficiaries of weighted voting rights;

(c) executive directors and senior management; and

(d) key personnel responsible for the Specialist Technology Company's technical operations and/or the R&D of its Specialist Technology Product(s) (including the head and the key personnel of its R&D department) whose expertise is primarily relied upon by the company for the development of its Specialist Technology Product(s), and the lead developer(s) of the core technologies in relation to the Specialist Technology Product(s).

427. We proposed that these persons and their close associates be subject to a restriction on the disposal of their holdings in the Specialist Technology Company following its listing of 12 months (for a Commercial Company) and 24 months (for a Pre-Commercial Company).[195]

Responses

428. 82% of respondents who commented (53 respondents) supported the proposed scope of key persons referred to in paragraph 426[196], while 18% of those who commented (12 respondents) did not support it.

429. Of the respondents who supported the proposed scope of key persons referred to in paragraph 426:

(a) 90% of respondents who commented (44 respondents) supported the proposed post-IPO lock-up period on the securities of such key persons and their close associates for a Commercial Company[197], while 10% of those who commented (five respondents) did not support it.

[194] Paragraph 242 of the Consultation Paper.

[195] Paragraph 243 of the Consultation Paper.

[196] Question 42 of the Consultation Paper.

[197] Question 43(a) of the Consultation Paper.

(b) 88% of respondents who commented (42 respondents) supported the proposed post-IPO lock-up period on the securities of such key persons and their close associates for a Pre-Commercial Company [198], while 13% of those who commented (six respondents) did not support it.

Comments

Scope of key persons

430. A majority of respondents supported the proposal, stating that the persons subject to lock-ups are those whose ongoing commitment to an issuer is beneficial to the issuer's development and future prospects.

Key Technical and R&D Personnel

431. A number of respondents objected to the proposed lock-up requirement on key R&D and technical personnel (see paragraph 426(d)) ("**Key Technical and R&D Personnel**") as they were concerned that:

(a) the scope of Key Technical and R&D Personnel could be broad. It could be difficult for a listing applicant to identify and confirm a complete list of persons that should be subject to lock-ups. This is because staff engaging in R&D and technical operations often make up a large portion of all employees in a Specialist Technology Company;

(b) equity-based compensation (e.g. share award schemes) is often a key mechanism used by Specialist Technology Companies to attract and retain talent, given their limited cash resources. The proposed lock-up requirement would negatively affect their ability to recruit and retain key technical personnel, which would put them at a competitive disadvantage, particularly in niche industries.

These respondents believed that the proposed requirement may also give rise to the unintended effect of incentivising an applicant's key persons to resign before the company's IPO application to circumvent the lock-up requirement; and

(c) Key Technical and R&D Personnel normally do not hold a substantial interest in a Specialist Technology Company. Those that hold substantial stakes would likely be subject to a lock-up for other reasons (e.g. as a controlling shareholder; founder; or voluntarily as requested by underwriters to prevent an excessive amount of selling activity immediately after an IPO).

432. To overcome the potential uncertainty, some respondents suggested that the Exchange specify that only the core management personnel subject to the management continuity requirement who are responsible for R&D (such as the Chief Technology Officer or the head of research department) should be subject to lock-ups.

[198] Question 43(b) of the Consultation Paper.

Senior management

433. Some respondents also suggested removing "senior management" from the definition of "key person". They were concerned that the scope of "senior management" is too broad and the lock-up requirement may negatively impact personnel recruitment and retention. These respondents suggested a narrower definition (e.g. setting a minimum shareholding requirement below which senior management personnel would not be subject to a lock-up) or removing them from the lock-up requirement. They thought that underwriters and listing applicants should be free to decide lock-ups on senior management holdings on a commercial basis.

Length of lock-up period

434. A majority of respondents supported the lock-up periods required for the key persons for both Commercial Companies and Pre-Commercial Companies. They commented that the periods were reasonably long to not only help align key persons' interests with those of other shareholders throughout the lock-up period, but also demonstrate their confidence in an applicant's prospects for a foreseeable period after listing.

435. Some opposing respondents suggested shortening the lock-up periods as follows:

    (a) For Commercial Companies: six months.

    (b) For Pre-Commercial Companies: suggestions ranged from six to 18 months.

436. Two respondents suggested extending the lock-up periods to 36 months.

Exchange conclusion

Key Technical and R&D Personnel

437. We do not agree that the lock-up requirement will significantly affect the ability of Specialist Technology Companies to attract and retain talent. The prospect of an IPO that provides Key Technical and R&D Personnel with an ability to sell some or all of their shareholdings (after the lock-up period has ended) for very significant gains (bearing in mind the relatively large market capitalisation at which the company is listed), as an incentive, should greatly outweigh the temporary inconvenience of the lock-up itself.

438. The Guidance Letter has provided illustrative examples of the Key Technical and R&D Personnel. In determining whether a person should be designated as a Key Technical and R&D Personnel, an applicant should consider factors including the shareholding of such personnel, his/her remuneration relative to other R&D staff, and his/her seniority. We have amended the Guidance Letter (see paragraph 76 of the Guidance Letter) to clarify this accordingly.

439. The Exchange retains the right to deem any person to be a "key person" based on the facts and circumstances of an individual case. An applicant would be able to provide evidence to substantiate its view that any particular person should not be deemed as a "key person".

440. The purpose of the lock-up requirement on Key Technical and R&D Personnel is to help ensure that the Specialist Technology Companies listed on the Exchange are those with Key Technical and R&D Personnel who are confident of their employer's prospects, based on their knowledge of the technical capabilities of the Specialist Technology Product(s) that they have helped develop. The Exchange may question the suitability for listing of an applicant if one or more of their Key Technical and R&D Personnel resign prior to its listing application to avoid a lock-up, as the capabilities of the applicant's technology may consequently be put into question by those who know it best.

441. The purpose of the lock-up requirement on Key Technical and R&D Personnel is different from that of the lock-up requirement on senior management. As stated above, imposing lock-up restrictions on the holdings of Key Technical and R&D Personnel helps support an applicant's claims regarding the technical capabilities of its Specialist Technology Product(s). In contrast, imposing lock-up restrictions on the holdings of senior management is to help support the information stated in the applicant's Listing Document regarding the applicant's financial position and prospects. Consequently, limiting the lock-up requirements to senior management would not achieve the Exchange's regulatory aims.

Senior management

442. The Exchange would like to clarify that "senior management" refers to the persons identified in the senior management section in the Listing Document. The Exchange expects, in accordance with the existing Rule requirement, the directors of an applicant to determine which individual(s) constitute senior management. Senior management may include directors of subsidiaries; heads of divisions, departments or other operating units within the group as, in the opinion of the applicant's directors, is appropriate[199].

Length of lock-up period

443. We note the majority support for the length of the lock-up periods proposed.

444. In view of the majority support from respondents, we will adopt the proposals regarding lock-ups on the holdings of "key persons", with the clarifications referred to in paragraph 438 (see paragraph 76 of the Guidance Letter) and some drafting comments (see Rule 18C.14) incorporated for consistency with Rule 10.07.

III. Post-IPO Lock-ups: Pre-IPO Investors

Proposal

445. The Exchange proposed that Pathfinder SIIs be subject to a post-IPO lock-up of six months (for a Commercial Company) and 12 months (for a Pre-Commercial Company).[200]

[199] Paragraph 12.1 of Appendix 16 to the Listing Rules.

[200] Paragraph 247 of the Consultation Paper.

Responses

446. 80% of respondents who commented (52 respondents) supported the proposed post-IPO lock-up period on the securities of the Pathfinder SIIs of a Commercial Company[201], while 20% of those who commented (13 respondents) did not support it.

447. 73% of respondents who commented (45 respondents) supported the proposed post-IPO lock-up period on the securities of the Pathfinder SIIs of a Pre-Commercial Company[202], while 27% of those who commented (17 respondents) did not support it.

Comments

448. The majority of respondents supported imposing a lock-up on Pathfinder SIIs.

449. A number of respondents were of the view that Pathfinder SIIs should not be subject to any lock-up restriction, citing one or more of the following reasons:

(a) this would cause practical difficulties as Pathfinder SIIs are generally private equity or venture capital funds and would need to realise their investments within a fixed timetable that is dictated by the terms of these funds;

(b) this would discourage investors from becoming Pathfinder SIIs, or these investors would seek a discount on their investment because of the lock-up requirement, hence making it more difficult for issuers to raise pre-IPO funding;

(c) the lock-up will dissuade pre-IPO investors from being categorised as Pathfinder SIIs;

(d) companies may prefer to list on other exchanges that do not impose such disposal restriction; and

(e) a regulatory lock-up on investors is unnecessary as pre-IPO investors are normally subject to a voluntary lock-up of six months already.

450. A number of respondents agreed with the proposed length of the lock-up period for Commercial Companies but did not support the length of the lock-up period for Pre-Commercial Companies. They were of the view a 12-month period was too long. Alternative suggestions ranged from six to nine months, or 12 months but with the flexibility to dispose of a portion of the holdings in the second six-month period.

[201] Question 44(a) of the Consultation Paper.

[202] Question 44(b) of the Consultation Paper.

Exchange conclusion

451. We disagree that the proposed lock-up on the holdings of Pathfinder SIIs will discourage investment or put the Exchange at a competitive disadvantage to other exchanges. As stated by the respondents, pre-IPO investors are often subject to lock-ups voluntarily at the time of an IPO and so are mindful of this possibility when making their investments. As stated in the Consultation Paper, all shares issued prior to an IPO on the STAR Market, for example, are generally subject to a one-year lock-up period from listing.[203]

452. We have provided additional flexibility on the minimum investment benchmarks for the Pathfinder SIIs (see Section B(XI) above) and clarified that the lock-up requirement will only be applicable to the pre-IPO investor(s) identified as Pathfinder SII(s) (see paragraph 81 of the Guidance Letter). If an applicant has more than the required number of Sophisticated Independent Investors that meet the minimum investment benchmarks for Pathfinder SIIs, the applicant would be free to decide, on a commercial basis, which of these investor(s) would be designated as Pathfinder SII(s), who will then be subject to lock-ups.

453. The Exchange believes that this would not cause undue difficulties, because as stated in the Consultation Paper[204], it is not uncommon that underwriters would also request appropriate lock-ups from different shareholders (including pre-IPO investors) depending on the needs of the relevant IPO, which also sometimes results in different lock-up periods or staggered periods with volume limitations for different shareholders.

454. In view of the majority support for our proposal on lock-ups for Pathfinder SIIs, we will adopt the proposal with the clarifications referred to in paragraph 452.

IV. Post-IPO Lock-ups: Securities Subject to Lock-up

Proposal

455. The Exchange proposed that, with regards to shareholders subject to lock-up requirements (and consistent with current requirements for controlling shareholders[205]):[206]

(a) only the securities in respect of which such persons are shown by the Listing Document to be the beneficial owner(s) would be subject to lock-ups;

(b) they would not be restricted from disposing of their shares prior to listing or offering them for sale as part of the IPO, i.e. only the securities retained by them after listing would be subject to the lock-up restrictions; and

[203] Paragraph 235 of the Consultation Paper.

[204] Paragraph 238 of the Consultation Paper.

[205] See Rule 10.07(1) and Note 1 to Rule 10.07.

[206] Paragraph 249 of the Consultation Paper.

(c) shareholders subject to a lock-up would be able to purchase additional securities in the IPO and dispose of them during the lock-up period, subject to the issuer's compliance with requirements to maintain an open market in the securities and a sufficient public float.[207] Additional securities purchased in the IPO would be subject to the limitations on "double dipping" (see paragraphs 407 to 408).

Responses

456. 90% of respondents who commented (55 respondents) supported this proposal[208], while 10% of those who commented (six respondents) did not support it.

Comments

457. A majority of respondents supported the proposal as it is consistent with the current provisions in the Listing Rules governing controlling shareholders.[209] Supporting respondents stated that existing shareholders should be given the chance to recoup some of their investments according to their own financing needs or as driven by their fund mandates, and it is noted that such disposal would be disclosed in the Listing Document. This arrangement could also mitigate potential post lock-up selling pressure.

458. A few respondents objected to the proposal. They believed that controlling shareholders, key persons and Pathfinder SIIs subject to lock-up should demonstrate continuous commitment to and confidence in a company, and therefore should not be permitted to sell down their shareholdings at the IPO.

Exchange conclusion

459. In view of the majority support from respondents, we will adopt the proposal.

V. Post-IPO Lock-ups: Deemed Disposal of Securities

Proposal

460. The Exchange proposed that any deemed disposal of securities by a person resulting from the allotment, grant or issue of new securities by a Specialist Technology Company during a lock-up period would not be regarded as a breach of the lock-up restrictions.[210]

[207] Rule 8.08.

[208] Question 45 of the Consultation Paper.

[209] Rule 10.07(1).

[210] Paragraph 255 of the Consultation Paper.

Responses

461. 97% of respondents who commented (60 respondents) supported this proposal[211], while 3% of those who commented (two respondents) did not support it.

Comments

462. A majority of respondents supported the proposal. They believed that this would allow expedient fundraising and issuance of new shares after listing for fast growing businesses. They thought that a deemed disposal of securities by a person resulting from the allotment, grant or issue of new securities would be out of the control of the person concerned, and should not mean the person had liquidated their position. It therefore should not constitute a breach of the lock-up requirements by that person.

Exchange conclusion

463. In view of the majority support from respondents, we will adopt the proposal.

VI. Post-IPO Lock-ups: Lock-up Period Upon Removal of Designation as a Pre-Commercial Company

Proposal

464. The Exchange proposed that any lock-up period in effect as at the time of the removal of designation as a Pre-Commercial Company would continue to apply unchanged.[212]

Responses

465. 76% of respondents who commented (45 respondents) supported this proposal[213], while 24% of those who commented (14 respondents) did not support it.

Comments

466. A number of respondents who supported the proposal commented that they did so on the basis that investors should be able to rely on the lock-up periods as disclosed in a Listing Document.

[211] Question 46 of the Consultation Paper.

[212] Paragraph 256 of the Consultation Paper.

[213] Question 47 of the Consultation Paper.

467. A relatively large minority of respondents objected to the proposal for reasons that included the following:

(a) a company that has successfully commercialised its Specialist Technology Product(s) should be subject to the same set of requirements that are applicable to Commercial Companies. The proposal could provide a dis-incentive for Pre-Commercial Companies to work towards commercialisation;

(b) public investors' expectations of a Pre-Commercial Company would have been met once the company achieves the Commercialisation Revenue Threshold, so the longer lock-up period for Pre-Commercial Companies is no longer necessary; and

(c) dis-continuing the longer lock-up period would be consistent with the cessation of application of other continuing obligations imposed on Pre-Commercial Companies.

468. Some of the opposing respondents suggested that if a Pre-Commercial Company achieved the Commercialisation Revenue Threshold, the lock-up periods could be shortened to end on the later of: (a) the date on which such lock-up period would end, had the listing applicant applied for listing as a Commercial Company; and (b) the date falling on a fixed period of time (e.g. 30 days) after the removal of designation as a Pre-Commercial Company. Investors could be informed of this arrangement by disclosure in the Listing Document and in the announcement on the removal of designation as a Pre-Commercial Company.

Exchange conclusion

469. Having considered respondents' feedback, we will modify the requirement to state that if a Pre-Commercial Company achieves the Commercialisation Revenue Threshold, the lock-up periods would be shortened to end on the later of: (a) the date on which such lock-up periods would have ended if the issuer had applied for listing as a Commercial Company; and (b) the date falling on the 30th day after the announcement on the removal of designation as a Pre-Commercial Company (see Note 2 to Rule 18C.23).

470. This amendment should help ensure that companies that are close to achieving the Commercialisation Revenue Threshold at the time of their listing are not deterred from applying to list under the Specialist Technology Regime by our lock-up requirements for Pre-Commercial Companies.

471. A Pre-Commercial Company should disclose such potential shortening of the lock-up period in its Listing Document (see paragraph 70(m)(v) of the Guidance Letter). The revised lock-up period should also be disclosed in the announcement on the removal of designation as a Pre-Commercial Company (see Section F(XII) and Rule 18C.24).

VII. Disclosure of Shareholding at Listing and on an Ongoing Basis

Proposal

472. The Exchange proposed that a Specialist Technology Company must disclose in its Listing Document the total number of securities in the issuer held by the persons (as identified in the Listing Document) subject to the lock-up requirements under the Listing Rules, and that the same information must also be disclosed in the interim and annual reports of the Specialist Technology Company for so long as such persons remain as a shareholder.[214]

Responses

473. 95% of respondents who commented (58 respondents) supported this proposal[215], while 5% of those who commented (three respondents) did not support it.

Comments

474. A majority of respondents supported the proposal. Many respondents agreed that the disclosure requirement would provide useful information to investors on the interests held by key shareholders (i.e. persons originally subject to lock-up) on an ongoing basis to assess whether they are continuing to demonstrate commitment to, and confidence in, a Specialist Technology Company's prospects.

475. Some respondents agreed with the proposed disclosure in the Listing Document but opposed the ongoing disclosure requirement. They were of the view that the existing reporting obligations under Part XV of the SFO, which already govern substantial shareholders, directors and chief executives, would be sufficient to provide investors with material shareholding information on a timely basis. They did not consider it necessary to require issuers to disclose the interests held by all the persons that are subject to the lock-up requirements.

476. Some opposing respondents were concerned that, as some of the persons subject to a lock-up are not obliged to report their positions under Part XV of the SFO, an issuer may have to seek confirmations with such persons. This may be difficult as some may no longer be employed by the issuer and may not cooperate with it to report the number of shares they hold for disclosure in interim and annual reports.

Exchange conclusion

477. In response to some respondents' concerns regarding an issuer's ability to report the positions of persons that are not subject to Part XV of the SFO, we have clarified that the issuer should make the disclosure of these positions based on information that is publicly available to the listed issuer or otherwise within the knowledge of its directors as at the latest practicable date (see Rule 18C.18). A Specialist Technology Company must disclose the

[214] Paragraph 257 of the Consultation Paper.

[215] Question 48 of the Consultation Paper.

shareholding held by such persons who are employed by the company, as such information is expected to be within the knowledge of its directors (see paragraph 83 of the Guidance Letter).

478. In view of the majority support from respondents, we will adopt the proposal, with the clarification as set out in paragraph 477 above.

Disciplinary jurisdiction

479. We have taken the opportunity to amend the Rules to add "key persons" and Pathfinder SIIs who are subject to the lock-up obligations of the Specialist Technology Regime to the list of persons against whom the Exchange may bring disciplinary actions (see the amendment to Rule 2A.09(1) in **Appendix IV** to this paper). This consequential amendment is made to ensure that such persons, being parties with obligations under the Listing Rules, can be exposed to regulatory consequences if they breach our lock-up requirements.

VIII. Ongoing Disclosure Requirements for Pre-Commercial Companies

Proposals

480. The Exchange proposed that a Pre-Commercial Company include in its interim and annual reports details of its R&D activities and commercialisation progress during the period under review, including the following: [216]

(a) details of the development progress of its Specialist Technology Product(s) under development;

(b) the timeframe for, and any progress made towards, achieving the Commercialisation Revenue Threshold, including updates on the amount of contract value realised and/or realisable in respect of the agreements with customers, as previously disclosed to demonstrate its path to achieving such threshold in its Listing Document or any subsequent update as published by the Pre-Commercial Company;

(c) updates on any revenue, profit and other business and financial estimates as provided in the Listing Document and any subsequent updates to those estimates as published by the Pre-Commercial Company;

(d) a summary of its R&D expenditure during the relevant period; and

(e) a prominently disclosed warning that the company may not achieve the Commercialisation Revenue Threshold.

481. We also proposed that the details to be provided by a Pre-Commercial Company under the ongoing disclosure requirement should be consistent with those disclosed in its Listing Document. This means that the Pre-Commercial Company should adopt the same milestones and metrics used, with information presented in substantially the same format

[216] Paragraph 262 of the Consultation Paper.

as the information disclosed in the Listing Document, to enable its shareholders and potential investors to assess how well the company is adhering to its intentions as disclosed in its Listing Document.[217]

Responses

482. 94% of respondents who commented (58 respondents) supported the proposed disclosure requirements referred to in paragraphs 480 and 481[218], while 6% of those who commented (four respondents) did not support them.

483. 92% of respondents who commented (57 respondents) supported the proposal that only Pre-Commercial Companies should be subject to the disclosure requirements referred to in paragraphs 480 and 481[219], while 8% of those who commented (five respondents) did not support them.

Comments

484. A majority of respondents supported the proposal. They generally agreed that the continuing disclosure would enable an issuer's shareholders and potential investors to assess how well the company is adhering to its intentions as disclosed in its Listing Document, and such requirement is consistent with the existing regime for Biotech Companies.

485. Some respondents suggested including updates on the use of proceeds in an issuer's interim report (in addition to the proposed requirement for disclosure in the annual report).

486. A few respondents believed that Commercial Companies should also be subject to the proposed requirements as they were of the view that the risk profiles for Commercial Companies and Pre-Commercial Companies are similar.

Exchange conclusion

487. As in the case of other Main Board issuers, Specialist Technology Companies are required to comply with the existing Listing Rule requirements and guidance on the disclosure of the use of proceeds, including those required to be disclosed in annual and interim reports[220] and in relation to a material change in the use of proceeds not previously disclosed in the Listing Document. In the case of any such material change, a Specialist Technology

[217] Paragraph 263 of the Consultation Paper.

[218] Question 49 of the Consultation Paper.

[219] Question 50 of the Consultation Paper.

[220] Paragraphs 11(8) (for annual report) and 41A (for interim report) of Appendix 16 of the Listing Rules.

Company, as with other issuers, must make an announcement to notify investors of the change after listing as this is generally regarded as price sensitive information.[221]

488. As we stated in the Consultation Paper[222], investment in the securities of Pre-Commercial Companies carries additional risks. For this reason and as a majority of the respondents were of the view that only Pre-Commercial Companies should be subject to these ongoing disclosure requirements (see also paragraph 516 below), we will adopt the proposal only for these companies.

489. As a Pre-Commercial Company may have demonstrated its path to achieving the Commercial Revenue Threshold in ways other than disclosure relating to contract value realised and/or realisable in respect of the agreements with customers (see paragraphs 276 to 281), we have amended the relevant updates requirement (as referred to in paragraph 480(b)) to instead refer to "updates on the information previously disclosed" (see Rule 18C.19(2)).

490. In view of the majority support from respondents, we will adopt the proposal as set out in the Consultation Paper with the amendment referred to in paragraph 489.

IX. Sufficiency of Operations and Assets and Delisting Process

Proposal

491. The Exchange proposed that Pre-Commercial Companies should be subject to a remedial period of 12 months to re-comply with the sufficiency of operations and assets requirement before delisting, in the event that the Exchange considers that a Pre-Commercial Company has failed to meet its continuing obligation to maintain sufficient operations or assets.[223]

Responses

492. 85% of respondents who commented (51 respondents) supported the proposal on sufficiency of operations and assets and delisting process as referred to in paragraph 491[224], while 15% of those who commented (nine respondents) did not support it.

Comments

493. A majority of the respondents supported the proposal on sufficiency of operations and assets and delisting process as referred to in paragraph 491.

[221] Paragraph 3.13 of Section I in Appendix 1 of Guidance Letter HKEX-GL86-16 (Guide on Producing Simplified Listing Documents Relating to Equity Securities for New Applications).

[222] Paragraphs 66 to 68 of the Consultation Paper.

[223] Paragraph 266(a) of the Consultation Paper.

[224] Question 51 of the Consultation Paper.

494. Some respondents objected to this proposal as they were concerned that the length of the remedial period was too short and believed that there should be some flexibility to accommodate circumstances where remedial actions take longer than 12 months. They cited the example of a Pre-Commercial Company that falls into difficulties due to an unexpected event beyond their control, and stated that the Exchange should consider providing a longer remedial period on a case-by-case basis.

495. Some respondents suggested applying the usual 18-month period that is applied to other issuers, given the potential complexity of resolving Specialist Technology related issues.

Exchange conclusion

496. Given the heightened risk of corporate failure for Pre-Commercial Companies[225], the Exchange is of the view that our Consultation Paper proposal for a shorter remedial period should be imposed. We will assess the merits of any request for an extension of the remedial period on a case-by-case basis in accordance with our existing procedures[226].

497. In view of the majority support from respondents, we will adopt the proposal.

X. Material Change of Business

Proposal

498. The Exchange proposed that Pre-Commercial Companies must not effect any transaction that would result in a fundamental change to their principal business without the prior consent of the Exchange.[227]

Responses

499. 94% of respondents who commented (59 respondents) supported this proposal[228], while 6% of those who commented (four respondents) did not support it.

Comments

500. A majority of respondents supported the proposal. Some respondents observed that this requirement is in line with the approach adopted for Chapter 18A companies, and stated that the Specialist Technology Regime allowed Pre-Commercial Companies to list based on their plans to bring the particular Specialist Technology Product(s) to commercialisation. Therefore, a Pre-Commercial Company must obtain the Exchange's consent if there was to be a fundamental change to its business.

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[225] Paragraphs 67 to 68 of the Consultation Paper.

[226] See Section IV (Extension of Remedial Period) of Guidance Letter HKEX-GL95-18 (Guidance on long suspension and delisting).

[227] Paragraph 266(b) of the Consultation Paper.

[228] Question 52 of the Consultation Paper.

501. Among the opposing respondents, some believed that a Pre-Commercial Company should be allowed to switch its focus to a new Specialist Technology Product given the fast-changing nature of Specialist Technology Industries. One respondent suggested that the Exchange consider clarifying that the proposed Rule is not intended to preclude Pre-Commercial Companies from engaging in merger and acquisition activities that such companies considered may be in the best interests of their shareholders. Acquisitions of companies to enlarge product pipelines or integrate key technologies were quoted as examples of such activities.

Exchange conclusion

502. The proposed requirement is not intended to restrict legitimate business development. Similar to the approach taken for Biotech Companies[229], prior consent will normally be given if the Specialist Technology Company can demonstrate to the Exchange's satisfaction that it is engaging in a legitimate business expansion or diversification that forms part of its business strategies.

503. An acquisition by a Specialist Technology Company of a company to enlarge its product pipelines, or to integrate key technologies, is unlikely to be regarded by the Exchange as one that would result in a fundamental change to the issuer's principal business.

504. In view of the majority support from respondents, we will adopt the proposal.

XI. Stock Marker

Proposal

505. The Exchange proposed that Pre-Commercial Companies be prominently identified through a "PC" marker at the end of their stock short names.[230]

Responses

506. 98% of respondents who commented (61 respondents) supported this proposal[231], while 2% of those who commented (one respondent) did not support it.

Comments

507. A majority of respondents supported the proposal. Some commented that adding a stock marker at the end of the stock names of Pre-Commercial Companies would remind the investing public of the underlying risks associated with such companies. They also thought that this approach would be consistent with that adopted by the Exchange with respect to

[229] Paragraph 88 of the Consultation Paper on a Listing Regime for Companies from Emerging and Innovative Sectors .

[230] Paragraph 266(c) of the Consultation Paper.

[231] Question 53 of the Consultation Paper.

Biotech Companies (under Rule 18A.11) and issuers with a WVR structure (under Rule 8A.42).

Exchange conclusion

508. The Exchange has decided to change the stock marker from "PC" to "P" to reserve more space for a company's name in the stock short name[232].

509. In view of the majority support from respondents, we will adopt the proposal with the amendment referred to in paragraph 508.

XII. Removal of Designation as Pre-Commercial Companies

Proposal

510. The Exchange proposed the following process that would need to be followed by a Pre-Commercial Company wishing to be regarded as a Commercial Company[233]:

(a) it must make an application to the Exchange for that purpose.

(b) It must provide the Exchange with published audited financial statements in support of its application demonstrating that:

(i) for its most recent audited financial year, it has met the Commercialisation Revenue Threshold; or

(ii) as a result of its operations as a whole, it has met at least one of the Main Board Eligibility Tests (including the track record period requirements of those tests).

(c) Upon notification by the Exchange confirming that an issuer will no longer be regarded as a Pre-Commercial Company, the issuer must publish an announcement.

(d) At that time, the Exchange will remove the stock marker (see Section F(XI)) from the stock short name of the company.

Responses

511. 97% of respondents who commented (60 respondents) supported this proposal[234], while 3% of those who commented (two respondents) did not support it.

[232] The current limit of the stock short name is 8 characters/ symbols in Chinese and 15 letters/ symbols in English. See Naming Convention of Stock Short Name on the Exchange's website (link).

[233] Paragraphs 269 to 272 of the Consultation Paper.

[234] Question 55 of the Consultation Paper.

Comments

512. A majority of respondents supported the proposal. They were of the view that the audited financial statements would provide sufficient assurance that a company has met the Commercialisation Revenue Threshold or one of the Main Board Eligibility Tests, and this would not be unduly burdensome.

Exchange conclusion

513. In view of the majority support from respondents, we will adopt the proposal with the corresponding amendment made to require the disclosure of the revised lock-up periods applicable to the relevant shareholders of a Pre-Commercial Company (see paragraph 471) in the announcement referred to in paragraph 510(c) (see Rule 18C.24).

XIII. Cessation of Application of Continuing Obligations

Proposal

514. The Exchange proposed that the continuing obligations for Pre-Commercial Companies would no longer apply once a Pre-Commercial Company has met the requirements proposed in the Consultation Paper and ceases to be regarded as a Pre-Commercial Company.[235]

Responses

515. 98% of respondents who commented (61 respondents) supported this proposal[236], while 2% of those who commented (one respondent) did not support it.

Comments

516. A majority of respondents supported the proposal. They agreed that the additional continuing obligations should cease to apply when a Pre-Commercial Company has achieved the Commercialisation Revenue Threshold or when it has met at least one of the Main Board Eligibility Tests.

Exchange conclusion

517. In view of the majority support from respondents, we will adopt the proposal.

[235] Paragraph 267 of the Consultation Paper.

[236] Question 54 of the Consultation Paper.

DEFINITIONS

TERM	DEFINITION
"2018 Listing Reforms"	the changes to the Listing Rules that were implemented in April 2018
"Aggregate Investment Benchmark"	the aggregate investment benchmark for the investment from all Sophisticated Independent Investors at the time of listing (see Section B(XI) and paragraph 37(b) of the Guidance Letter)
"Alternative Tests"	the Market Capitalisation / Revenue / Cash Flow Test and the Market Capitalisation / Revenue Test
"AUM"	assets under management
"Biotech Company"	as defined in Rule 18A.01 and which are listed or seeking to list under Chapter 18A of the Listing Rules
"CAGR"	compound annual growth rate
"**Clawback Mechanism**"	the mechanism of reallocation of securities from the placing tranche to the public subscription tranche of an IPO based on the level of demand in the subscription tranche
"Commercial Company"	a Specialist Technology Company that has met the Commercialisation Revenue Threshold at the time of listing
"Commercialisation Revenue Threshold"	the minimum revenue threshold for a Commercial Company, being HK$250 million for the most recent audited financial year arising from the Company's Specialist Technology business segment
"Competent Authority"	as defined in Rule 18A.01
"Consultation Paper"	the Consultation Paper on a Listing Regime for Specialist Technology Companies (link)
"Conclusions Paper"	Conclusions to the Consultation Paper (i.e. this paper)
"De-SPAC Target"	as defined in Rule 18B.01
"De-SPAC Transaction"	as defined in Rule 18B.01
"Exchange" or "SEHK"	the Stock Exchange of Hong Kong Limited, a wholly owned subsidiary of HKEX
"FCA"	the Financial Conduct Authority in the UK
"FCA Discussion Paper"	the discussion paper titled "Primary Markets Effectiveness Review: Feedback to the discussion of the purpose of the listing regime and further discussion" (DP22/2) published by the FCA in May 2022

TERM	DEFINITION
"Guidance Letter"	Guidance Letter for Specialist Technology Companies as set out in **Appendix V** to this paper
"HKEX"	Hong Kong Exchanges and Clearing Limited
"INED"	Independent non-executive director
"**Independent Institutional Investors**"	Institutional Professional Investors that participate in the placing tranche of an IPO (whether as cornerstone investor or otherwise), excluding existing shareholders and any of their close associates, and core connected persons of the applicant
"**Independent Price Setting Investor**"	comprising (a) Institutional Professional Investors and (b) other types of investors with AUM, fund size or investment portfolio size of at least HK$1 billion, who participate in the placing tranche of an IPO (whether as cornerstone investor or otherwise), excluding existing shareholders and any of their close associates, and core connected persons of the applicant
"Ineligible Sample Cohort"	issuers in the Sample Cohort which would have not been able to meet the Main Board Eligibility Tests, based on their respective market capitalisation and the latest audited financial results at the time of listing
"**Institutional Professional Investors**"	persons falling under paragraphs (a) to (i) of the definition of "professional investor" in Section 1 of Part 1 of Schedule 1 to the SFO (see Table 8 on page 88 of the Consultation Paper) *Note: For the avoidance of doubt, corporate professional investors and individual professional investors (see Note to Table 8 on page 89 of the Consultation Paper) shall not be recognised as Institutional Professional Investors.*
"IPO"	an initial public offering
"Listing Document"	a prospectus, a circular or any equivalent document (including a scheme of arrangement and introduction document) issued or proposed to be issued in connection with an application for listing
"Listing Rules" or "Rules"	the Rules Governing the Listing of Securities on the Exchange
"LSE"	London Stock Exchange plc
"Main Board Eligibility Tests"	the financial eligibility requirements of the Main Board, being: (a) Rule 8.05(1) (the Profit Test); (b) Rule 8.05(2) (the Market Capitalisation / Revenue / Cash Flow Test); and (c) Rule 8.05(3) (the Market Capitalisation / Revenue Test) of the Listing Rules
"Main Board"	the main board of the SEHK

TERM	DEFINITION
"Mainland China"	for the purpose of this paper, means the People's Republic of China, other than the regions of Hong Kong, Macau and Taiwan
"Market Capitalisation / Revenue / Cash Flow Test"	the market capitalisation / revenue / cash flow test as defined in Rule 8.05(2)
"Market Capitalisation / Revenue Test"	the market capitalisation / revenue test as defined in Rule 8.05(3)
"NASDAQ"	the NASDAQ Stock Market
"NYSE"	the New York Stock Exchange LLC
"Pathfinder SIIs"	Sophisticated Independent Investors that have invested at least 12 months before the date of the listing application of a Specialist Technology Company
"Placing Guidelines"	Placing Guidelines for Equity Securities, Appendix 6 to the Listing Rules
"PN18"	Practice Note 18 (*Initial Public Offer of Securities*) of the Listing Rules
"PRC"	the People's Republic of China
"PRC issuer"	as defined in rule 19A.04
"Pre-Commercial Company"	a Specialist Technology Company that has not yet met the Commercialisation Revenue Threshold at the time of listing
"Profit Test"	the profit test as defined in Rule 8.05(1)
"R&D"	research and development
"Recognised Stock Exchange"	as defined in Rule 1.01
"Sample Cohort"	507 Specialist Technology Issuers listed in the US and Mainland China between January 2019 and March 2022 identified by the Exchange for research and analysis (see Appendix III of the Consultation Paper for the analysis and selection methodology)
"SFC"	the Securities and Futures Commission
"SFO"	Securities and Futures Ordinance (Cap. 571)
"SFO PI Rules"	Securities and Futures (Professional Investor) Rules (Cap. 571D)
"SGX"	the Singapore Exchange Limited
"**Sophisticated Independent Investor**"	third party investors referred to in paragraphs 28 to 35 in the Guidance Letter

TERM	DEFINITION
"Specialist Technology"	science and/or technology applied to products and/or services within an acceptable sector of a Specialist Technology Industry
"Specialist Technology Company"	a company primarily engaged (whether directly or through its subsidiaries) in the research and development of, and the commercialisation and/or sales of, Specialist Technology Product(s) within an acceptable sector of a Specialist Technology Industry
"Specialist Technology Industries"	industries considered to be within the scope of the Specialist Technology Regime and updated from time to time. The initial Specialist Technology Industries (see paragraph 7 of the Guidance Letter) comprise the following: (a) next-generation information technology; (b) advanced hardware and software; (c) advanced materials; (d) new energy and environmental protection; and (e) new food and agriculture technologies.
"Specialist Technology Issuers"	companies (a) currently listed in the US, Mainland China and Hong Kong as of 30 April 2022; and (b) primarily engaged in one or more acceptable sectors set out in second column of Table 9 on page 90 of the Consultation Paper at the time of listing (see Appendix III of the Consultation Paper for the selection methodology)
"Specialist Technology Product"	the product and/or service (alone or together with other products or services) that applies Specialist Technology
"Specialist Technology Regime"	the listing regime under which a Specialist Technology Company could apply to list on the Exchange under Chapter 18C of the Listing Rules
"STAR Market"	the Shanghai Stock Exchange Science and Technology Innovation Board
"STAR Market Rules"	Rules Governing the Listing of Stocks on the Science and Technology Innovation Board of Shanghai Stock Exchange (Revised in 2020) (Simplified Chinese version only)
"Successor Company"	as defined in Rule 18B.01
"UK"	the United Kingdom
"US"	the United States of America
"WVR"	weighted voting rights as defined in Rule 8A.02
"WVR structure"	a structure of an issuer that results in WVR

APPENDIX I: LIST OF RESPONDENTS

Named Respondents

Accounting Firms
Deloitte Touche Tohmatsu
Ernst & Young
KPMG
PricewaterhouseCoopers
Corporate Finance Firms / Banks
Black Spade Capital Limited
CCB International Capital Limited
Charltons for and on behalf of Alliance Capital Partners Limited, Altus Capital Limited, Anglo Chinese Corporate Finance, Limited, Asian Capital Limited, Frontpage Capital Limited, Huajin Corporate Finance (International) Limited, Lego Corporate Finance Limited, Oriental Patron Asia Limited and Yu Ming Investment Management Limited
China International Capital Corporation Hong Kong Securities Limited
China Merchants Securities (HK) Co., Limited
J.P. Morgan
Tian Yuan Law Firm LLP for and on behalf of BOCOM International (Asia) Limited
Tian Yuan Law Firm LLP for and on behalf of China Securities (International) Corporate Finance Company Limited (*duplicate of response from Tian Yuan Law Firm LLP for and on behalf of BOCOM International (Asia) Limited*)
Tian Yuan Law Firm LLP for and on behalf of GF Capital (Hong Kong) Limited (*duplicate of response from Tian Yuan Law Firm LLP for and on behalf of BOCOM International (Asia) Limited*)
HKEX Participant
China Tonghai Capital Limited
Investment Firms Focusing on Private Equity / Venture Capital Investment
Chinese Academy of Sciences Holdings Co., Ltd.

Shenzhen Oriental Fortune Capital Investment Management Co., Ltd.
Law Firms
Ashurst Hong Kong
Baker & McKenzie
CFN Lawyers and AnJie Broad Law Firm
Clifford Chance
Davis Polk & Wardwell
DLA Piper Hong Kong
Fangda Partners
Freshfields Bruckhaus Deringer
Gallant
Herbert Smith Freehills
King & Wood Mallesons
Kirkland & Ellis
Latham & Watkins LLP
Morrison & Foerster
Sidley Austin LLP
Skadden Arps Slate Meagher & Flom
Slaughter and May
Stevenson, Wong & Co.
Tian Yuan Law Firm LLP
Listed Companies
Davis Polk & Wardwell for and on behalf of Baidu, Inc.
Davis Polk & Wardwell for and on behalf of Tencent Holdings Limited
Meituan

NetEase, Inc.
Professional Bodies / Industry Associations
Asia Securities Industry and Financial Markets Association
Asian Corporate Governance Association
CFA Society Hong Kong
Hong Kong Business Angel Network
Hong Kong Federation of Women Lawyers Limited
Hong Kong Institute of Certified Public Accountants
Hong Kong Professionals and Senior Executives Association
Hong Kong Securities Association
Hong Kong Securities Professionals Association
Hong Kong Venture Capital and Private Equity Association
Hong Kong Women Professionals & Entrepreneurs Association
The British Chamber of Commerce in Hong Kong
The Chamber of Hong Kong Listed Companies
The Hong Kong Chartered Governance Institute
The Hong Kong Independent Non-Executive Director Association Limited
The Hong Kong Institute of Directors
The Institute of Securities Dealers
The Law Society of Hong Kong
Prospective Listing Applicants
Clifford Chance for and on behalf of a prospective listing applicant
Herbert Smith Freehills on behalf of QuantumPharm Inc.
Time Medical Holdings Company Limited

Other Companies / Organisations
Blockchain Venture Capital Inc.
China Pharmaceutical Industry Research Development Association
Individuals
Mr. Albert Wong
Mr. Mingles Tsoi (*duplicate of response from Hong Kong Business Angel Network*)

Anonymous Respondents

CATEGORY	NUMBER
Corporate Finance Firms / Banks	5
Investment Firm Focusing on Listed Securities Investment	1
Investment Firms Focusing on Private Equity / Venture Capital Investment	4
Law Firms	3
Listed Company	1
Professional Body / Industry Association	1
Prospective Listing Applicants	8
Individuals	5
TOTAL	**28**

APPENDIX II: QUANTITATIVE ANALYSIS OF RESPONSES

The table below summarises the quantitative responses[1] from respondents to all questions in the Consultation Paper. Due to rounding, the total percentage may not add up to 100%.

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q1	Do you agree with the proposed definitions of "Specialist Technology Company", "Specialist Technology Products" and "Specialist Technology"?	62	69%	4	4%	24	27%
Q2	Do you agree with the list of Specialist Technology Industries and the respective acceptable sectors set out in paragraph 4 of the Draft Guidance Letter (Appendix V to the Consultation Paper)?	62	69%	12	13%	16	18%
Q3	Do you agree that the Exchange should take into account the factors set out in paragraph 107 of the Consultation Paper to determine whether a company is "primarily engaged" in the relevant business as referred to in the definition of "Specialist Technology Company"?	57	63%	7	8%	26	29%
Q4	Do you agree that the Exchange should retain the discretion to reject an application for listing from an applicant within an acceptable sector if it displays attributes inconsistent with the principles referred to in paragraph 101 of the Consultation Paper?	56	62%	9	10%	25	28%
Q5	Do you agree that the Specialist Technology Regime should accommodate the listings of both Commercial Companies and Pre-Commercial Companies?	64	71%	3	3%	23	26%

[1] Excluding duplicate responses.

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q6	Do you agree with the proposed approach to apply more stringent requirements to Pre-Commercial Companies?	57	89%	4	6%	3	5%
Q7	Do you agree with the proposal that all investors, including retail investors, should be allowed to subscribe for, and trade in, the securities of Pre-Commercial Companies?	59	92%	2	3%	3	5%
Q8	Do you agree that a Commercial Company applicant must have a minimum expected market capitalisation of HK$8 billion?	16	18%	66	73%	8	9%
Q9	Do you agree that a Pre-Commercial Company applicant must have a minimum expected market capitalisation of HK$15 billion at listing?	15	17%	61	68%	14	16%
Q10	Do you agree that a Commercial Company must have revenue of at least HK$250 million for the most recent audited financial year?	46	51%	24	27%	20	22%
Q11	Do you agree that only the revenue arising from the applicant's Specialist Technology business segment(s) (excluding any inter-segmental revenue from other business segments of the applicant), and not items of revenue and gains that arise incidentally, or from other businesses, should be recognised for the purpose of the Commercialisation Revenue Threshold?	60	67%	4	4%	26	29%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q12(a)	Do you agree that a Commercial Company must demonstrate year-on-year growth of revenue derived from the sales of Specialist Technology Product(s) throughout the track record period, with allowance for temporary declines in revenue due to economic, market or industry-wide conditions?	55	61%	11	12%	24	27%
Q12(b)	Do you agree that the reasons for, and remedial steps taken (or to be taken) to address, any downward trend in a Commercial Company's annual revenue must be explained to the Exchange's satisfaction and disclosed in the Listing Document?	58	64%	7	8%	25	28%
Q13	Do you agree that a Specialist Technology Company listing applicant must have been engaged in R&D of its Specialist Technology Product(s) for a minimum of three financial years prior to listing?	51	57%	15	17%	24	27%
Q14(a)	Do you agree that, for a Commercial Company, its total amount of R&D investment must constitute at least 15% of its total operating expenditure for each of its three financial years prior to listing?	48	53%	20	22%	22	24%
Q14(b)	Do you agree that, for a Pre-Commercial Company, its total amount of R&D investment must constitute at least 50% of its total operating expenditure for each of its three financial years prior to listing?	31	34%	34	38%	25	28%
Q15	Do you agree with the proposed method for determining the amount of qualifying R&D investment and the total operating expenditure as set out in paragraph 141 of the Consultation Paper?	52	58%	17	19%	21	23%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q16	Do you agree that a Specialist Technology Company listing applicant must have been in operation in its current line of business for at least three financial years prior to listing under substantially the same management?	53	59%	12	13%	25	28%
Q17	Do you agree that there must be ownership continuity and control for a Specialist Technology Company listing applicant in the 12 months prior to the date of the listing application?	61	68%	2	2%	27	30%
Q18	Do you agree that an applicant applying to list under the proposed regime must have received meaningful investment from Sophisticated Independent Investors (SIIs)?	69	77%	7	8%	14	16%
Q19	Do you agree with the independence requirements for a Sophisticated Independent Investor as set out in paragraphs 155 to 157 of the Consultation Paper?	50	72%	6	9%	13	19%
Q20	Do you agree with the proposed definition of a sophisticated investor (including the definition of investment portfolio) as set out in paragraphs 159 to 162 of the Consultation Paper?	35	51%	26	38%	8	12%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q21	Do you agree that as an indicative benchmark for meaningful investment, an applicant should have received third party investment from at least two Sophisticated Independent Investors who have invested at least 12 months before the date of the listing application, each holding such amount of shares or securities convertible into shares equivalent to 5% or more of the issued share capital of the listing applicant as at the date of listing application and throughout the pre-application 12-month period?	28	41%	39	57%	2	3%
Q22	Do you agree that as an indicative benchmark for meaningful investment, the aggregate investment from all Sophisticated Independent Investors should result in them holding such amount of shares or securities convertible into shares equivalent to at least such percentage of the issued share capital of the applicant at the time of listing as set out in Table 4 and paragraph 168 of the Consultation Paper?	36	52%	21	30%	12	17%
Q23	Do you agree that a Pre-Commercial Company applicant must have as its primary reason for listing the raising of funds for the R&D of, and the manufacturing and/or sales and marketing of, its Specialist Technology Product(s) to bring them to commercialisation and achieving the Commercialisation Revenue Threshold?	60	67%	3	3%	27	30%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q24	Do you agree that a Pre-Commercial Company applicant must demonstrate to the Exchange, and disclose in its Listing Document, a credible path to the commercialisation of its Specialist Technology Products, appropriate to the relevant Specialist Technology Industry, that will result in it achieving the Commercialisation Revenue Threshold?	63	70%	1	1%	26	29%
Q25	Do you agree with the examples proposed in paragraphs 176 to 179 (including the definition of "highly reputable customer") of the Consultation Paper that a Pre-Commercial Company applicant could use to demonstrate a credible path to achieving the Commercialisation Revenue Threshold?	50	79%	10	16%	3	5%
Q26(a)	Do you agree that a Pre-Commercial Company applicant must explain and disclose, in detail, the timeframe for, and impediments to, achieving the Commercialisation Revenue Threshold?	58	64%	4	4%	28	31%
Q26(b)	Do you agree that a Pre-Commercial Company applicant must, if its working capital (after taking into account the listing proceeds) is insufficient to meet its needs before it achieves the Commercialisation Revenue Threshold, describe the potential funding gap and how it plans to further finance its path to achieving the Commercialisation Revenue Threshold after listing?	59	66%	3	3%	28	31%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q27	Do you agree that a Pre-Commercial Company applicant must have available working capital to cover at least 125% of its group's costs for at least the next 12 months (after taking into account the IPO proceeds of the applicant), and these costs must substantially consist of the following: (a) general, administrative and operating costs; and (b) R&D costs?	56	62%	6	7%	28	31%
Q28	Do you agree that Independent Institutional Investors should be given a minimum allocation of offer shares in the IPO of Specialist Technology Companies to help ensure a robust price discovery process?	60	67%	9	10%	21	23%
Q29	Do you agree with the definition of Independent Institutional Investors as set out in paragraphs 201 to 202 of the Consultation Paper?	39	65%	18	30%	3	5%
Q30	Do you agree that a Specialist Technology Company must, in addition to meeting the existing requirements on public float, ensure that at least 50% of the total number of shares offered in the initial public offering (excluding any shares to be issued pursuant to the exercise of any over-allotment option) must be taken up by Independent Institutional Investors?	34	57%	23	38%	3	5%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q31	Do you agree that in the case where a Specialist Technology Company is listed by way of a De-SPAC Transaction, at least 50% of the total number of shares issued by the Successor Company as part of the De-SPAC Transaction (excluding any shares issued to the existing shareholders of the De-SPAC Target as consideration for acquiring the De-SPAC Target) must be taken up by Independent Institutional Investors?	36	60%	17	28%	7	12%
Q32	Do you agree that in the case of a Specialist Technology Company seeking to list by introduction, the Exchange will consider granting waivers, on a case-by-case basis, from the requirement for the minimum allocation of offer shares to Independent Institutional Investors, if the applicant is able to demonstrate that it is expected to meet the applicable minimum market capitalisation at the time of listing (see paragraph 120 of the Consultation Paper), having regard to its historical trading price (for at least a six-month period) on a Recognised Stock Exchange with sufficient liquidity and a large investor base (a substantial portion of which are independent Institutional Professional Investors)?	56	62%	5	6%	29	32%
Q33	Do you agree that there should be a new initial retail allocation and clawback mechanism for Specialist Technology Companies to help ensure a robust price discovery process?	49	54%	11	12%	30	33%
Q34	Do you agree with the proposed initial allocation and clawback mechanism for Specialist Technology Companies as set out in paragraph 205 of the Consultation Paper?	40	82%	6	12%	3	6%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q35	Do you agree that a Specialist Technology Company seeking an initial listing must ensure that a portion of its issued shares with a market capitalisation of at least HK$600 million is free from any disposal restrictions (whether under: contract; the Listing Rules; applicable laws; or otherwise) upon listing (referred to as its "free float")?	39	43%	24	27%	27	30%
Q36	Do you agree that the Exchange should reserve the right not to approve the listing of a Specialist Technology Company if it believes the company's offer size is not significant enough to facilitate post-listing liquidity, or may otherwise give rise to orderly market concerns?	44	49%	21	23%	25	28%
Q37	Do you agree that a Specialist Technology Company applicant's Listing Document must include the additional information set out in paragraph 32 of the Draft Guidance Letter (Appendix V of the Consultation Paper) due to it being a Specialist Technology Company?	62	69%	2	2%	26	29%
Q38	Do you have any other suggestions for additional information that a Specialist Technology Company should include in its Listing Document in order to allow an investor to properly assess and value the company?	8	9%	54	60%	28	31%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q39	Do you agree that existing shareholders should be allowed to participate in the IPO of a Specialist Technology Company provided that the company complies with the existing public float requirement under Rule 8.08(1), the requirement for minimum allocation to Independent Institutional Investors (see paragraph 200 of the Consultation Paper) and the minimum free float requirement (see paragraph 207 of the Consultation Paper)?	61	68%	3	3%	26	29%
Q40	Do you agree with the proposals set out in paragraph 225 of the Consultation Paper regarding the conditions for existing shareholders subscribing for shares in an IPO?	57	93%	1	2%	3	5%
Q41(a)	Do you agree that the controlling shareholders of a Commercial Company should be subject to a lock-up period of 12 months?	52	58%	12	13%	26	29%
Q41(b)	Do you agree that the controlling shareholders of a Pre-Commercial Company should be subject to a lock-up period of 24 months?	47	52%	15	17%	28	31%
Q42	Do you agree with the scope of key persons (as described in paragraph 242 of the Consultation Paper) that should be subject to a restriction on the disposal of their holdings after listing?	53	59%	12	13%	25	28%
Q43(a)	Do you agree with the proposed lock-up periods on the securities of such key persons and their close associates of 12 months for a Commercial Company?	44	83%	5	9%	4	8%
Q43(b)	Do you agree with the proposed lock-up periods on the securities of such key persons and their close associates of 24 months for a Pre-Commercial Company?	42	79%	6	11%	5	9%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q44(a)	Do you agree with the proposed lock-up period on the securities of Pathfinders SIIs of six months for a Commercial Company?	52	58%	13	14%	25	28%
Q44(b)	Do you agree with the proposed lock-up period on the securities of Pathfinders SIIs of 12 months for a Pre-Commercial Company?	45	50%	17	19%	28	31%
Q45	Do you agree that controlling shareholders, key persons and Pathfinder SIIs should be permitted (in accordance with current Rules and guidance) to sell their securities prior to an IPO and offer them for sale in the IPO, such that only the securities retained by them after listing would be subject to the lock-up restrictions?	55	61%	6	7%	29	32%
Q46	Do you agree that any deemed disposal of securities by a person resulting from the allotment, grant or issue of new securities by a Specialist Technology Company during a lock-up period would not constitute a breach of the lock-up requirements?	60	67%	2	2%	28	31%
Q47	Do you agree that a lock-up period in force at the time of the removal of designation as a Pre-Commercial Company should continue to apply unchanged?	45	50%	14	16%	31	34%
Q48	Do you agree that a Specialist Technology Company must disclose in its Listing Document the total number of securities in the issuer held by the persons (as identified in the Listing Document) that are subject to the lock-up requirements under the Listing Rules, and that the same information must also be disclosed in the interim and annual reports of the Specialist Technology Company for so long as such persons remain as a shareholder?	58	64%	3	3%	29	32%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q49	Do you agree with the scope of the additional disclosure in the interim and annual reports of Pre-Commercial Companies as set out in paragraphs 262 and 263 of the Consultation Paper?	58	64%	4	4%	28	31%
Q50	Do you agree that only Pre-Commercial Companies should be subject to the ongoing disclosure requirements referred to in Question 49?	57	63%	5	6%	28	31%
Q51	Do you agree that Pre-Commercial Companies should be subject to a remedial period of 12 months to re-comply with the sufficiency of operations and assets requirement before delisting, in the event that the Exchange considers that a Pre-Commercial Company has failed to meet its continuing obligation to maintain sufficient operations or assets?	51	57%	9	10%	30	33%
Q52	Do you agree that Pre-Commercial Companies must not effect any transaction that would result in a fundamental change to their principal business without the prior consent of the Exchange?	59	66%	4	4%	27	30%
Q53	Do you agree that Pre-Commercial Companies must be prominently identified through a “PC” marker at the end of their stock names?	61	68%	1	1%	28	31%
Q54	Do you agree that the continuing obligations for Pre-Commercial Companies no longer apply once a Pre-Commercial Company has met the requirements in paragraph 270 of the Consultation Paper and ceases to be regarded as a Pre-Commercial Company?	61	68%	1	1%	28	31%

NO.	QUESTION	YES	%	NO	%	DID NOT COMMENT	%
Q55	Do you agree with the proposed requirements for Pre-Commercial Companies to demonstrate to the Exchange that they should no longer be regarded as a Pre-Commercial Company (see paragraphs 269 to 272 of the Consultation Paper)?	60	67%	2	2%	28	31%

APPENDIX III: METHODOLOGY

Purpose of the Exchange's Methodology

1. In reviewing and drawing conclusions from the consultation responses, the Exchange's goal is to ensure that we come to a balanced view in the best interest of the market as a whole and in the public interest.

2. The effectiveness of this process depends on the submission of original responses from a broad range of respondents that give considered and substantive reasons for their views. The Exchange's methodology, accordingly, aims to accurately categorise respondents and identify different viewpoints. In line with the Exchange's past publicly stated practice, this requires a qualitative assessment of the responses in addition to a quantitative assessment.

Identifying the Category of a Respondent

3. In this paper, each respondent is categorised according to whether their response represented the view of:

   (a) an institution or an individual;

   (b) for an institution, one of the following: "Accounting Firm", "Corporate Finance Firm / Bank", "HKEX Participant", "Investment Firm Focusing on Listed Securities Investment", "Investment Firm Focusing on Private Equity / Venture Capital Investment", "Law Firm", "Listed Company", "Professional Body / Industry Association", "Prospective Listing Applicant" or "Other Company / Organisation"; and

   (c) for an individual, one of the following: "Accountant", "Corporate Finance Staff", "HKEX Participant Staff", "Staff at Investment Firm Focusing on Listed Securities Investment", "Staff at Investment Firm Focusing on Private Equity / Venture Capital Investment", "Lawyer", "Listed Company Staff", "Prospective Listing Applicant Staff", "Retail Investor" or "Other Individual".

4. The Exchange used its best judgement to categorise each respondent using the most appropriate description above.

5. The Exchange categorised "Professional Bodies / Industry Associations" as a single group rather than strictly assigning them individually to other categories (e.g. by assigning qualified accountants' associations to the "Professional Bodies / Industry Associations" category instead of the "Accounting Firms" category). This is in line with the Exchange's past practice. Subjective judgement is required to assign professional bodies to other categories and some do not fit easily with other categories of respondents.

6. It is not the Exchange's practice to categorise "Investment Firms" by the size of their assets under management for the purposes of analysing consultation responses, as the Exchange believes that the size of an institution's global assets does not mean that the Exchange should necessarily attach more insight to their arguments or viewpoints. This would also raise issues as to the treatment of representative bodies that have considerable variances in number and type of members. Similarly, it is not the Exchange's practice to categorise professional bodies by their size and nature of their membership.

Respondents by category

7. Breakdowns of institutional respondents and individual respondents to this consultation by category are set out in Table 10 and Table 11 below respectively[1].

Table 10: Breakdown of institutional respondents by category

CATEGORY	NUMBER	%
Accounting Firms	4	5%
Corporate Finance Firms / Banks	12	14%
HKEX Participant	1	1%
Investment Firm Focusing on Listed Securities Investment	1	1%
Investment Firms Focusing on Private Equity / Venture Capital Investment	6	7%
Law Firms	23	27%
Listed Companies	5	6%
Professional Bodies / Industry Associations	19	23%
Prospective Listing Applicants	11	13%
Other Companies / Organisations	2	2%
TOTAL[2]	**84**	**100%**

Table 11: Breakdown of individual respondents by category

CATEGORY	NUMBER	%
Corporate Finance Staff	2	33%

[1] Due to rounding, the total percentage in each table may not add up to 100%.

[2] Total number excludes duplicated responses.

CATEGORY	NUMBER	%
Staff at Investment Firms Focusing on Private Equity / Venture Capital Investment	1	17%
Lawyer	1	17%
Prospective Listing Applicant Staff	1	17%
Other Individual	1	17%
TOTAL[3]	**6**	**100%**

Qualitative Analysis

8. The Exchange performed a qualitative analysis to enable it to properly consider the broad spectrum of respondents and their views. A qualitative analysis enabled the Exchange to give due weight to responses submitted on behalf of multiple persons or institutions and the underlying rationale for a respondent's position.

Quantitative Analysis

9. The Exchange also performed an analysis to determine the support, in purely numerical terms, for the Consultation Paper proposals. The result of this analysis forms **Appendix II**.

10. For the purpose of its quantitative analysis, the Exchange placed each response into one of the following four categories based on the content of the response with respect to each of the Consultation Paper proposals:

    (a) support;

    (b) not support; or

    (c) no comment.

Counting responses not respondents

11. For the purpose of its quantitative analysis, the Exchange counted the number of responses received not the number of respondents those submissions represented. This means:

    (a) a submission by a professional body is counted as one response even though that body/association may represent many individual members;

    (b) a submission representing a group of individuals is counted as one response; and

[3] Total number excludes duplicated responses.

(c) a submission by a law firm representing a group of market practitioners (e.g. sponsor firms or banks) is counted as one response.

12. However, when undertaking qualitative analysis of responses, the Exchange has taken into account the number and nature of the persons or firms represented by other respondents.

13. The Exchange's method of counting responses, not respondents they represent, is the Exchange's long established publicly stated policy.

Duplicate responses

14. Three responses were found to duplicate other responses and were not counted for the purpose of our quantitative and qualitative analysis of the responses.

Anonymous Responses

15. 28 respondents requested their responses be published anonymously (see **Appendix I** for the number of these respondents in each category). We have included these responses in the list of responses published on the HKEX website, identified by category only (e.g. "Individuals").

16. We counted these responses for the purpose of both our qualitative and quantitative assessment of responses.

APPENDIX IV: AMENDMENTS TO MAIN BOARD LISTING RULES

Rules that have been added or amended compared to those included in the Consultation Paper are highlighted in yellow.

Chapter 2A

GENERAL

COMPOSITION, POWERS, FUNCTIONS AND PROCEDURES OF THE LISTING COMMITTEE, THE LISTING REVIEW COMMITTEE AND THE LISTING DIVISION

…

Disciplinary Jurisdiction and Sanctions

2A.09 (1) The Exchange may bring disciplinary actions and impose or issue the sanctions in rule 2A.10 against any of the following:

…

(i) any guarantor in the case of a guaranteed issue of debt securities or structured products; ~~and~~

(j) any person falling within rule 18C.14; and

(k) any other party who gives an undertaking to or enters into an agreement with the Exchange.

…

Chapter 8

EQUITY SECURITIES

QUALIFICATIONS FOR LISTING

Preliminary

8.01 …

Further conditions are set out in Chapters 8A, 18, 18A, 18B, 18C, 19, 19A, 19B and 19C for issuers seeking a listing of equity securities under those chapters.

…

8.21A (1) …

…

Note 3: This rule is modified for a new applicant that is a Pre-Commercial Company under Chapter 18C, which must comply with the requirements of rule 18C.07.

…

Chapter 11

EQUITY SECURITIES

LISTING DOCUMENTS

…

Contents

…

11.08 Special requirements for listing documents are set out in Chapters 8A, 18, 18A, 18B, 18C, 19, 19A, 19C and 21 for issuers with, or seeking, a listing of equity securities under those chapters.

…

Chapter 18B

EQUITY SECURITIES

SPECIAL PURPOSE ACQUISITION COMPANIES

…

DE-SPAC TRANSACTION REQUIREMENTS

Application of New Listing Requirements

…

18B.36 A Successor Company must meet all new listing requirements of these rules.

Note: These include all the applicable requirements under Chapter 8, and the application procedures and requirements for a new listing set out in Chapter 9. The Successor Company will be required, among other things, to issue a listing document and pay the non-refundable initial listing fee. Chapters 8A, 18, ~~and~~ 18A and 18C will also apply where applicable.

…

Chapter 18C

EQUITY SECURITIES

SPECIALIST TECHNOLOGY COMPANIES

Scope

The Exchange Listing Rules apply as much to Specialist Technology Companies with, or seeking, a listing as they do to other issuers, subject to the additional requirements, modifications and exceptions set out or referred to in this Chapter.

This Chapter sets out rules and modifications to existing rules applicable to Specialist Technology Companies that seek to list on the basis that they are unable to satisfy either the profit test in rule 8.05(1), the market capitalisation/revenue/cash flow test in rule 8.05(2), or the market capitalisation/revenue test in rule 8.05(3).

Issuers are encouraged to contact the Exchange if they envisage any difficulties in complying fully with the applicable requirements set out in this Chapter.

DEFINITIONS

18C.01 Unless otherwise stated or the context otherwise requires, the following terms have the meanings set out below:

"Commercial Company"	a Specialist Technology Company that has met the revenue requirement as set out in rule 18C.03(4) at the time of listing
"Cornerstone Investor"	has the meaning in rule 18A.01
"Pre-Commercial Company"	a Specialist Technology Company that has not met the revenue requirement as set out in rule 18C.03(4) at the time of listing
"Specialist Technology"	science and/or technology applied to products and/or services within an acceptable sector of a Specialist Technology Industry
"Specialist Technology Company"	a company primarily engaged (whether directly or through its subsidiaries) in the research and development of, and the commercialisation and/or sales of, Specialist Technology Product(s) within an acceptable sector of a Specialist Technology Industry

"Specialist Technology Industry" or "an acceptable sector of a Specialist Technology Industry"	an industry or an acceptable sector (as the case may be) that is included in a list of Specialist Technology Industries set out in guidance published on the Exchange's website, as updated from time to time
"Specialist Technology Product"	a product and/or service (alone or together with other products or services) that applies Specialist Technology
"weighted voting right"	has the meaning in rule 8A.02
"WVR structure"	has the meaning in rule 8A.02

CONDITIONS FOR LISTING

Basic Conditions

18C.02 An applicant that has applied for listing under this Chapter must, in addition to satisfying the requirements of this Chapter, also satisfy the requirements of Chapter 8 (other than rules 8.05, 8.05A and 8.05B).

18C.03 An applicant applying for listing under this Chapter must:

(1) demonstrate that it meets the definition of a Specialist Technology Company, and is both eligible and suitable for listing as either a Commercial Company or a Pre-Commercial Company;

Note: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on any additional eligibility or suitability criteria.

(2) have been in operation in its current line of business for at least three financial years prior to listing under substantially the same management;

Note: The Exchange may accept a shorter trading record period under this rule in exceptional circumstances where the issuer or its group has a trading record of at least two financial years if the Exchange is satisfied that the listing of the issuer is desirable in the interests of the issuer and investors and that investors have the necessary information available to arrive at an informed judgement concerning the issuer and the securities for which listing is sought. In such cases the Exchange should be consulted at an early stage and additional conditions will be imposed pursuant to rule 2.04.

(3) for a Commercial Company, have an initial market capitalisation at the time of listing of at least HK$6,000,000,000; or for a Pre-Commercial Company, have an initial market capitalisation at the time of listing of at least HK$10,000,000,000; and

(4) for a Commercial Company, have revenue of at least HK$250,000,000 for its most recent audited financial year.

Note: For the purpose of this rule, only revenue arising from the applicant's Specialist Technology business segment(s) (excluding any inter-segmental revenue from other business segments of the applicant), and not items of revenue and gains that arise incidentally or from other businesses, will be recognised. Revenue arising from "book" transactions, such as banner barter transactions, the writing back of accounting provisions and other similar activities resulting from mere book entries, will be disregarded.

18C.04 An applicant applying for listing under this Chapter must:

(1) have engaged in the research and development of its Specialist Technology Product(s) for at least three financial years prior to listing;

(2) have incurred expenditure on the research and development of its Specialist Technology Product(s) that amounted to:

(a) for a Commercial Company, at least 15% of its total operating expenditure;

(b) for a Pre-Commercial Company with revenue of at least HK$150,000,000 but less than HK$250,000,000 for its most recent audited financial year, at least 30% of its total operating expenditure; and

(c) for a Pre-Commercial Company with revenue of less than HK$150,000,000 for its most recent audited financial year, at least 50% of its total operating expenditure; and

(3) meet the applicable percentage threshold under rule 18C.04(2):

(a) on a yearly basis for at least two of the three financial years prior to its listing; and

(b) on an aggregate basis over all three financial years prior to listing,

with the percentage ratio calculated as the total amount of its expenditure on the research and development of its Specialist Technology Product(s) incurred for the period specified in this rule 18C.04(3)(a) or (b) above (as the case may be), divided by its total operating expenditure for the same period.

Note 1: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on the items that qualify as: (a) expenditure on research and development and (b) total operating expenditure for the purpose of this rule.

Note 2: With respect to rule 18C.04(1), where the Exchange has permitted an applicant to list with a shorter trading record period pursuant to the note to rule 18C.03(2), the Exchange will accept a research and development engagement period of a length that is the same as the permitted shorter trading record period. In such cases, the applicant must meet the applicable percentage threshold of rule 18C.04(2) on a yearly basis for each of the most recent two financial years prior to its listing.

18C.05 An applicant that has applied for listing under this Chapter must have received meaningful investment from sophisticated independent investors.

Note: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on the definition of sophisticated independent investors, and the nature and extent of investment that would meet this rule.

Additional Conditions for Pre-Commercial Companies

18C.06 A Pre-Commercial Company must demonstrate to the Exchange and disclose in its listing document a credible path to the commercialisation of its Specialist Technology Product(s), as appropriate to the relevant Specialist Technology Industry, that will result in it achieving the revenue requirement as set out in rule 18C.03(4).

Note: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on examples of a "credible path" for the purpose of this rule.

18C.07 A Pre-Commercial Company must ensure that it has available sufficient working capital to cover at least 125% of its group's costs for at least 12 months from the date of publication of its listing document (after taking into account the proceeds of the new applicant's initial listing). These costs must substantially consist of the following:

(1) general, administrative and operating costs (including any production costs); and

(2) research and development costs.

Note 1: The Exchange would expect that the issuer would use a substantive portion of the proceeds from its initial listing to cover these costs.

Note 2: Capital expenditures do not need to be included in the calculation of working capital requirements for the purpose of this rule. However, where capital expenditures are financed out of borrowings, relevant interest and loan repayments must be included in the calculation. A Pre-Commercial Company must include research and development costs, irrespective of whether they are capitalised, in the calculation of working capital requirements for the purpose of this rule.

INITIAL PUBLIC OFFERING OF A SPECIALIST TECHNOLOGY COMPANY

Allocation of Shares

18C.08 At least 50% of the total number of shares offered in the initial public offering (excluding any shares to be issued pursuant to the exercise of any over-allotment option) of a Specialist Technology Company must be taken up by independent price setting investors in the placing tranche (whether as Cornerstone Investors or otherwise).

Note: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on the meaning of independent price setting investors for the purpose of this rule.

18C.09 Paragraph 4.2 of Practice Note 18 is modified with respect to the allocation of shares in the initial public offering of a Specialist Technology Company, such that where an initial public offering of a Specialist Technology Company includes both a placing tranche and a public subscription tranche, the minimum allocation of shares to the public subscription tranche shall be as follows:

(1) an initial allocation of 5% of the shares offered in the initial public offering;

(2) a clawback mechanism that increases the number of shares to 10% when the total demand for shares in the subscription tranche is 10 times or more but less than 50 times the initial allocation; and

(3) a clawback mechanism that increases the number of shares to 20% when the total demand for shares in the subscription tranche is 50 times or more the initial allocation.

Shares may be transferred from the subscription tranche to the placing tranche where there is insufficient demand in the subscription tranche to take up the initial allocation.

Free Float and Offer Size

18C.10 A Specialist Technology Company seeking an initial listing under this Chapter must, in addition to meeting the requirements of rule 8.08(1), ensure that a portion of the total number of its issued shares listed on the Exchange with a market capitalisation of at least HK$600,000,000 are not subject to any disposal restrictions (whether under contract, the Listing Rules, applicable laws or otherwise) at the time of listing.

18C.11 The Exchange would expect the listing of a Specialist Technology Company to be accompanied by an offer (including both the placing tranche and the public subscription tranche) of a meaningful size and reserves the right not to approve the listing of a Specialist Technology Company if the offer size is not significant enough to facilitate price discovery, or may otherwise give rise to orderly market concerns.

CONTENTS OF LISTING DOCUMENTS FOR SPECIALIST TECHNOLOGY COMPANIES

18C.12 A Specialist Technology Company must disclose in its listing document any information required by the Exchange that is due to it being a Specialist Technology Company.

Note: The Exchange will publish guidance on the Exchange's website, as amended from time to time, on the information that a Specialist Technology Company must disclose in its listing document for the purpose of this rule.

RESTRICTIONS ON THE DISPOSAL OF SECURITIES FOLLOWING A NEW LISTING

18C.13 The controlling shareholder(s) of a Specialist Technology Company must comply with rule 10.07 modified as follows:

(1) the reference to "6 months" in rule 10.07(1)(a) is read as "12 months" for the controlling shareholder(s) of a Commercial Company and "24 months" for those of a Pre-Commercial Company;

(2) rule 10.07(1)(b) does not apply to the controlling shareholder(s) of a Specialist Technology Company; and

(3) the reference to "12 months" in note 3 to rule 10.07(2) is read as "24 months" for the controlling shareholder(s) of a Pre-Commercial Company.

18C.14 The following persons and their respective close associates, as identified in the listing document of a Specialist Technology Company, must not, and must procure that the relevant registered holder(s) must not, in the period commencing on the date by reference to which disclosure of their respective shareholdings is made in the listing document and ending on the applicable dates upon the expiry of the period as prescribed below (counting from the date on which dealings in the securities of the Specialist Technology Company commence on the Exchange), dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of, any of those securities of the Specialist Technology Company in respect of which they are shown by that listing document to be the beneficial owner(s):

	Person(s)	**The restrictions end upon the expiry of the following period**	
		Commercial Companies	**Pre-Commercial Companies**
(1)	The key persons of a Specialist Technology Company, comprising the following persons: (a) founder(s) (including the founding member(s) of key operating subsidiaries of the Specialist Technology Company) (b) the beneficiaries of weighted voting rights (if the Specialist Technology Company is to be listed with a WVR structure) (c) executive directors and senior management (d) key personnel responsible for the Specialist Technology Company's technical operations and/or the research and development of its Specialist Technology Product(s)	12 months	24 months
(2)	Such existing investors in a Specialist Technology Company as identified by the Exchange in guidance published on the Exchange's website, as amended from time to time	6 months	12 months

Note 1: Any offer for sale contained in a listing document must not be subject to such restrictions.

Note 2: Rules 10.07(2) and 10.07(3) including the notes to rule 10.07(2) apply mutatis mutandis, to the persons referred to in this rule and their respective close associates, as if (a) all references to "controlling shareholder(s)" were references to the relevant person(s) and their respective close associates; and (b) the reference to "12 months" in note 3 to rule 10.07(2) were a reference to the relevant periods as prescribed in this rule.

Note 3: The restrictions under rule 18C.14(1) apply to a person identified as a key person of the Specialist Technology Company as at the time of its listing, and will continue to apply even if the person ceases to hold the relevant position (either because of a change in position or resignation or otherwise).

18C.15 Rules 18C.13 and 18C.14 do not prevent the disposal of any interest of the relevant person in the securities of the Specialist Technology Company in the following circumstances:

(1) on the death of such person; or

(2) in any other exceptional circumstances to which the Exchange has given its prior approval.

18C.16 Any deemed disposal of securities resulting from the allotment, grant or issue of securities by a Specialist Technology Company in compliance with the Listing Rules will not be regarded as a breach of rule 18C.13 or 18C.14.

DISCLOSURE OF SHAREHOLDINGS

18C.17 A Specialist Technology Company must disclose in its listing document the total number of securities in the issuer held by each person that are subject to the requirements of rule 18C.13 or 18C.14.

18C.18 A Specialist Technology Company must disclose in its interim (half-yearly) and annual reports the information referred to in rule 18C.17, based on information that is publicly available to the issuer or otherwise within the knowledge of its directors as at the latest practicable date prior to the issue of the relevant report, for so long as the relevant person remains as a shareholder.

ADDITIONAL CONTINUING OBLIGATIONS FOR PRE-COMMERCIAL COMPANIES

Disclosure in Reports

18C.19 A Pre-Commercial Company listed under this Chapter must include in its interim (half-yearly) and annual reports details of its research and development and commercialisation activities during the period under review, including:

(1) details of the development progress of its Specialist Technology Product(s) under development;

(2) the timeframe for, and any progress made towards, achieving the revenue requirement as set out in rule 18C.03(4), including updates on the information previously disclosed to demonstrate the path to achieving such revenue requirement in its listing document or any subsequent update as published by the Pre-Commercial Company;

(3) updates on any revenue, profit and other business and financial estimates as provided in the listing document and any subsequent update to those estimates as published by the Pre-Commercial Company;

(4) a summary of expenditure on its research and development activities; and

(5) a prominently disclosed warning that it may not achieve the revenue requirement as set out in rule 18C.03(4).

Note: Details to be disclosed under this rule should be consistent with those disclosed in the listing document of the Pre-Commercial Company pursuant to the relevant guidance referred to in rule 18C.12 to enable its shareholders and potential investors to assess how well the company is adhering to its intentions as previously disclosed.

Sufficient Operations

18C.20 Where the Exchange considers that a Pre-Commercial Company listed under this Chapter fails to comply with rule 13.24, the Exchange may suspend dealings or cancel the listing of its securities under rule 6.01. The Exchange may also under rule 6.10 give the relevant issuer a period of not more than 12 months to re-comply with rule 13.24. If the relevant issuer fails to re-comply with rule 13.24 within such period, the Exchange will cancel the listing.

Material Changes

18C.21 Without the prior consent of the Exchange, a Pre-Commercial Company listed under this Chapter must not effect any acquisition, disposal or other transaction or arrangement or a series of acquisitions, disposals or other transactions or arrangements, that would result in a fundamental change in the principal business activities of the relevant issuer as described in the listing document issued at the time of its application for listing.

Removal of Designation as a Pre-Commercial Company

18C.22 A Pre-Commercial Company that wishes to cease being regarded as a Pre-Commercial Company after listing must make an application to the Exchange for that purpose.

18C.23 A Pre-Commercial Company must provide the Exchange with published audited financial statements in support of an application made under rule 18C.22 demonstrating that:

(1) for its most recent audited financial year, it has met the revenue requirement as set out in rule 18C.03(4); or

(2) as a result of its operations as a whole, it has met at least one of the tests in rule 8.05.

Note 1: Upon the notification by the Exchange confirming that an issuer will no longer be regarded as a Pre-Commercial Company, rules 18C.19 to 18C.21 cease to apply to it.

Note 2: The periods during which the relevant shareholders of a Pre-Commercial Company are subject to the restrictions on disposal of securities as set out in rules 18C.13 to 18C.14 will expire on the later of: (1) the date on which such lock-up periods would have ended if the issuer had applied for listing as a Commercial Company; and (2) the date falling on the 30th day after the announcement on the removal of designation as a Pre-Commercial Company as required under rule 18C.24.

18C.24 As soon as practicable after the notification by the Exchange referred to in note 1 to rule 18C.23, a Specialist Technology Company must announce (1) the removal of designation as a Pre-Commercial Company and (2) the dates on which the respective restrictions on disposal of securities applicable to the relevant shareholders will end in accordance with note 2 to rule 18C.23.

Appendix 1

Contents of Listing Documents

Part A

Equity Securities

…

36. A statement by the directors that in their opinion the working capital available to the group is sufficient for the group's requirements for at least 12 months from the date of publication of the listing document or, if not, how it is proposed to provide the additional working capital thought by the directors to be necessary. (Note 3)

Note 1: In the case of a Mineral Company, a statement by the directors that in their opinion the issuer has available sufficient working capital for 125% of the group's present requirements.

Note 2: In the case of a new applicant for listing under Chapter 18A, a statement by the directors that in their opinion the issuer has available sufficient working capital for at least 125% of the group's costs for at least 12 months from the date of publication of its listing document, taking into account the factors in rule 18A.03(4).

Note 3: A new applicant which is a banking company or an insurance company should refer to rule 8.21A(2).

Note 4: In the case of a new applicant for listing under Chapter 18C as a Pre-Commercial Company (as defined in rule 18C.01), a statement by the directors that in their opinion the issuer has available sufficient working capital for at least 125% of the group's costs for at least 12 months from the date of publication of its listing document, taking into account the factors set out in rule 18C.07.

Appendix 6

Placing Guidelines

— for —

Equity Securities

New Applicants

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11. Dealings in the securities cannot commence until the Exchange has been supplied with and approved a list setting out for all the placees, the required information, including without limitation, the names, addresses and identity cards (or if none, passport numbers and the jurisdiction of issuance) (in the case of individuals) and the names, addresses, jurisdiction of incorporation and the relevant company identification numbers (in the case of companies), the names, addresses and identity cards (or if none, passport numbers and the jurisdiction of issuance) of the beneficial owners (in the case of nominee companies) and the amounts taken up by each placee (see rule 9.11(35)). The Exchange reserves the right to require submission of such further information (on an electronic spreadsheet or such other format as it may request) on the placees as it may consider necessary for the purpose of establishing their independence, including without limitation details of beneficial ownership.

11A. For an applicant seeking to list under Chapter 18C, the placing of securities must comply with rule 18C.08. The list referred to in paragraph 11 must also include the relevant information to demonstrate that the placing of securities is in compliance with rule 18C.08, with identification of each placee who falls within the definition of an independent price setting investor as referred to in that rule. The Exchange reserves the right to require submission of further information on those placees as it may consider necessary for the purpose of establishing the basis on which such placees fall within such definition.

…

APPENDIX V: GUIDANCE LETTER FOR SPECIALIST TECHNOLOGY COMPANIES

Guidance that has been added or amended compared to that included in the Consultation Paper is highlighted in yellow.

HKEX GUIDANCE LETTER

HKEX-GL[•]-23 ([•] 2023)

Subject	**Guidance on Specialist Technology Companies**
Listing Rules and Regulations	**Main Board Chapter 18C**

Important note: *This letter does not override the Listing Rules and is not a substitute for advice from qualified professional advisers. If there is any conflict or inconsistency between this letter and the Listing Rules, the Listing Rules prevail. You may consult the Listing Division on a confidential basis for an interpretation of the Listing Rules, or this letter. Unless otherwise specified, defined terms in the Listing Rules shall have the same meanings in this letter.*

Purpose

1. This letter provides guidance for Specialist Technology Companies with, or seeking, a listing on the Exchange pursuant to Chapter 18C ("Chapter 18C") of the Main Board Listing Rules ("Rules").

2. The definitions used in this guidance letter are the same as those set out in the Rules.

Guidance

A. Specialist Technology Industries

3. Rule 18C.01 defines "Specialist Technology Industry" and "an acceptable sector of a Specialist Technology Industry" as an industry or an acceptable sector (as the case may be) that is included in a list of Specialist Technology Industries set out in guidance published on the Exchange's website, as updated from time to time.

4. Rule 18C.03(1) states that an applicant applying for listing under Chapter 18C must demonstrate that it meets the definition of a Specialist Technology Company, and is both eligible and suitable for listing as either a Commercial Company or a Pre-Commercial Company.

5. Rule 2.04 states that the Exchange may waive, modify or not require compliance with the Listing Rules in individual cases (to suit the circumstances of a particular case), as a variety of circumstances may exist which require it to make ad hoc decisions.

6. Rule 8.04 states that both the issuer and its business must, in the opinion of the Exchange, be suitable for listing.

List of Specialist Technology Industries

7. The list of Specialist Technology Industries and the non-exhaustive[1] acceptable sectors that the Exchange considers to fall within each of these industries are set out as follows:

Acceptable sector	Description
(a) Next-generation information technology	
Software, platform and infrastructure solutions powered by cloud computing and big data analytics	
Cloud-based services	The application of cloud computing in as-a-service business models through the access and use of servers, networks, storage capacity, development tools and applications via the internet, including: • Software as a service (SaaS): the delivery of software applications over cloud infrastructure enabling companies to conduct their operations using the application • Platform as a service (PaaS): the delivery of a platform for the creation of software in the form of virtualisation, middleware, and/or operating systems, which is then delivered over cloud infrastructure • Infrastructure as a service (IaaS): the delivery of cloud computing infrastructure (i.e. servers, storage, and networks) as an on-demand service
Artificial intelligence ("AI")	The development of AI technology, including: • Technology and infrastructure enabling AI: the development of open-source development platforms, computing, and data services • AI-empowered algorithm programming: image recognition, audio-visual learning, natural language processing (NLP), machine learning, and deep learning • AI solutions: the design and provision of AI solutions used in different industry verticals

[1] The list is non-exhaustive in nature given an applicant falling outside the list may still be considered as "within an acceptable sector of a Specialist Technology Industry" (see paragraphs 10 to 13) and may be updated from time to time (see paragraph 14).

Acceptable sector	Description
(b) Advanced hardware and software	
The development of new hardware and software using advanced technology	
Robotics and automation	The development of robots, automated systems, and enabling technologies, including: • Robot technology: the engineering of robots, computer software and machines for the improved performance of tasks and/or automation processes • Internet of Things (IoT) technology: machine-to-machine communications designed to monitor events, process data and determine actions • Smart home applications: home automation designs involving human-robot interaction and/or human-appliance interaction • Smart product designs: design and manufacturing of sensor-driven, WiFi-enabled, self-learning or programmable products
Semiconductors	The development of technology for applications along the semiconductor value chain, including: • Production inputs: materials, manufacturing equipment, electronic design automation (EDA) and core intellectual property (IP) • Design: logic and physical design, and validation and verification • Fabrication: conversion of designs into chips and semiconductor devices • Advanced packaging: flip-chip packaging, 3D packaging and wafer-level packaging
Advanced communication technology	The development of connectivity technologies used in the transfer of information and/or connection of devices, including: • Next-generation wireless communication systems: fifth-generation (5G) and beyond technology enabling high-speed and high-volume data transfers over wireless technology infrastructure and applications • Satellite communication: satellite-enabled telecommunications, broadcasting and data communications
Electric and autonomous vehicles	The manufacturing and/or deployment of autonomous vehicles and electric vehicles, and development of enabling technologies, including: • Electric vehicles: the use of new energy solutions in all-electric or battery electric vehicles (BEVs) • Autonomous vehicles: vehicles and trucks equipped with self-driving solutions • Location technology: sensors and technology enabling the detection or calculation of the geographical position of a person, mobile device or vehicle

Acceptable sector	Description
Advanced transportation technology	The development of transportation technology (excluding electric and autonomous vehicles), and deployment of smart mobility systems, including: • Transportation technology: new modes of transport (including electric aircraft) and drone technology • Intelligent transportation systems: the application of information and communication technology in road transport, traffic management and safety and mobility systems (including ridesharing)
Aerospace technology	The development of technology used in the research, exploration and utilisation of space, including: • Spacecraft development: the development of space launch vehicles, satellites, space stations and related components • Space exploration: space imaging, earth imaging and robotic spacecraft • Utilisation of space in defence capabilities: space-based services and assets for security and defence purposes
Advanced manufacturing	The development of technology in production activities that depend on automation, computation, software, sensing, and/or networking, including: • Additive manufacturing: 3D printing and mass-scale customisation for industrial and manufacturing processes • Digitalised manufacturing: applications of sensors and 3D vision technology in manufacturing processes
Quantum information technology and computing	Software, hardware and services developed based on the principles of quantum information science and technology, including: • Quantum computing: quantum computing software and/or hardware, and the provision of access to quantum computers via commercial cloud-based platforms • Quantum communication: science and technology applied to quantum-secured communication networks • Quantum precision measurement: the application of quantum mechanics and quantum electrodynamics to precision measurement physics
Metaverse technology	The development of technology (including hardware, software and infrastructure) that enables the following applications: • Virtual reality (VR): technology providing a lifelike simulation of reality synthetically or virtually • Augmented reality (AR): technology enhancing human experience through the combination of the physical and digital worlds • Brain-computer interfaces (BCIs): computer-based systems translating brain signals into commands that are relayed to an output device to carry out a desired action

Acceptable sector	Description
(c) Advanced materials	
The production or integration of new or significantly improved materials to enhance the performance of traditional materials	
Synthetic biological materials	The development of new materials that are genetically encoded and generated through the integration of synthetic biology and materials science. Examples include biopolymers, fibres, optical materials, adhesives and other materials for specialist applications
Advanced inorganic materials	The development of advanced functional inorganic materials science and technology for the following applications: • Special glass: smart switchable glass technology such as smart windows and display • Special metals and alloys: metals and alloys for specialist applications or with special properties • Special ceramics: advanced ceramics made from inorganic non-metallic compounds
Advanced composite materials	The development of high-performance composite materials and advanced processing techniques for composite materials. Examples include carbon matrix composite materials and advanced polymers
Nanomaterials	The development and application of technology to enable the manipulation of materials conducted at a nanoscale, including: • Manufacturing of end products using nanotechnology: nanostructured filters, coatings and additives • Development of nanotechnology: the manufacturing and testing of equipment for nanoscale measurement and/or manipulation of materials
(d) New energy and environmental protection	
The production of energy from natural sources and the development of networks and infrastructure to support such production and other processes for improving environmental sustainability and resource use and/or energy efficiency	
New energy generation	The development of technology enabling new, clean or renewable energy generation, including solar and wind power, hydropower, hydrogen energy, wave powered electricity generation and biofuel
New energy storage and transmission technology	The development of energy transmission and distribution technology, and deployment of infrastructure dedicated to the generation and storage of new energy (including clean or renewable energy and hydrogen energy) including: • New energy storage systems: battery technologies and long duration energy storage • New energy transmission and distribution networks: power grid management and development and smart grid developments

Acceptable sector	Description
New green technology	The development of technology-driven solutions for environmental conservation or remediation, or technologies that enhance resource- and/or energy-efficiency including: • Environmental remediation: soil washing, soil vapour extraction and thermal desorption • Emissions reduction: hydrogen and carbon capture and storage
(e) New food and agriculture technologies	
Food and agriculture technologies applied to agriculture, farming and food processing activities	
New food technology	The development of technology for food production and processing, including: • Artificial meat, sustainable protein technology, and synthetic biology in food technology: production of novel ingredients including cultured meat, plant-based meat and egg substitution, sustainable protein, genome engineering, livestock genetics and macronutrient products • Food waste reduction: new technology enabling food waste reduction, shelf-life enhancement and monitoring
New agriculture technology	The application of technology in the production of agricultural machinery, equipment and supplies, including: • Agricultural biotechnology and crop efficiency technology: genetic engineering of crops and crop nutrition diagnostics • Agricultural synthetic biology: the application of synthetic biology in crop production, fertilisers and pesticides and animal feedstock • Farming technology: hydroponic crop farming, vertical farming, insect farming and microbe growing systems

8. A Biotech Company (as defined in Chapter 18A ("Chapter 18A") of the Rules) relying on a Regulated Product (as defined in Chapter 18A) as the basis of its listing application must submit an application under Chapter 18A instead of Chapter 18C. A Biotech Company relying on a Regulated Product as the basis of its listing application that fails to satisfy the requirements under Chapter 18A (and the relevant guidance) is not permitted to submit an application under Chapter 18C.

9. A company in the biotech industry that does not base its listing application on a Regulated Product may apply to list under Chapter 18C as long as it meets the definition of a Specialist Technology Company.

Applicants that do not fall within the scope of the existing list of Specialist Technology Industries and acceptable sectors

10. An applicant falling outside the list of Specialist Technology Industries or acceptable sectors as set out in paragraph 7 may be considered as "within an acceptable sector of a Specialist Technology Industry" for the purpose of the definitions of "Specialist Technology Company" and "Specialist Technology" if it can demonstrate that:

    (a) it has high growth potential;

    (b) its success can be demonstrated to be attributable to the application, to its core business, of new technologies and/or the application of the relevant science and/or technology within that sector to a new business model, which differentiates it from traditional market participants serving similar consumers or end users; and

    (c) research and development significantly contributes to its expected value and constitutes a major activity and expense.

11. An applicant falling outside the list of Specialist Technology Industries or acceptable sectors as set out in paragraph 7 must submit a pre-IPO enquiry to the Exchange to seek confidential guidance on whether it can be considered as "within an acceptable sector of a Specialist Technology Industry" before submitting a listing application under Chapter 18C.

12. In making its assessment, the Exchange will take into account all relevant facts and circumstances. To enable the Exchange to make a prompt assessment, an applicant should include in its submission all relevant facts with a meaningful and balanced discussion of its core business, technologies and innovations. The applicant should avoid making selective disclosures focusing only on favourable facts. Doing so is also likely to prolong the Exchange's assessment.

13. The Exchange will consult with the SFC, and seek its approval, before determining such a potential applicant to be "within an acceptable sector of a Specialist Technology Industry" and so eligible to submit a listing application under Chapter 18C.

Updating of guidance on Specialist Technology Industries and acceptable sectors

14. The Exchange will update the list of Specialist Technology Industries and acceptable sectors from time to time, as necessary, after consultation with the SFC and with its approval. One of the circumstances in which it may do so is following, or to accompany, the listing of an applicant from a new industry / sector. However, the Exchange reserves the right not to update the Guidance Letter in these circumstances if, for example, the applicant has characteristics that are not generally applicable to other companies in its industry / sector.

Exchange's discretion to reject an application

15. The Exchange retains the discretion to reject an application for listing from an applicant within an acceptable sector as set out in paragraph 7 if it displays attributes inconsistent with the principles set out in paragraphs 10(a) to (c), provided that in such context, sub-paragraph (b) is replaced by "its success can be demonstrated to be attributable to the application, to its core business, of the relevant Specialist Technology".

Companies with multiple business segments

16. Where an applicant has multiple business segments, some of which do not fall within one or more acceptable sectors of the Specialist Technology Industries, the Exchange will, for the purpose of determining whether the company is "primarily engaged" in the relevant business (as referred to in the definition of "Specialist Technology Company"), take into account the following factors:

    (a) whether a substantial portion of the total operating expenditure of the company and staff resources (including their time and the number of staff with relevant expertise and experience) was spent on the research and development of, and the commercialisation and/or sales of, Specialist Technology Products in the company's Specialist Technology business segment(s)[2] for at least three financial years prior to listing;

    (b) whether the basis for investors' valuation and the expected market capitalisation of the company is based primarily on the company's Specialist Technology business segment(s), rather than its other business segments or assets unrelated to its Specialist Technology business segment(s);

    (c) whether the proposed use of proceeds for listing would primarily be applied to its Specialist Technology business segment(s);

    (d) the proportion of the revenue (if any) generated by the Specialist Technology business segment(s) relative to the total revenue of the company; and

    (e) the reason for retaining the non-Specialist Technology business segment(s) and the history of the company's operations.

17. The factors set out in paragraph 16 are included for guidance only and are not intended to be exhaustive. The Exchange will adopt a holistic approach taking into account all the information provided and all relevant circumstances to determine whether it is satisfied that the company is "primarily engaged" in the relevant business.

[2] For companies with multiple business segments, the business activities attributable to a Specialist Technology business segment are expected to constitute one or more operating and/or reporting segments under the applicable accounting and financial reporting standards (for example see IFRS 8).

B. Other criteria for Specialist Technology Companies

18. Note to Rule 18C.03(1) states that the Exchange will publish guidance on its website, as amended from time to time, on any additional eligibility or suitability criteria for a Specialist Technology Company.

19. An applicant applying for listing under Chapter 18C must satisfy the following criteria:

    (a) **Use of proceeds (Pre-Commercial Companies only):** a Pre-Commercial Company applicant must have as its primary reason for listing the raising of funds for the research and development of, and the manufacturing and/or sales and marketing of, its Specialist Technology Product(s) to bring them to commercialisation and achieving the revenue threshold as required under Rule 18C.03(4);

    (b) **Ownership continuity:** ownership continuity and control in the 12 months prior to the date of the listing application, and up until the time immediately before the offering and/or placing becomes unconditional.

    The Exchange will apply the same guidance as it has published on the ownership continuity and control requirement as set out in Rules 8.05(1)(c), 8.05(2)(c) and 8.05(3)(c) for the purpose of this ownership continuity requirement.

    The Exchange may grant waivers on a case-by-case basis from the ownership continuity requirement with respect to a Specialist Technology Company that is listed by way of a De-SPAC Transaction; and

    (c) **Revenue growth (Commercial Companies only):** a Commercial Company is normally expected to demonstrate a year-on-year growth of revenue throughout the track record period with allowance for temporary declines in revenue (for example, due to economic, market or industry-wide conditions or other factors which were temporary and outside of the applicant's control). For this purpose, only revenue satisfying the requirement of the Note to Rule 18C.03(4) will be recognised. The reasons for, and remedial steps taken (or to be taken) to address, any downward trend in the Commercial Company's annual revenue must be explained to the Exchange's satisfaction and disclosed in its listing document.

20. Applicants should note that the criteria set out in paragraph 19 are neither exhaustive nor binding, and the Exchange will take into account all relevant circumstances in its assessment of the eligibility and suitability of an applicant for listing, including the attributes set out in paragraph 10 (as modified by paragraph 15 where applicable).

C. R&D expenditure

21. Rules 18C.04(2) and (3) set out requirements as to the minimum amount of expenditure on the research and development of its Specialist Technology Product(s) that a Specialist Technology Company must make prior to listing. Note 1 to Rule 18C.04 states that the Exchange will publish guidance on its website, as amended from time to time, on the items that qualify as: (a) expenditure on research and development and (b) total operating expenditure for the purpose of that rule.

22. Rule 18C.19 requires a Pre-Commercial Company to include in its interim (half-yearly) and annual reports details of its research and development and commercialisation activities during the period under review, including a summary of expenditure on its research and development activities.

23. For the purpose of calculating the amount of expenditure on the research and development ("R&D") under Rules 18C.04 and 18C.19:

    (a) the amount of R&D expenditure for a period includes costs that are directly attributable to the Specialist Technology Company's R&D activities during the period, including development costs for the period that have been capitalised as intangible assets for accounting purposes, but excluding general, administrative or other costs that are not clearly related to R&D activities;

    (b) apart from the costs described in sub-paragraph (a) above, the Exchange expects the amount of R&D expenditure to primarily comprise the following costs:

        (i) the costs of personnel engaged in R&D activities;

        (ii) the depreciation, service fees or other directly attributable costs of equipment or facilities used in R&D activities (including data centre operating costs, cloud-based service fees, rentals, utilities and maintenance costs);

        (iii) the amortisation of intangibles used in R&D activities (to the extent the related R&D costs being capitalised as intangibles have not been included in paragraph 23(a) above); and

        (iv) the costs of materials consumed in R&D activities.

        The R&D expenditure should also include the costs of R&D conducted by others on the company's behalf (including consulting or testing fees).

        If any other type of costs apart from those listed above is included as qualifying R&D costs, the basis on which such costs are directly attributable to the company's R&D activities must be clearly explained; and

(c) the amount of R&D expenditure should exclude:

(i) the initial recognition of any fixed assets relating to the company's R&D activities (e.g. capital expenditures for acquiring an R&D centre); and

(ii) any expense of a finance nature.

24. For the purpose of calculating the total operating expenditure under Rule 18C.04(2), the total operating expenditure for a period is the sum of (a) the total expenses of the company as reflected in the financial statements of the company during the period, excluding cost of sales and any expense of a finance nature, and (b) any such costs that have not been recognised as expenses during the period but qualify as R&D expenditure as described in paragraphs 23(a) and 23(b) above.

25. The Appendix to this letter sets out some illustrative examples of the calculation of the R&D expenditure ratio under Rules 18C.04(2) and (3).

26. An applicant must include a detailed breakdown of its R&D expenditure in its listing document (see paragraph 70(h)).

D. Third party investment requirements

27. Rule 18C.05 stipulates that a Specialist Technology Company listing applicant must have received meaningful investment from sophisticated independent investors.

Independence requirement

28. The independence of a sophisticated independent investor will be determined as at the date of signing of the definitive agreement for the relevant investment in an applicant, and up to listing.

29. The following persons will not be considered as sophisticated independent investors for the purpose of Rule 18C.05:

(a) core connected person(s) of the applicant, provided that a sophisticated investor who is a substantial shareholder of the applicant can be considered as a sophisticated independent investor if it is a core connected person only because of the size of its shareholding in the applicant (subject to paragraph 29(b) below);

(b) controlling shareholder(s) (or person(s) within the group of persons who are considered as controlling shareholders) of the applicant; and

(c) the founder(s) of the applicant and their respective close associates.

30. The Exchange retains the discretion to deem any other person to be not independent for the purpose of Rule 18C.05 based on the facts and circumstances of an individual case. For example, a person who has an acting-in-concert agreement or arrangement with the founder(s) or controlling shareholder(s) of a Specialist Technology Company normally will not be considered as independent.

Definition of sophisticated investor

31. The Exchange will assess whether an investor is sophisticated for the purpose of Rule 18C.05 on a case-by-case basis by reference to its relevant investment experience, and its knowledge and expertise in the relevant field, which could be demonstrated by its net assets, assets under management ("AUM"), size of its investment portfolio or track record of investments, where applicable.

32. For this purpose, the Exchange would generally consider the following as examples, for illustrative purposes only, of the types of investors that would be considered sophisticated:

    (a) an asset management firm with AUM of, or a fund with a fund size of, at least HK$15,000,000,000;

    (b) a company having a diverse investment portfolio size of at least HK$15,000,000,000;

    (c) an investor of any of the types above with AUM, fund size or investment portfolio size (as applicable) of at least HK$5,000,000,000 where that value is derived primarily from Specialist Technology investments; and

    (d) a key participant in the relevant upstream or downstream industry with a meaningful market share and size, as supported by appropriate independent market or operational data.

33. "Investment portfolio" for the purpose of paragraphs 32(b) and 32(c) means the aggregate value of investments in investee companies as determined under the prevailing accounting standards. The Exchange is also prepared to consider other measures of investment values that may not be reflected in the investor's financial statements, such as the fair value of an investment supported by an independent valuation. The Exchange would not consider consolidated subsidiaries to be investee companies.

34. A fund managed by a fund manager that has AUM of an amount that meets the threshold set out in paragraph 32(a), or a wholly-owned subsidiary of an entity referred to in paragraph 32(a) or 32(b), would qualify as a sophisticated investor for the purpose of Rule 18C.05.

35. The Exchange may still consider investors of a type that is not included in the illustrative examples in paragraph 32 above as sophisticated, on a case-by-case basis, having regard to the specific circumstances of an applicant. In such situations, the applicant should demonstrate, in the particular circumstances of its individual case, that these investors have relevant investment experience, knowledge and expertise.

36. The applicant must disclose the size (and the basis for determination) of the AUM, the fund or the investment portfolio (as the case may be) and any other information relevant to the sophisticated independent investors in the listing document to substantiate that they have the relevant investment experience, knowledge and expertise to be considered sophisticated. Where the actual size of the AUM, fund or investment portfolio and such other relevant information cannot be disclosed with precision for confidentiality reasons, the Exchange will consider accepting alternative disclosures appropriate to the circumstances on a case-by-case basis, taking into account the factors set out in the relevant guidance that the Exchange has published[3]. Such information should be given as of:

(a) a date which is no more than six months prior to the date of signing of the definitive agreement for the investors' relevant investment in the applicant; and

(b) a date which is no more than six months prior to the date of the listing application.

Minimum investment requirement

37. As an indicative benchmark, an applicant applying to list under Chapter 18C and meeting the following requirements will generally be considered as having met the requirement of having received meaningful investment for the purpose of Rule 18C.05:

(a) **Investment from Pathfinder SIIs:** investments from a group of two to five sophisticated independent investors (each having invested in the applicant at least 12 months before the date of the listing application) ("Pathfinder SIIs") that satisfy the following:

(i) such Pathfinder SIIs, in aggregate, (1) hold such amount of shares or securities convertible into shares equivalent to 10% or more of the issued share capital of the applicant as at the date of its listing application and throughout the pre-application 12-month period; or (2) have otherwise invested an aggregate sum of at least HK$1,500,000,000 in the shares or securities convertible into shares of the applicant at least 12 months prior to the date of the listing application (excluding any subsequent divestments made on or before the date of the listing application); and

(ii) at least two such Pathfinder SIIs (1) each hold such amount of shares or securities convertible into shares equivalent to 3% or more of the issued share capital of the applicant as at the date of its listing application and throughout the pre-application 12-month period; or (2) each have otherwise invested at least HK$450,000,000 in the shares or securities convertible into shares of the applicant at least 12 months prior to the date of the listing application (excluding

[3] See Guidance Letter HKEX-GL98-18 (Guidance on disclosure in listing documents – listing applicants' names; statistics and data quoted; listing document covers; non-disclosure of confidential information; and material changes after trading record period) (as amended from time to time) and any other relevant guidance as implemented by the Exchange from time to time.

any subsequent divestments made on or before the date of the listing application).

(b) **Investment from all sophisticated independent investors:** investments from all sophisticated independent investors result in them holding, in aggregate, such amount of shares or securities convertible into shares equivalent to at least the percentage of the issued share capital of the applicant (before exercise of any over-allotment option) at the time of listing set out in the table below:

Expected market capitalisation of the applicant at the time of listing	**Minimum total investment from all sophisticated independent investors as a percentage of the issued share capital of the applicant (before exercise of any over-allotment option) at the time of listing**	
	Commercial Companies	*Pre-Commercial Companies*
HK$6,000,000,000 or more but less than HK$15,000,000,000 *(Commercial Companies)* HK$10,000,000,000 or more but less than HK$15,000,000,000 *(Pre-Commercial Companies)*	20%	25%
HK$15,000,000,000 or more and less than HK$30,000,000,000	15%	20%
HK$30,000,000,000 or more	10%	15%

Securities convertible into shares

38. In the case of a sophisticated independent investor holding securities convertible into shares in an applicant (such as convertible or exchangeable bonds, notes or loans or convertible preference shares), only the investment in the securities to be converted at or before listing will be counted when considering whether the meaningful investment requirement is met.

39. The applicant must disclose in the listing document the number of shares to be converted from such convertible securities at or before listing (and the corresponding investment amount) to demonstrate that it has met the meaningful investment requirement.

Indicative benchmark for the investment from Pathfinder SIIs

40. The Exchange may accept fluctuations in the shareholding of the Pathfinder SII(s) referred to in paragraph 37(a)(i)(1) or (ii)(1), taking into account all the relevant circumstances of a particular case. Such fluctuations will generally be accepted in the following circumstances (these are examples only and are non-exhaustive):

    (a) **Temporary dilution during the pre-application 12-month period:** where the Pathfinder SII(s)' shareholding meets the relevant threshold at the time of listing application and on average (i.e. 12-month average of the shareholding as of each month-end) throughout the pre-application 12-month period; and

    (b) **Temporary dilution pending top-up investment:** where (i) the Pathfinder SII(s)' shareholding is diluted due to investments made by other investors during the pre-application 12-month period; (ii) the relevant Pathfinder SII (or in the case of the aggregate threshold referred to in paragraph 37(a)(i)(1), at least one Pathfinder SII within the group) has committed irrevocably to top up its investment before the listing application by an amount that would have resulted in the Pathfinder SII(s) meeting the relevant indicative benchmark as at the date of listing application had such top-up been completed; and (iii) the top-up will be completed before the date of listing.

41. The timing of investment by the Pathfinder SIIs should be determined by reference to the date of irrevocable settlement.

42. The Exchange will consider on a case-by-case basis whether investments in an applicant held by different funds managed by the same fund manager, or by different entities wholly-owned by the same investor, can be aggregated as investments made by one Pathfinder SII for the purpose of the indicative benchmarks referred to in paragraph 37(a). Non-exhaustive factors that the Exchange will take into account include the shareholding structure of the investor entities, and how investment decisions are made.

Indicative benchmark for the investment from all sophisticated independent investors

43. For the purpose of the benchmark on aggregate investment set out in paragraph 37(b) ("Aggregate Investment Benchmark"):

    (a) the Exchange will count investments by sophisticated independent investors made before listing, and any offer shares issued to sophisticated independent investors at the time of listing (whether or not those investors held securities in the Specialist Technology Company before listing) towards the Aggregate Investment Benchmark; and

(b) where investments by sophisticated independent investors made before listing and cornerstone investments made by sophisticated independent investors are insufficient to satisfy the Aggregate Investment Benchmark, the Exchange would be prepared to allow an applicant to proceed to listing on the condition that sufficient offer shares would be allocated to sophisticated independent investors participating as placees under the placing tranche to satisfy the Aggregate Investment Benchmark ("SII Placees"), in which case the listing applicant, the overall coordinator(s) and the sponsor(s) should provide an undertaking in this regard and such undertaking should be disclosed in the listing document.

In such cases:

(i) the Exchange will only accept placees that clearly fall within the illustrative examples of the sophisticated independent investors (as set out in paragraph 32). To avoid any delay to listing, where an applicant plans to rely on an allocation to be made to a sophisticated independent investor which is a key market participant (as referred to in paragraph 32(d)), the listing applicant must submit the relevant information on such sophisticated independent investor(s) to which it intends to allocate offer shares as placee(s) for the above purpose well in advance so that the Exchange can have sufficient time to assess whether such placee(s) may be regarded as sophisticated independent investors; and

(ii) the Specialist Technology Company must confirm in the allotment results announcement under Rule 12.08 that the investment from all sophisticated independent investors has met the Aggregate Investment Benchmark, and disclose in the same announcement the identities of the SII Placees, the number of shares held by them and other relevant information of the SII Placees as required to be disclosed under paragraph 36 to substantiate that they have the relevant investment experience, knowledge and expertise to be considered sophisticated. This information should be given as of a date that is no more than six months prior to the date of listing.

Secondary / Dual listings

44. For applicants listed on other stock exchanges applying to list under Chapter 18C, the Exchange acknowledges the possibility that the shareholding of sophisticated independent investors at the relevant times (e.g. the time of the Chapter 18C listing application) may not strictly comply with the indicative benchmarks set out in paragraph 37.

45. In assessing whether such an applicant has received meaningful investment from sophisticated independent investors for the purpose of Rule 18C.05, the Exchange will consider, on a case-by-case basis, the specific circumstances of the applicant, including, without limitation, the shareholding of sophisticated independent investors before and at the time of the applicant's overseas listing and at the time of the Chapter 18C listing application.

E. Path to achieving the revenue requirement for a Commercial Company

46. Rule 18C.06 states that a Pre-Commercial Company must demonstrate to the Exchange and disclose in its listing document a credible path to the commercialisation of its Specialist Technology Product(s), as appropriate to the relevant Specialist Technology Industry, that will result in it achieving the revenue requirement as set out in Rule 18C.03(4).

Timeframe, impediments and funding requirements

47. The Exchange will retain the discretion to determine whether the evidence provided by an applicant satisfies the requirement of Rule 18C.06. For this purpose, a Pre-Commercial Company applicant must also:

    (a) explain and disclose, in detail, the timeframe for, and impediments to, achieving the revenue requirement as set out in Rule 18C.03(4); and

    (b) to the extent that its working capital (after taking into account the listing proceeds) is insufficient to meet its needs before it achieves the revenue requirement as set out in Rule 18C.03(4), describe the potential funding gap and how it plans to further finance its path to achieving such revenue requirement after listing.

48. Pre-Commercial Companies should exercise caution when disclosing the timeframe for, and the path to, achieving the revenue requirement as set out in Rule 18C.03(4), and clearly disclose the relevant risks, impediments and underlying material assumptions involved in making such statements as appropriate to ensure the disclosures are not misleading.

Examples of a credible path to achieving the revenue requirement for a Commercial Company

49. Non-exhaustive examples of a credible path to achieving the revenue requirement for a Commercial Company as required under Rule 18C.06 include:

    (a) binding contracts or non-binding framework agreements, with reasonably sufficient details on the timeframe and milestones for commercialisation, in respect of the Specialist Technology Product(s) that the applicant has in place; and

    (b) such binding contracts or non-binding framework agreements being arranged with a reasonable number of independent customers for the development, testing or sales of the Specialist Technology Product(s), with a substantial potential aggregate contract value realisable within 24 months from the date of listing. The Exchange may, under exceptional circumstances, accept that a credible path is demonstrated by a binding contract or non-binding framework agreement with an expected timeframe of more than 24 months, in which case an independent customer engaged in such arrangement must also be a highly reputable customer.

50. For the purpose of paragraph 49:

(a) the independence of a customer will be determined as at the date of signing of the relevant contract or framework agreement with an applicant and up to listing. The Exchange will apply the same criteria as those used for assessing the independence of a sophisticated independent investor (see paragraphs 29 to 30 above) in assessing the independence of a customer; and

(b) the Exchange will assess whether a customer is a "highly reputable customer" on a case-by-case basis taking into account all relevant facts and circumstances of an applicant and the relevant Specialist Technology Industry and market. For this purpose, the Exchange would generally consider the following as examples, for illustrative purposes only, of a "highly reputable customer":

(i) a key market participant in the relevant upstream or downstream industry with meaningful market share and size, as supported by appropriate independent market or operational data; or

(ii) a State or State corporation as defined under Rule 1.01.

51. The factors referred to in paragraphs 49 and 50 are non-exhaustive examples of a credible path to achieving the revenue requirement for a Commercial Company as required under Rule 18C.06. If the aggregate value of the contracts or agreements that an applicant has entered into is insufficient to achieve the revenue requirement for a Commercial Company or otherwise do not meet all the requirements as set out in paragraphs 49 and 50, a Pre-Commercial Company applicant should describe how it plans to achieve the revenue requirement for a Commercial Company in the listing document.

52. A Pre-Commercial Company applicant may demonstrate its path to achieving the revenue requirement for a Commercial Company through other means with alternative evidence if the examples of the "credible path" in relation to the binding contracts or non-binding framework agreements described in paragraph 49 do not suit the Pre-Commercial Company's circumstances. For Pre-Commercial Companies targeting retail customers, with whom they may not directly enter into contracts, a credible path to achieving the revenue requirement for a Commercial Company could be demonstrated, for example, by reference to the number of retail customers indicating their interests in the applicant's Specialist Technology Product(s), as supported by appropriate evidence such as confirmed orders.

53. The Exchange retains the discretion to determine whether the evidence provided by a Pre-Commercial Company applicant satisfies the requirement of Rule 18C.06. The Exchange will adopt a holistic approach taking into account all the information provided and all relevant circumstances to determine whether it is satisfied that the Pre-Commercial Company has demonstrated a credible path to achieving the revenue requirement for a Commercial Company as required under Rule 18C.06.

F. Minimum allocation to independent price setting investors

54. Rule 18C.08 states that at least 50% of the total number of shares offered in the initial public offering (excluding any shares to be issued pursuant to the exercise of any over-allotment option) of a Specialist Technology Company must be taken up by independent price setting investors in the placing tranche (whether as Cornerstone Investors or otherwise).

55. The following persons who satisfy the independence requirement in paragraph 56 will be considered as "independent price setting investors" for the purpose of Rule 18C.08:

    (a) Institutional Professional Investors (as defined in Rule 18B.01); and

    (b) other types of investors with AUM, fund size or investment portfolio size of at least HK$1,000,000,000.

56. A person will not be considered as an independent price setting investor if it is (a) an existing shareholder of the applicant, or a close associate of such an existing shareholder; or (b) a core connected person of the applicant.

57. For the purposes of paragraph 55(b), the meaning of "investment portfolio" is as set out in paragraph 33.

58. A fund managed by a fund manager that has AUM of an amount that meets the threshold set out in paragraph 55(b), or a wholly-owned subsidiary of an entity referred to in paragraph 55(b), would qualify as an independent price setting investor for the purpose of Rule 18C.08.

59. In the case of a Specialist Technology Company listing by way of a De-SPAC Transaction, Rule 18C.08 also applies such that at least 50% of the total number of shares issued by the Successor Company as part of the De-SPAC Transaction (excluding any shares issued to the existing shareholders of the De-SPAC Target as consideration for acquiring the De-SPAC Target) must be taken up by independent price setting investors.

60. In the case of a Specialist Technology Company listing by introduction under Chapter 7 of the Rules, the Exchange will take a holistic approach and consider granting waivers, on a case-by-case basis, from the requirement under Rule 18C.08 if the applicant is able to demonstrate that it is expected to meet the applicable minimum market capitalisation at the time of listing under Rule 18C.03(3), having regard to non-exhaustive factors such as its investor base and historical trading price and turnover (for at least a six-month period) on another stock exchange with sufficient liquidity and a large investor base, where applicable.

G. Liquidity arrangements for applicants listed on another stock exchange

61. Rules 18C.10 and 18C.11 set out requirements on the free float and offer size of a Specialist Technology Company.

62. Irrespective of whether their listings in Hong Kong are accompanied by an offer, applicants with securities listed on another stock exchange (which are, or represent, shares in the same class as the shares for which listing is sought on the Exchange) must have due regard to whether there will be an open market in the securities for which listing is sought and, where necessary, must make appropriate arrangements to facilitate the liquidity of their shares to meet Hong Kong market demand.

63. This is to ensure that the trading of the securities for which listing is sought is conducted in a fair and orderly manner and in the case of a listing accompanied by an offer, this will also be one of the factors that the Exchange will take into account when assessing whether the size of the offer may give rise to orderly market concerns (see Rule 18C.11).

64. In addition, Specialist Technology Companies seeking to list by introduction must continue to comply with existing guidance on liquidity arrangements to meet Hong Kong market demand during the initial period of listing[4].

H. Disclosure requirements

65. Rule 18C.12 states that a Specialist Technology Company must disclose in its listing document any information required by the Exchange that is due to it being a Specialist Technology Company.

66. The following guidance for Specialist Technology Companies supplements the guidance which the Exchange has published relating to disclosure in listing documents applicable to all listing applicants. A listing document of a Specialist Technology Company that does not follow this guidance may be considered not substantially complete as required under the Listing Rules and may be returned.

67. In view of the complexity and technicality involved in Specialist Technology Companies' businesses, applicants are encouraged to use diagrams or flowcharts to explain their business models, Specialist Technology Products and key non-Specialist Technology Products. They are also reminded to present fair, balanced and accurate information to potential investors.

68. In addition to the information specifically required under the Rules and this guidance letter, a Specialist Technology Company must disclose all relevant information in the listing document to demonstrate that it meets the definition of a Specialist Technology Company, the suitability and eligibility criteria and the requirements for listing as set out in Chapter 18C and this guidance letter.

[4] See Guidance Letter HKEX-GL53-13 (Guidance on liquidity arrangements for issuers seeking to list by introduction where the securities to be listed are already listed on another stock exchange) (as amended from time to time) and any other relevant guidance as implemented by the Exchange from time to time.

69. Non-exhaustive examples of such disclosures include: (a) the Specialist Technology Industry and the acceptable sector (as referred to in Section A above) that it falls within; and (b) the identity, timing of investment, shareholding and/or investment amount (where applicable) of the relevant sophisticated independent investors for the purpose of the third party investment requirements (as referred to in Section D above).

70. The following disclosure should also be made in a listing document which falls under Chapter 18C, where applicable:

	Key area	Disclosure recommendations
(a)	**Information on pre-IPO investments**	(i) In addition to the existing disclosure requirements on pre-IPO investments[5], an applicant should also disclose the implied pre-money and post-money valuations of each round of pre-IPO investment in a table (ii) reasons for material fluctuations in valuation (1) as compared to the immediate previous round of pre-IPO financing; and (2) between the proposed IPO valuation and the valuation in the latest round of pre-IPO financing, such as key development of the products and business milestones
(b)	**Burn rate**	Disclose in the Summary and other relevant sections: (i) *Historical burn rate* The burn rate throughout the track record period, with the basis for determination and reasons for any substantial expenditure explained (ii) *Future burn rate* • a reasonable period of time, with basis, that the applicant can maintain its viability with existing cash balance and the IPO proceeds • when the applicant expects to raise its next round of financing based on the burn rate • assumptions in relation to the future burn rate, which should be reasonable taking into account specific facts and circumstances
(c)	**Cash operating cost**	(i) *Historical cash operating cost* Disclose an estimate of cash operating costs, including costs relating to research and development incurred in the development of the Specialist Technology Products and costs associated with: (1) workforce employment (2) direct production costs, including materials (if it has commenced production)

[5] See Guidance Letter HKEX-GL43-12 (Guidance on Pre-IPO Investments) (as amended from time to time) and any other relevant requirements as implemented by the Exchange from time to time.

	Key area	Disclosure recommendations
		(3) research and development (4) product marketing (if any) (5) non-income taxes, royalties and other governmental charges (if any) (6) contingency allowances (7) any other significant costs *Note: A Specialist Technology Company must:* • *set out the components of cash operating costs separately by category;* • *explain the reason for any departure from the list of items to be included under cash operating costs; and* • *discuss any material cost items that should be highlighted to investors.* (ii) *Future cash operating cost* A Specialist Technology Company must highlight in the Summary section any expected material increase in costs or expenses (such as research and development expenses and marketing expenses in connection with its products / services) during the period covered by the working capital forecast
(d)	**Products**	(i) Include in the Summary section a clear and accurate summary of its key Specialist Technology Product(s) (ii) For each Specialist Technology Product (including those in the pipeline or not yet commercialised), disclose the existing stage and development timetable of the Specialist Technology Product (e.g. whether it is still in the prototype or testing stage, or it is conducting demonstrations in a controlled and real-world environment and close to delivering the final Specialist Technology Product), which should be presented in a fair and balanced manner and without favourable possibilities being presented as certain or as more probable than is likely to be the case (iii) Disclose the technical capabilities and commercial viability of the key technology applied to the Specialist Technology Product(s) (iv) Specify the origins (i.e. in-licensing or internally developed) and the jurisdiction rights of the intellectual property pertaining to the key Specialist Technology Product(s)
(e)	**Disclosure on commercialisation status and prospects**	(i) Disclose an overview of the commercialisation status and the commercialisation plan of the Specialist Technology Products (ii) With respect to each key Specialist Technology Product: (1) elaborate on the commercialisation status, impediments to commercialisation and the future commercialisation plan; and

	Key area	Disclosure recommendations
		(2) substantiate its commercialisation plan, with details of contracts, orders and/or letters of intention (if any) to illustrate revenue visibility, or an appropriate negative statement if there is no contract, order or letter of intention
(f)	**Addressable market, market share and Industry Overview**	(i) With respect to each key Specialist Technology Product, clearly define its respective addressable markets (including the current addressable market and the expected addressable market for a reasonable future period), and the current and expected market shares, in each case, in accordance with (ii) and (iii) below, together with the basis for determination, to provide information on the applicant's market position within the relevant industry (ii) *Current and expected addressable markets* • Clearly define both the current and expected addressable markets (e.g. by reference to a limited pool of customers using the products / services rather than only the overall market), and disclose material information of such markets (e.g. size, value, assumed growth rates in prices and quantities, and comparable products / services in the target market and other markets) • Disclose competitive landscape of the key Specialist Technology Product(s) and, to the extent applicable, include the following information of the competing or potentially competing commercialised or pipeline products / services: (1) the name and price (including similar products / services launched in other jurisdictions and factors that may affect pricing in the target market); (2) expiration dates of key intellectual property rights; (3) technologies; and (4) addressable markets • Substantiate any statements that the applicant's products / services are likely to be more competitive or better (iii) *Current and expected market share* • Clearly disclose the basis for determination of the current and expected market shares • The expected market share can be provided on a qualitative basis by reference to its expected competitive landscape, and should be provided for a reasonable future period, with all relevant risks, impediments and assumptions clearly disclosed
(g)	**Business model based disclosures**	(i) Clearly disclose the business model(s) of the applicant in the Summary and Business sections. The Exchange expects the applicant to disclose key aspects of its business model(s), which can be one of the following, or a combination of them, and/or other business models: • subscription-based model • transaction-based model

	Key area	Disclosure recommendations
		(ii) For each key Specialist Technology Product from which the applicant has recorded sales during and after (if applicable) the track record period, the applicant must disclose key metrics relevant to its business model(s), with non-exhaustive examples as follows: • *For subscription-based companies*: total number of subscribers, total number of paying subscribers, total number of new subscribers, total customer acquisition cost ("CAC"), customer retention rate [6] and net dollar retention rate[7] • *For transaction-based companies*: total number of customers, total number of new customers, total CAC, number of transactions, average transaction value, customer retention rate and net dollar retention rate (iii) Clearly present the key metrics disclosed by reference to regular intervals, with the basis for determination and reasons for material fluctuations (if any) explained
(h)	**Research and development ("R&D") expenditure and experience and specific risks**	Disclose in the listing document: (i) a detailed breakdown of its R&D expenditure for each of the three financial years prior to listing, showing the amounts incurred by category and by the Specialist Technology Product(s) to which the R&D expenditure corresponds (ii) the size, experience, qualifications and areas of specialisation of the R&D team, and how long they have been working on similar products / services (iii) the percentage of IPO proceeds to be spent on R&D (iv) the stage of R&D for key Specialist Technology Products in the pipeline or not yet commercialised (v) details of the Specialist Technology Company's R&D experience in the relevant Specialist Technology Industry and acceptable sector, including: (1) details of its operations in R&D (2) the collective expertise and experience of key management and technical staff

[6] Customer retention rate refers to the percentage of customers for the immediately preceding year which remained to be the company's customers for the current year.

[7] Net dollar retention rate refers to the ratio of revenue contribution of a customer group in the immediately preceding year to the revenue contribution of the same group of customers for the current year.

	Key area	Disclosure recommendations
		(3) the proportion of R&D performed in-house (i.e. within the applicant's group), as opposed to R&D outsourced to, or in collaboration with, external third parties and the R&D progress made by the applicant on any key Specialist Technology Product(s) that are in-licensed or acquired. Details of any outsourced / collaborative R&D arrangements, including the calibre and experience of outsourced / collaborating parties, the material terms of the relevant arrangements, who will have ownership of intellectual property rights and the applicant's involvement and role in the R&D activities under the arrangements (4) the relevant experience of the key persons referred to in Rule 18C.14(1) in the R&D, manufacturing and commercialisation of the relevant Specialist Technology Product(s) (5) the salient terms of any service agreements between the applicant and its key management and technical staff (6) measures (if any) that the applicant has in place to retain key management or technical staff (for example incentivisation arrangements and/or non-compete clauses), and the measures and arrangements that the applicant has in place, in the event of the departure of any of its key management or technical staff (7) statement of any legal claims or proceedings that may have an influence on its R&D for any key Specialist Technology Product
(i)	**Industry standards/ competent authority requirements**	(i) Disclose details of any applicable industry-specific standards, definitions or classifications (e.g. for autonomous vehicles, the level of automotive automation defined by the relevant industry association), and the basis for determination; and whether the applicant's key Specialist Technology Product(s) have met such standards, definitions or classifications (ii) Disclose details of any relevant regulatory approval required and/or obtained for each key Specialist Technology Product, and a statement that no material unexpected or adverse changes have occurred since the date of issue of the relevant regulatory approval for a key Specialist Technology Product (if any). Where there are material changes, these must be prominently disclosed (iii) If applicable, disclose a summary of material communications with the relevant competent authority in relation to its Specialist Technology Product(s), and the results of such communications (iv) If applicable, disclose all material safety data relating to its Specialist Technology Product(s), including any serious adverse events

	Key area	Disclosure recommendations
(j)	**Intellectual property**	(i) Disclose details of any material intellectual property right(s) granted and/or applied for in relation to each key Specialist Technology Product, or an appropriate negative statement (ii) With respect to material intellectual property rights: • include in the Summary section such intellectual property rights • disclose the tenure and material payment obligations associated with such intellectual property rights and residual intellectual property rights, and whether such rights are in-licensed or self-owned • to the extent that any material intellectual property right is in-licensed, disclose a clear statement of the applicant's material rights and obligations under the applicable licensing agreement (iii) Clearly disclose the details and significance of material intellectual property rights in relation to each key Specialist Technology Product, including: • the part of the relevant Specialist Technology Product to which the material intellectual property right is attributing or protecting (for example, whether key technology or product packing); and • the extent and form to which such intellectual property is protected (e.g. whether patent is in the process of application, or patent has already been registered, procedures put in place to protect intellectual property rights not registered or not in the process of registration) (iv) Highlight any risk of intellectual property right infringements in the Summary and Risk Factors sections, and disclose a positive statement by the directors (supported by the sponsor's due diligence) as to whether the applicant had any instances of infringement of third parties' intellectual property rights and, if so, the relevant details and potential impact on the applicant's operation
(k)	**Risks**	(i) Disclose specific risks, general risks and dependencies, including the extent to which the applicant's business is dependent on key individuals and the impact of the departure of key management or technical staff on the applicant's business and operations (ii) If relevant and material to the Specialist Technology Company's business operations, disclose information on project risks arising from environmental, social, and health and safety issues
(l)	**Warning statement on the cover of the Listing Document**	The following warning statement that must be prominently and legibly displayed on the front cover or inside front cover:

	Key area	Disclosure recommendations
		"The issuer is a Specialist Technology Company (as defined in Chapter 18C of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited). The securities of Specialist Technology Companies carry high investment risks including risks of share price volatility and inflated valuation due to the difficulty in valuing such companies. Investors should fully understand the investment risks of a Specialist Technology Company and the risks disclosed by the issuer before making their investment decisions."
(m)	**Additional disclosures for Pre-Commercial Companies**	In addition to the disclosures required in paragraph 47 of this guidance letter, a Pre-Commercial Company is required to disclose, in the listing document: (i) the stage of R&D for each of its Specialist Technology Product(s) (ii) development details by key stages and milestones for its key Specialist Technology Product(s) to meet the revenue requirement in Rule 18C.03(4) In defining the key stages and milestones, a Pre-Commercial Company should make reference to the industry-specific standards, definitions or classifications, and the relevant regulatory approval required, as disclosed by reference to Key area (i) - "Industry standards/ competent authority requirements" above. In the absence of such requirements, a Pre-Commercial Company should define its own stages and milestones that are appropriate for its relevant industry (iii) All relevant risks associated with the commercialisation of each of its key Specialist Technology Product(s) (iv) The following additional warning statement that must be prominently and legibly displayed on the front cover or inside front cover, following the warning statement referred to in sub-paragraph (l) above: "In addition, the issuer is a Pre-Commercial Company (as defined in Chapter 18C of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited). Pre-Commercial Companies are Specialist Technology Companies that cannot meet the revenue requirement as set out in Rule 18C.03(4), and so are subject to a higher risk of corporate failure if they are unable to secure sufficient external funding and/or cannot generate sufficient revenue to sustain their operations after listing." (v) The potential earlier expiry of the lock-up periods applicable to the relevant shareholders in the case of the removal of designation as a Pre-Commercial Company as described in Note 2 to Rule 18C.23

I. Subscription of shares by existing shareholders

71. Given the likely significant funding needs of Specialist Technology Companies and the importance of existing shareholders in meeting the funding needs of these companies, existing shareholders may participate in the IPO of a Specialist Technology Company provided that the applicant complies with Rules 8.08(1), 18C.08 and 18C.10. For the avoidance of doubt, the Existing Shareholders Conditions in guidance letter HKEX-GL85-16 do not apply to Specialist Technology Companies. Instead, the following applies:

    (a) an existing shareholder holding less than 10% of shares in the Specialist Technology Company may subscribe for shares in the IPO as either a cornerstone investor or as a placee. In the case of subscription as a placee, the applicant, its sponsor and overall coordinator must confirm that no preference in allocation was given to the existing shareholder. In the case of subscription as a cornerstone investor, the applicant and its sponsor must confirm that no preference was given to the existing shareholder other than the preferential treatment of assured entitlement at the IPO price and the terms must be substantially the same as other cornerstone investors; and

    (b) an existing shareholder holding 10% or more of shares in the Specialist Technology Company may subscribe for shares in the IPO as a cornerstone investor.

72. In addition to meeting the requirements in paragraph 71 above, an existing shareholder who wishes to exercise a contractual anti-dilution right (if any) to subscribe for shares in the IPO should comply with the existing requirements under paragraph 3.10 of GL43-12. For the avoidance of doubt, such existing shareholder may subscribe for further IPO shares to a level higher than his/her pre-IPO shareholding provided that Rules 8.08(1), 18C.08 and 18C.10 are met.

73. Where allocations will be made to core connected persons, the Specialist Technology Company must apply for, and the Exchange will ordinarily grant, a related Rule 9.09 waiver, if applicable.

J. Stock marker

74. The listed securities of a Pre-Commercial Company will be assigned a special stock short name marker that ends with the marker "P".

K. Lock-up periods

Key persons

75. It is stated in Rule 18C.14(1)(d) that "key personnel responsible for the Specialist Technology Company's technical operations and/or the research and development of its Specialist Technology Product(s)" should be subject to the restrictions on disposal in that Rule.

76. By way of an example for illustrative purposes only, the key personnel referred to in Rule 18C.14(1)(d) includes the head and the key personnel of its research and development department whose expertise is primarily relied upon by the company for the development of the Specialist Technology Product(s), and the lead developer(s) of the core technologies in relation to the Specialist Technology Product(s). In determining whether a person is a key personnel referred to in Rule 18C.14(1)(d), an applicant should consider factors including the shareholding of such personnel, his/her remuneration relative to other R&D staff, and his/her seniority.

77. An applicant should identify the key persons referred to in Rule 18C.14(1)(d) having regard to its specific facts and circumstances, and disclose the basis for its determination.

78. The Exchange may request an applicant to provide supporting documentation to substantiate the basis on which such key persons have been identified.

79. The Exchange may deem any person to be a key person falling within the scope of Rule 18C.14(1)(d) based on the facts and circumstances of an individual case.

Existing investors

80. Rule 18C.14(2) states that "such existing investors in a Specialist Technology Company as identified by the Exchange in guidance published on the Exchange's website, as amended from time to time", are subject to the restrictions on the disposal of securities under that Rule.

81. The lock-up restrictions of Rule 18C.14(2) only apply to such investors identified as the Pathfinder SIIs that satisfy the indicative minimum investment benchmarks as set out in paragraph 37(a) above. If an applicant has more than the required number of sophisticated independent investors that meet the minimum investment benchmarks for Pathfinder SIIs as set out in paragraph 37(a) above, it would be free to decide, on a commercial basis, which of these investors are to be designated as the Pathfinder SIIs, who will then be subject to the lock-up restrictions under Rule 18C.14(2).

Disclosure of shareholding

82. Rule 18C.18 states that a Specialist Technology Company must disclose in its interim (half-yearly) and annual reports the total number of securities in the issuer held by each of the persons (as identified in the listing document) that are subject to the lock-up requirements under Rule 18C.13 or 18C.14, based on information that is publicly available to the issuer or otherwise within the knowledge of its directors, as at the latest practicable date prior to the issue of the relevant report, for so long as the relevant person remains as a shareholder.

83. A Specialist Technology Company must disclose the total number of securities in the issuer held by each of the persons referred to in paragraph 82 above who are employed by the company as at the latest practicable date prior to the issue of the relevant report, as such information is expected to be within the knowledge of its directors.

L. Calculation of percentage ratios

84. Since Specialist Technology Companies listed under Chapter 18C are not required to meet any of the financial eligibility tests under Rules 8.05(1), 8.05(2) or 8.05(3) at the time of listing, they may not have recorded any profit (and in the case of Pre-Commercial Companies, they may not have recorded any revenue). Accordingly, the application of the revenue ratio and the profit ratio to any proposed transaction that these issuers propose to undertake may not be appropriate in some cases.

85. The Exchange may exercise its discretion under Rule 14.20 to disregard the revenue ratio and the profit ratio (where applicable) for any Specialist Technology Company listed under Chapter 18C and consider other relevant indicators of size, including industry-specific tests suggested by the issuer, on a case-by-case basis. The listed issuer must provide alternative tests which it considers appropriate to the Exchange for consideration.

Appendix

R&D expenditure ratio calculation - Illustrative example 1 (Pre-commercial Company)

Company A is a Pre-Commercial Company (with revenue of less than HK$150,000,000 for the most recent audited financial year) seeking to list on the Main Board pursuant to Chapter 18C. The applicable minimum R&D expenditure ratio is 50% under Listing Rule 18C.04(2)(c). The consolidated statements of profit or loss of Company A and the capital expenditures incurred for the three financial years prior to listing are as follows:

Consolidated statements of profit or loss	**Year 1 HK$'000**	**Year 2 HK$'000**	**Year 3 HK$'000**
Revenue	**-**	**-**	**120,000**
Cost of sales	-	-	(54,000)
Gross profit	**-**	**-**	**66,000**
Selling and marketing expenses	-	-	(13,000)
General and administrative expenses	(320,000)	(348,000)	(395,000)
R&D expenses	(236,000)	(264,000)	(450,000)
Loss from operations	**(556,000)**	**(612,000)**	**(792,000)**
Finance costs	(17,000)	(18,000)	(19,000)
Loss before tax	**(573,000)**	**(630,000)**	**(811,000)**
Income tax expense	-	-	-
Loss for the year	**(573,000)**	**(630,000)**	**(811,000)**

Capital expenditures incurred	**Year 1 HK$'000**	**Year 2 HK$'000**	**Year 3 HK$'000**
Acquisition of R&D centre (fixed asset)[1]	200,000	-	-
R&D equipment acquired and capitalised (fixed asset)[1]	65,000	85,000	25,000
Intangible asset acquired from third parties and capitalised[2]	120,000	30,000	-
Internal development costs capitalised as intangible asset[2]	20,000	30,000	-
	405,000	**145,000**	**25,000**

[1] The depreciation expense of these fixed assets is included in R&D expenses.

[2] The amortisation of these intangible assets began at the beginning of year 3 for R&D activities with annual amortisation expense of HK$40,000,000 (included in the line item "R&D expenses").

Calculation of R&D expenditure ratios

Step 1: Compute the annual and total R&D expenditure for the track record period

	Year 1 HK$'000	Year 2 HK$'000	Year 3 HK$'000
R&D expenses	236,000	264,000	450,000
Adjustments:			
Add: Intangible asset acquired from third parties and capitalised	120,000	30,000	-
Add: Internal development costs capitalised as intangible asset	20,000	30,000	-
Less: Amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(40,000)
Annual R&D expenditure (A)	**376,000**	**324,000**	**410,000**

Total R&D expenditure for the three financial years prior to listing (HK$'000) (B)	**1,110,000**

Step 2: Compute the annual and total operating expenditure for the track record period

	Year 1 HK$'000	Year 2 HK$'000	Year 3 HK$'000
R&D expenses	236,000	264,000	450,000
Selling and marketing expenses	-	-	13,000
General and administrative expenses	320,000	348,000	395,000
Adjustments:			
Add: Intangible asset acquired from third parties and capitalised	120,000	30,000	-
Add: Internal development costs capitalised as intangible asset	20,000	30,000	-
Less: Amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(40,000)
Annual total operating expenditure (C)	**696,000**	**672,000**	**818,000**

Total operating expenditure for the three financial years prior to listing (HK$'000) (D)	**2,186,000**

Step 3: Compute the annual and total R&D expenditure ratio for the track record period

		Year 1	Year 2	Year 3
(i) Annual R&D expenditure ratio =	**(A)/(C)**	**54%**	**48%**	**50%**
(ii) Total R&D expenditure ratio =	**(B)/(D)**		**51%**	

Result:

As the annual R&D expenditure ratio of at least two of the three financial years is at least 50% AND the total R&D expenditure ratio over the three-year track record period is also at least 50%, Company A can meet the R&D expenditure ratio requirement for a Pre-Commercial Company under Listing Rule 18C.04(2)(c).

R&D expenditure ratio calculation - Illustrative example 2 (Commercial Company)

Company B is a Commercial Company seeking to list on the Main Board pursuant to Chapter 18C. The applicable minimum R&D expenditure ratio is 15% under Listing Rule 18C.04(2)(a). The consolidated statements of profit or loss of Company B and the capital expenditures incurred for the three financial years prior to listing are as follows:

Consolidated statements of profit or loss	**Year 1 HK$'000**	**Year 2 HK$'000**	**Year 3 HK$'000**
Revenue	**100,000**	**120,000**	**290,000**
Cost of sales	(70,000)	(84,000)	(203,000)
Gross profit	**30,000**	**36,000**	**87,000**
Selling and marketing expenses	(75,000)	(89,000)	(116,000)
General and administrative expenses	(51,000)	(63,000)	(78,000)
R&D expenses	(21,000)	(30,000)	(42,000)
Loss from operations	**(117,000)**	**(146,000)**	**(149,000)**
Finance costs	(1,700)	(1,800)	(1,900)
Loss before tax	**(118,700)**	**(147,800)**	**(150,900)**
Income tax expense	(500)	(600)	(1,500)
Loss for the year	**(119,200)**	**(148,400)**	**(152,400)**

Capital expenditures incurred	**Year 1 HK$'000**	**Year 2 HK$'000**	**Year 3 HK$'000**
Acquisition of R&D centre (fixed asset)[1]	10,000	-	-
R&D equipment acquired and capitalised (fixed asset)[1]	7,000	9,000	3,000
Intangible asset acquired from third parties and capitalised[2]	5,000	-	-
Internal development costs capitalised as intangible asset[2]	2,000	3,000	-
	24,000	**12,000**	**3,000**

[1] The depreciation expense of these fixed assets is included in R&D expenses.

[2] The amortisation of these intangible assets began at the beginning of year 3 for R&D activities with annual amortisation expense of HK$2,000,000 (included in the line item "R&D expenses").

Calculation of R&D expenditure ratios

Step 1: Compute the annual and total R&D expenditure for the track record period

	Year 1 HK$'000	Year 2 HK$'000	Year 3 HK$'000
R&D expenses	21,000	30,000	42,000
Adjustments:			
Add: Intangible asset acquired from third parties and capitalised	5,000	-	-
Add: Internal development costs capitalised as intangible asset	2,000	3,000	-
Less: Amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(2,000)
Annual R&D expenditure (A)	**28,000**	**33,000**	**40,000**

Total R&D expenditure for the three financial years prior to listing (HK$'000) (B)	**101,000**

Step 2: Compute the annual and total operating expenditure for the track record period

	Year 1 HK$'000	Year 2 HK$'000	Year 3 HK$'000
R&D expenses	21,000	30,000	42,000
Selling and marketing expenses	75,000	89,000	116,000
General and administrative expenses	51,000	63,000	78,000
Adjustments:			
Add: Intangible asset acquired from third parties and capitalised	5,000	-	-
Add: Internal development costs capitalised as intangible asset	2,000	3,000	-
Less: Amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(2,000)
Annual total operating expenditure (C)	**154,000**	**185,000**	**234,000**

Total operating expenditure for the three financial years prior to listing (HK$'000) (D)	**573,000**

Step 3: Compute the annual and total R&D expenditure ratio for the track record period

		Year 1	Year 2	Year 3
(i) Annual R&D expenditure ratio =	**(A)/(C)**	**18%**	**18%**	**17%**
(ii) Total R&D expenditure ratio =	**(B)/(D)**		**18%**	

Result:

As the annual R&D expenditure ratio of at least two of the three financial years is at least 15% AND the total R&D expenditure ratio over the three-year track record period is also at least 15%, Company B can meet the R&D expenditure ratio requirement for a Commercial Company under Listing Rule 18C.04(2)(a).

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