

16 December 2022

BY HAND AND BY EMAIL

Corporate and Investor Communications Department
Hong Kong Exchanges and Clearing Limited
8th Floor, Two Exchange Square
8 Connaught Place
Central
Hong Kong

Dear Sirs,

Consultation Paper on Listing Regime for Specialist Technology Companies

Ernst & Young is pleased to respond in this letter to the request of The Stock Exchange of Hong Kong Limited for feedback on the captioned consultation paper. Terms used in this letter shall have the same meanings as in the consultation paper.

We welcome the Exchange's proposal to set up a listing regime for Specialist Technology Companies with a view to maintaining the competitiveness of Hong Kong as an international financial centre.

We would like to share with you the following observations and comments:

Specialist Technology Industries

We agree that the proposed regime should cover companies from broad industry categories similar to the non-biotech STAR industries and include new food and agriculture technologies.

Categorisation of Commercial / Pre-Commercial Companies

Given the different risk profiles, we agree to the Exchange's proposed categorisation and imposition of more stringent requirements on Pre-Commercial Companies.

Minimum expected market capitalisation

Exchange's proposals and rationale

It is stated in paragraphs 121 to 124 of the consultation paper that, in line with the views of most of the 27 stakeholders with which the Exchange conducted preliminary discussions and the Exchange's wish to uphold market quality, the Exchange proposes setting the minimum market capitalisation for Commercial Companies at HK\$8 billion, the valuation generally associated with a "unicorn" company. The high implied price-to-sales (P/S) ratio of 32 times (based on the proposed revenue threshold of HK\$250 million) is indicative of the nature of Specialist Technology Companies, which tend to achieve high valuations before generating substantial revenue. Stakeholders told the Exchange that investors in such companies generally value them based on future growth and revenue, rather than past or current revenue already generated. The Exchange also found that out of the issuers in the Ineligible Sample Cohort (i.e., 212 US and Mainland Specialist Technology Issuers sampled that would not have met the Main Board Eligibility Tests) with a market capitalisation of at least HK\$8 billion, a majority of them had achieved the said implied P/S ratio of 32 times or more at the time of listing. The proposed price discovery optimisation proposals should mean that the expected market capitalisation of an applicant is strongly supported by independent due diligence, research and professional judgement, mitigating the risk of overly inflated valuations. The Exchange proposes setting the threshold for Pre-Commercial Companies at HK\$15 billion which is substantially higher than that proposed for Commercial Companies (almost two-fold).

EY's analysis

Whilst raising the bar to only allow technology "unicorns" to list under the proposed regime may help ensure investor protection, it will restrict the number of Specialist Technology Companies that qualify to list in Hong Kong, thus making it more difficult to create a critical mass to ensure the success of the regime and to compete with the US and the Mainland markets. A pre-revenue Biotech Company can list with a minimum market capitalisation of HK\$1.5 billion under Chapter 18A of the Main Board Listing Rules. We understand that Biotech Companies are subject to Competent Authority regimes and therefore arguably they may justify having a lower market capitalisation. The Exchange acknowledges in paragraphs 10 and 79 of the consultation paper that the presence of a Competent Authority 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, but it does provide investors with

a frame of reference with which to judge the stage of development of Core Products, in the absence of commercial indicators such as revenue and profit.

The proposed minimum market capitalisation of HK\$8 billion for Commercial Companies (which have been in operation for at least three years and already achieved a revenue threshold of HK\$250 million) is much higher than the HK\$1.5 billion required for pre-revenue Biotech Companies (which may not successfully commercialise their products and are only required to be in operation for at least two years). The justification appears to be limiting the proposed regime to “unicorns” only. There is no further explanation in the consultation paper as to how the proposed minimum market capitalisation of HK\$15 billion for Pre-Commercial Companies is derived. However, technology is an important sector, and its significance will only grow further with time.

As set out in the jurisdictional comparison table in paragraph 61 of the consultation paper, the existing Main Board market capitalisation/revenue test (i.e., HK\$4 billion/HK\$ 500 million) is far more stringent than the non-profit-based and non-cashflow-based financial eligibility tests of the selected exchanges. Based on Appendix II to the paper, none of the selected exchanges imposes a non-profit-based eligibility test with a P/S ratio of more than 10 times. One of the criteria for listing a new economy company with WVR structure under the Exchange’s own Chapter 8A implies a P/S ratio of 10 times. Furthermore, there is no information in the consultation paper as to how many issuers in the Ineligible Sample Cohort (selected US and Mainland issuers) had a market capitalisation below HK\$8 billion. In fact, as at 12 December 2022, based on the offer prices of the companies at time of listing, (i) out of the 493 STAR companies listed, 342 (about 69%) would not have passed the HK\$8 billion threshold (assuming a historic exchange rate of RMB1=HK\$1.2 used in Appendix II to the consultation paper which is higher than the rate at the time of writing); and (ii) out of the 53 Biotech Companies listed under Chapter 18A, 16 (about 30%) would not have passed the HK\$8 billion threshold. As set out in paragraph 58 of the consultation paper, the number of issuers that have been listed under the Alternative Tests (i.e., the market capitalisation/revenue test or market capitalisation/revenue/cash flow test introduced in 2004) remains low. Of those listed under the Alternative Tests since 2017, only three (5.6%) operate in Specialist Technology Industries and only five used the market capitalisation/revenue test. For the proposed regime to be successful, one would expect that it should enable many more listings than those under the Alternative Tests.

We understand the Exchange's view that the minimum market capitalisations should be sufficiently high to ensure the quality of the companies coming to list under the proposed regime, but we believe there is room for a reduction in the currently proposed market capitalisations, bearing in mind the current economic climate, the competition from other exchanges and the other safeguards proposed by the Exchange (such as meaningful pre-IPO third party investment and post-IPO lock-up provisions that involve longer lock-up periods and cover more key persons). The Exchange may also consider imposing additional qualitative safeguards (such as enhanced corporate governance as discussed below) to balance the risks brought about by lowering the very high quantitative thresholds.

The following table illustrates a range of possible minimum market capitalisations based on the proposed revenue threshold of HK\$250 million for Commercial Companies and the assumption that the minimum market capitalisation of Pre-Commercial Companies should be double that of Commercial Companies:

Option	Commercial companies		Pre-Commercial Companies
	P/S ratio (times)	Minimum market capitalisation (HK\$)	Minimum market capitalisation (HK\$)
A	6	1.5 billion ¹	3 billion
B	8	2 billion ²	4 billion
C	10 ³	2.5 billion	5 billion
D	16	4 billion ⁴	8 billion ⁵

Footnotes:

1. HK\$1.5 billion is the minimum market capitalisation for a pre-revenue Biotech Company under Chapter 18A (see comparison table below).
2. HK\$2 billion is the minimum market capitalisation under the market capitalisation/revenue/cash flow test (see comparison table below).
3. 10 times is the maximum P/S ratio as shown in the comparison table below.
4. HK\$4 billion is the minimum market capitalisation under the market capitalisation/revenue test (see comparison table below).
5. US\$1 billion is the valuation generally associated with a "unicorn" company (according to paragraphs 116 and 121 of the consultation paper).

The following table sets out the non-profit-based requirements of other regimes within the Main Board and those of the STAR market (based on Appendix II to the consultation paper) for comparison:

Regime	Minimum market capitalisation	Minimum revenue	P/S ratio (times)	Remarks
Main Board Biotech Companies	HK\$1.5 billion	N/A	N/A	Competent Authority benchmarks
Main Board market cap/revenue/cash flow test	HK\$2 billion	HK\$500 million	4	Minimum cash inflows required
Main Board market cap/revenue test	HK\$4 billion	HK\$500 million	8	
Main Board new economy companies with WVR structure	HK\$10 billion	HK\$1 billion	10	One of the listing options
STAR Listing Criterion 2	RMB1.5 billion	RMB200 million	7.5	Minimum R&D investment required
STAR Listing Criterion 3	RMB2 billion	RMB300 million	6.67	Minimum cash flows required
STAR Listing Criterion 4	RMB3 billion	RMB300 million	10	
STAR Listing Criterion 5	RMB4 billion	N/A	N/A	Most biotech companies listed using this route

EY's suggestion

We agree that the minimum market capitalisation thresholds should be set at a level that would make the proposed regime competitive in terms of attracting Mainland companies to list in Hong Kong but is high enough to help maintain the integrity of our market. As such, we suggest setting the minimum market capitalisation for Commercial Companies at HK\$1.5 billion to be on par with pre-revenue Biotech Companies, as we believe that a Specialist Technology Company that has commercialised its products and achieved the minimum revenue threshold of HK\$250 million should not be considered to have a higher risk profile than a pre-revenue Biotech Company which may not successfully commercialise its products. For Pre-Commercial Companies, we suggest setting the threshold at HK\$8 billion, the valuation generally associated with a "unicorn" company, as these companies carry a much higher risk profile and it is reasonable to only allow "unicorns" to list. We also suggest that the proposed minimum free float of HK\$600 million be reduced accordingly.

Same as the Main Board profit requirement, the Exchange can increase the thresholds as time goes by, but it would be difficult for the Exchange to reduce the thresholds later in the event only a handful of “unicorns” seek to list soon after the launch and the regime loses momentum thereafter. Some of our clients in Mainland China were not interested to know more about the proposed regime because the proposed minimum market capitalisations are too high from their point of view.

R&D investment

Paragraph 141 of the consultation paper states that:

“For the purpose of determining the amount of qualifying R&D investment and the total operating expenditure under the expenditure ratio test in paragraph 138:

- (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 be primarily comprised of 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;

- (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 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 141(b) above.”

We note that R&D investment for a period includes (1) development costs for the period that have been capitalised as intangible assets (see paragraph 141(a) quoted above) as well as (2) the amortisation of intangibles used in R&D activities (see paragraph 141(b)(iv) quoted above).

If the capitalisation and amortisation of the same R&D expenditure happened within the three-year trading record, counting the subsequent amortisation as qualified R&D investment will amount to double-counting a portion of the same capitalised expenditure which has already been included as qualified R&D investment during a prior period within the trading record. We believe it is not the intention of the Exchange to allow such double-counting.

In the event the proposals are adopted, we suggest the Exchange to issue frequently asked questions to clarify the above issue, as well as including illustrative examples to explain the calculation of the expenditure ratio test for both Commercial Companies (e.g., treatment of cost of sales) and Pre-Commercial Companies (e.g., scenarios involving capitalisation of R&D investment during the trading record period).

Enhanced corporate governance

The Exchange may consider putting in place additional safeguards in the form of enhanced corporate governance. For example, the Exchange may require Pre-Commercial Companies to establish a corporate governance committee, similar to what Chapter 8A requires for companies with a WVR structure; and/or to appoint INEDs possessing suitable experience in the technology sector. Similar safeguards may also be imposed on Commercial Companies should the minimum market capitalisation threshold be lowered.

Should you have any questions on the above comments, please do not hesitate to contact our Professional Practice Partner in Hong Kong, [REDACTED]
[REDACTED]

Yours faithfully,

[REDACTED]

Certified Public Accountants
Hong Kong