

2.5 SPECIALIST TECHNOLOGY COMPANIES

1. This chapter provides guidance for Specialist Technology Companies with, or seeking, a listing on the Exchange pursuant to MB Chapter 18C. The chapter is divided into the following sections:
 - A. Specialist Technology Industries
 - B. Minimum Initial Market Capitalisation Requirement and Other Criteria for Specialist Technology Companies
 - C. R&D Expenditure
 - D. Third Party Investments
 - E. Path to Achieving Revenue Requirement
 - F. Minimum Allocation to Independent Price Setting Investors
 - G. Liquidity Arrangements
 - H. Disclosures
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 - J. Specialist Technology Company with a WVR Structure
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Definitions

- **Commercial Company** means a Specialist Technology Company that has revenue of at least HK\$250 million for its most recent audited financial year.
- **Pre-Commercial Company** means a Specialist Technology Company that does not meet the revenue requirement to be a Commercial Company.
- **Specialist Technology Company** means a company primarily engaged (whether directly or through its subsidiaries) in the R&D of, and the commercialisation and/or sales of, Specialist Technology Product(s) within an acceptable sector of a Specialist Technology Industry.
- **Specialist Technology Industry** and **an acceptable sector of a Specialist Technology Industry** means an industry or an acceptable sector (as the case may be) that is included in a list of Specialist Technology Industries set out in this Guide.
- **Specialist Technology Product** means a product and/or service (alone or together with other products or services) that applies science and/or technology within an acceptable sector of a Specialist Technology Industry.

A. Specialist Technology Industries

List of Specialist Technology Industries

2. The following table sets out the list of Specialist Technology Industries and the non-exhaustive¹ acceptable sectors that the Exchange considers to fall within each of these industries:

Acceptable sector	Description
(i) Next-generation information technology	
<i>Software, platform and infrastructure solutions powered by cloud computing and big data analytics</i>	
Cloud-based services	<p>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:</p> <ul style="list-style-type: none">(a) <i>Software as a service (SaaS)</i>: the delivery of software applications over cloud infrastructure enabling companies to conduct their operations using the application;(b) <i>Platform as a service (PaaS)</i>: 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; and(c) <i>Infrastructure as a service (IaaS)</i>: the delivery of cloud computing infrastructure (i.e. servers, storage, and networks) as an on-demand service.
Artificial intelligence (“AI”)	<p>The development of AI technology, including:</p> <ul style="list-style-type: none">(a) <i>Technology and infrastructure enabling AI</i>: the development of open-source development platforms, computing, and data services;(b) <i>AI-empowered algorithm programming</i>: image recognition, audio-visual learning, natural language processing (NLP), machine learning, and deep learning; and(c) <i>AI solutions</i>: 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 3 to 6) and may be updated from time to time (see paragraph 9).

Acceptable sector	Description
(ii) Advanced hardware and software	
<i>The development of new hardware and software using advanced technology</i>	
Robotics and automation	<p>The development of robots, automated systems, and enabling technologies, including:</p> <ul style="list-style-type: none"> (a) <i>Robot technology</i>: the engineering of robots, computer software and machines for the improved performance of tasks and/or automation processes; (b) <i>Internet of Things (IoT) technology</i>: machine-to-machine communications designed to monitor events, process data and determine actions; (c) <i>Smart home applications</i>: home automation designs involving human-robot interaction and/or human-appliance interaction; and (d) <i>Smart product designs</i>: design and manufacturing of sensor-driven, WiFi-enabled, self-learning or programmable products.
Semiconductors	<p>The development of technology for applications along the semiconductor value chain, including:</p> <ul style="list-style-type: none"> (a) <i>Production inputs</i>: materials, manufacturing equipment, electronic design automation (EDA) and core intellectual property (IP); (b) <i>Design</i>: logic and physical design, and validation and verification; (c) <i>Fabrication</i>: conversion of designs into chips and semiconductor devices; and (d) <i>Advanced packaging</i>: flip-chip packaging, 3D packaging and wafer-level packaging.
Advanced communication technology	<p>The development of connectivity technologies used in the transfer of information and/or connection of devices, including:</p> <ul style="list-style-type: none"> (a) <i>Next-generation wireless communication systems</i>: fifth-generation (5G) and beyond technology enabling high-speed and high-volume data transfers over wireless technology infrastructure and applications; and (b) <i>Satellite communication</i>: satellite-enabled telecommunications, broadcasting and data communications.

Acceptable sector	Description
Electric and autonomous vehicles	<p>The manufacturing and/or deployment of autonomous vehicles and electric vehicles, and development of enabling technologies, including:</p> <ul style="list-style-type: none"> (a) <i>Electric vehicles</i>: the use of new energy solutions in all-electric or battery electric vehicles (BEVs); (b) <i>Autonomous vehicles</i>: vehicles and trucks equipped with self-driving solutions; and (c) <i>Location technology</i>: sensors and technology enabling the detection or calculation of the geographical position of a person, mobile device or vehicle.
Advanced transportation technology	<p>The development of transportation technology (excluding electric and autonomous vehicles), and deployment of smart mobility systems, including:</p> <ul style="list-style-type: none"> (a) <i>Transportation technology</i>: new modes of transport (including electric aircraft) and drone technology; and (b) <i>Intelligent transportation systems</i>: the application of information and communication technology in road transport, traffic management and safety and mobility systems (including ridesharing).
Aerospace technology	<p>The development of technology used in the research, exploration and utilisation of space, including:</p> <ul style="list-style-type: none"> (a) <i>Spacecraft development</i>: the development of space launch vehicles, satellites, space stations and related components; (b) <i>Space exploration</i>: space imaging, earth imaging and robotic spacecraft; and (c) <i>Utilisation of space in defence capabilities</i>: space-based services and assets for security and defence purposes.
Advanced manufacturing	<p>The development of technology in production activities that depend on automation, computation, software, sensing, and/or networking, including:</p> <ul style="list-style-type: none"> (a) <i>Additive manufacturing</i>: 3D printing and mass-scale customisation for industrial and manufacturing processes; and (b) <i>Digitalised manufacturing</i>: applications of sensors and 3D vision technology in manufacturing processes.

Acceptable sector	Description
Quantum information technology and computing	<p>Software, hardware and services developed based on the principles of quantum information science and technology, including:</p> <ul style="list-style-type: none"> (a) <i>Quantum computing</i>: quantum computing software and/or hardware, and the provision of access to quantum computers via commercial cloud-based platforms; (b) <i>Quantum communication</i>: science and technology applied to quantum-secured communication networks; and (c) <i>Quantum precision measurement</i>: the application of quantum mechanics and quantum electrodynamics to precision measurement physics.
Metaverse technology	<p>The development of technology (including hardware, software and infrastructure) that enables the following applications:</p> <ul style="list-style-type: none"> (a) <i>Virtual reality (VR)</i>: technology providing a lifelike simulation of reality synthetically or virtually; (b) <i>Augmented reality (AR)</i>: technology enhancing human experience through the combination of the physical and digital worlds; and (c) <i>Brain-computer interfaces (BCIs)</i>: computer-based systems translating brain signals into commands that are relayed to an output device to carry out a desired action.
(iii) Advanced materials	
<i>The production or integration of new or significantly improved materials to enhance the performance of traditional materials</i>	
Synthetic biological materials	<p>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.</p>
Advanced inorganic materials	<p>The development of advanced functional inorganic materials science and technology for the following applications:</p> <ul style="list-style-type: none"> (a) <i>Special glass</i>: smart switchable glass technology such as smart windows and display; (b) <i>Special metals and alloys</i>: metals and alloys for specialist applications or with special properties; and (c) <i>Special ceramics</i>: advanced ceramics made from inorganic non-metallic compounds.
Advanced composite materials	<p>The development of high-performance composite materials and advanced processing techniques for composite materials. Examples include carbon matrix composite materials and advanced polymers.</p>

Acceptable sector	Description
Nanomaterials	<p>The development and application of technology to enable the manipulation of materials conducted at a nanoscale, including:</p> <ul style="list-style-type: none"> (a) <i>Manufacturing of end products using nanotechnology:</i> nanostructured filters, coatings and additives; and (b) <i>Development of nanotechnology:</i> the manufacturing and testing of equipment for nanoscale measurement and/or manipulation of materials.
(iv) New energy and environmental protection	
<i>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</i>	
New energy generation	<p>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.</p>
New energy storage and transmission technology	<p>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:</p> <ul style="list-style-type: none"> (a) <i>New energy storage systems:</i> battery technologies and long duration energy storage; and (b) <i>New energy transmission and distribution networks:</i> power grid management and development and smart grid developments.
New green technology	<p>The development of technology-driven solutions for environmental conservation or remediation, or technologies that enhance resource- and/or energy-efficiency including:</p> <ul style="list-style-type: none"> (a) <i>Environmental remediation:</i> soil washing, soil vapour extraction and thermal desorption; and (b) <i>Emissions reduction:</i> hydrogen and carbon capture and storage.

Acceptable sector	Description
(v) New food and agriculture technologies	
<i>Food and agriculture technologies applied to agriculture, farming and food processing activities</i>	
New food technology	<p>The development of technology for food production and processing, including:</p> <ul style="list-style-type: none"> (a) <i>Artificial meat, sustainable protein technology, and synthetic biology in food technology</i>: production of novel ingredients including cultured meat, plant-based meat and egg substitution, sustainable protein, genome engineering, livestock genetics and macronutrient products; and (b) <i>Food waste reduction</i>: new technology enabling food waste reduction, shelf-life enhancement and monitoring.
New agriculture technology	<p>The application of technology in the production of agricultural machinery, equipment and supplies, including:</p> <ul style="list-style-type: none"> (a) <i>Agricultural biotechnology and crop efficiency technology</i>: genetic engineering of crops and crop nutrition diagnostics; (b) <i>Agricultural synthetic biology</i>: the application of synthetic biology in crop production, fertilisers and pesticides and animal feedstock; and (c) <i>Farming technology</i>: hydroponic crop farming, vertical farming, insect farming and microbe growing systems.

Outside the scope of the list of Specialist Technology Industries and acceptable sectors

3. The Exchange may consider applicants that fall outside the list of Specialist Technology Industries or acceptable sectors as “within an acceptable sector of a Specialist Technology Industry” taking into account the following:

Acceptable	Not acceptable
<ul style="list-style-type: none"> ✓ High growth potential. ✓ 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. ✓ R&D significantly contributes to its expected value and constitutes a major activity and expense. ✓ Biotech Company that does not base its listing application on a Regulated Product. 	<ul style="list-style-type: none"> ✗ Biotech Company that bases its listing application on a Regulated Product (as defined under MB Chapter 18A)².

4. Applicants that fall outside the list of Specialist Technology Industries or acceptable sectors as set out in paragraph 2 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 MB Chapter 18C.
5. An applicant should include in its submission all relevant facts with a meaningful and balanced discussion of its core business, technologies and innovations. Selective favourable disclosures will prolong the Exchange’s assessment.
6. The Exchange will take into account all relevant facts and circumstances in making its assessment, and 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 MB Chapter 18C.
7. The Exchange also retains the discretion to reject an application for listing from an applicant within an acceptable sector as set out in paragraph 2 if it displays attributes inconsistent with the principles set out under the heading “Acceptable” in paragraph 3 provided that in such context the second acceptable principle shall be replaced by “the applicant’s success can be demonstrated to be attributable to the application, to its core business, of the relevant Specialist Technology”.

Applicants with multiple business segments

8. 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 adopt a holistic approach in assessing whether the applicant is “primarily engaged” in the relevant business (as defined in “Specialist Technology Company”). Non-exhaustive examples include:

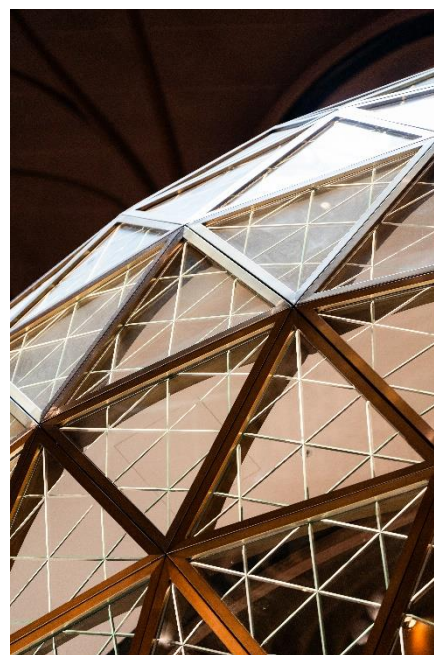
² A Biotech Company relying on a Regulated Product as the basis of its listing application that fails to satisfy the requirements under MB Chapter 18A (and the relevant guidance) is not permitted to submit an application under MB Chapter 18C.

- (i) Whether a substantial portion of the total operating expenditure of the applicant and staff resources (including their time and the number of staff with relevant expertise and experience) was spent on the R&D of, and the commercialisation and/or sales of, Specialist Technology Products in the applicant's Specialist Technology business segment³ for at least three financial years prior to listing;
 - (ii) Whether the basis for investors' valuation and the expected market capitalisation of the applicant is based primarily on the applicant's Specialist Technology business segment, rather than its other business segments or assets unrelated to its Specialist Technology business segment;
 - (iii) Whether the proposed use of proceeds for listing would primarily be applied to its Specialist Technology business segment;
 - (iv) The proportion of the revenue (if any) generated by the Specialist Technology business segment relative to the total revenue of the applicant; and
 - (v) The reason for retaining the non-Specialist Technology business segment and the history of the applicant's operations.
9. 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 in these circumstances if, for example, the applicant has characteristics that are not generally applicable to other companies in its industry/sector.

B. Minimum Initial Market Capitalisation Requirement and Other Criteria for Specialist Technology Companies

Initial market capitalisation

10. The minimum initial market capitalisation at the time of listing required for the listing of Specialist Technology Companies pursuant to MB Rule 18C.03(3) has been modified⁴, such that:
- (i) A Commercial Company must have an initial market capitalisation at the time of listing of at least HK\$4 billion; or
 - (ii) A Pre-Commercial Company must have an initial market capitalisation at the time of listing of at least HK\$8 billion.






³ For applicants 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).

⁴ The modification will apply from 1 September 2024 to 31 August 2027. See the "Joint Announcement of the SFC and the Exchange in relation to Temporary Modifications to Requirements for Specialist Technology Companies and De-SPAC Transactions" dated 23 August 2024 on the [Exchange's website](#).

Other criteria

11. The following table sets out the criteria that an applicant applying for listing under MB Chapter 18C must satisfy, which 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 3 (as modified by paragraph 7 where applicable):

<p>Ownership continuity</p> 	<p>(i) 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 unconditional⁵.</p> <p>(ii) 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.</p>
<p>Revenue growth (Commercial Companies only)</p> 	<p>(i) 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 (e.g. 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 MB 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.</p>
<p>Use of proceeds (Pre-Commercial Companies only)</p> 	<p>(i) 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 to bring them to commercialisation and achieving the revenue threshold as required for a Commercial Company.</p>

C. R&D Expenditure

12. For calculating the amount of R&D expenditure for the Specialist Technology Product:

Include	Exclude
<p>✓ Costs directly attributable to the Specialist Technology Company's R&D activities during the period (see paragraph 13), including development costs for the period that have been capitalised as intangible assets for accounting purposes.</p>	<p>✗ General, administrative or other costs that are not clearly related to R&D activities.</p> <p>✗ Initial recognition of any fixed assets relating to the applicant's R&D activities (e.g. capital expenditures for acquiring an R&D centre).</p>

⁵ The Exchange will apply the same guidance it has published on the ownership continuity and control requirement as set out in MB Rules 8.05(1)(c), 8.05(2)(c) and 8.05(3)(c) for the purpose of this ownership continuity requirement.

Include	Exclude
<ul style="list-style-type: none"> ✓ Amortisation of intangibles used in R&D activities (to the extent the related R&D costs being capitalised as intangibles have not been included above). ✓ Costs of personnel engaged in R&D activities. ✓ 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). ✓ Costs of materials consumed in R&D activities. ✓ Costs of R&D conducted by others on the applicant's behalf (including consulting or testing fees). 	<ul style="list-style-type: none"> ✗ Any expense of finance nature.

13. For calculating the total operating expenditure under MB Rule 18C.04(2), the total operating expenditure for a period⁶ is the sum of (i) the total expenses of the applicant as reflected in the financial statements during the period, excluding cost of sales and any expense of a finance nature; and (ii) any such costs that have not been recognised as expenses during the period but qualify as R&D expenditure as described in paragraph 12 above.
14. An applicant must include a detailed breakdown of its R&D expenditure in its listing document (see “Key area – R&D expenditure, experience and specific risks” of paragraph 55). If any other type of costs apart from those listed in paragraph 12 above is included as qualifying R&D costs, the basis for the inclusion must be explained clearly.
15. See the Appendix to this chapter for illustrative examples of the calculation of the R&D expenditure ratio.

D. Third Party Investments

16. A Specialist Technology Company applicant must have received meaningful investments from sophisticated independent investors.

Independent investor

17. 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.

⁶ Pursuant to MB Rule 18C.04(3), the applicant must meet the applicable percentage threshold under MB Rule 18C.04(2):

- (i) on a yearly basis for at least two of the three financial years prior to its listing; and
- (ii) on an aggregate basis over all three financial years prior to listing.

18. The following persons will not be considered as sophisticated independent investors:
- (i) Core connected person⁷ of the applicant, except for a substantial shareholder of the applicant that is considered a core connected person only because of the size of its shareholding in the applicant (subject to paragraph 18(ii) below);
 - (ii) Controlling shareholder (or person within the group of persons who are considered as controlling shareholders) of the applicant; and
 - (iii) The founder of the applicant and its close associates.
19. The Exchange retains the discretion to deem any other person to be not independent 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 or controlling shareholder of a Specialist Technology Company normally will not be considered as independent.

Sophisticated investor

20. The Exchange will assess whether an investor is sophisticated 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.
21. For illustrative purposes only, the Exchange would generally consider the following as examples of the types of investors that would be considered sophisticated:
- (i) An asset management firm with AUM of, or a fund with a fund size of, at least HK\$15 billion;
 - (ii) A company having a diverse investment portfolio size of at least HK\$15 billion;
 - (iii) 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
 - (iv) 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.
22. “Investment portfolio” for the purpose of paragraphs 21(ii) and 21(iii) means the aggregate value of investments in investee companies as determined under the prevailing accounting standards. The Exchange may 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.
23. A fund managed by a fund manager that has AUM of an amount that meets the threshold set out in paragraph 21(i), or a wholly-owned subsidiary of an entity referred to in paragraph 21(i) or 21(ii), would qualify as a sophisticated investor.

⁷ For the avoidance of doubt, a sophisticated investor with board representation will not be classified 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.

24. The Exchange may still consider investors of a type that is not included in the illustrative examples in paragraph 21 above as sophisticated, on a case-by-case basis, considering the specific circumstances of an applicant. The applicant should demonstrate that these investors have relevant investment experience, knowledge and expertise.
25. 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 above information cannot be disclosed in detail for confidentiality reasons, the Exchange may accept 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 published⁸. Such information should be given as of:
- (i) 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
 - (ii) A date which is no more than six months prior to the date of the listing application.

Minimum investments

26. As an indicative benchmark, an applicant applying to list under MB Chapter 18C and meeting the following requirements will generally be considered as having met the requirement of having received meaningful investments:
- (i) **Investments from Pathfinder SIIIs:** 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 SIIIs**") that satisfy the following:
 - (a) Such Pathfinder SIIIs, in aggregate, (1) hold such amount of shares or securities convertible into shares (e.g. convertible or exchangeable bonds, notes or loans or convertible preference 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\$1.5 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
 - (b) At least two such Pathfinder SIIIs (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 has 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).

⁸ See **Chapter 3.14** and any other relevant guidance as implemented by the Exchange from time to time for guidance on alternative disclosure on the background and investment experience of the sophisticated independent investors.

- (ii) **Investments from all sophisticated independent investors:** The following table sets out the 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:

Expected market capitalisation of the applicant at the time of listing ^{Note}	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\$4 billion or more but less than HK\$15 billion (Commercial Companies)	20%	25%
HK\$8 billion or more but less than HK\$15 billion (Pre-Commercial Companies)		
HK\$15 billion or more and less than HK\$30 billion	15%	20%
HK\$30 billion or more	10%	15%

Note: The Exchange has introduced temporary modifications to the minimum initial market capitalisation at the time of listing required for the listing of Specialist Technology Companies, effective from 1 September 2024. See paragraph 10 above for details.

Securities convertible into shares

27. In the case of a sophisticated independent investor holding securities convertible into shares in an applicant, 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.
28. 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 Pathfinder SII's investments

29. The Exchange may accept fluctuations in the shareholding of the Pathfinder SII referred to in paragraph 26(i)(a)(1) or (b)(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):
 - (i) **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

- (ii) **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 26(i)(a)(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 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.
30. The timing of investments by the Pathfinder SIIs should be determined by reference to the date of irrevocable settlement.
31. 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 26(i). 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 sophisticated independent investors' investments

32. For the purpose of the benchmark on aggregate investment set out in paragraph 26(ii) ("**Aggregate Investment Benchmark**"):
- (i) 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
 - (ii) 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 may 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 applicant, the OC and the sponsor should provide an undertaking in this regard and such undertaking should be disclosed in the listing document.

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 21). 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 21(iv)), the applicant must submit the relevant information on such sophisticated independent investor to which it intends to allocate offer shares as placee for the above purpose well in advance so that the Exchange can have sufficient time to assess whether such placee may be regarded as a sophisticated independent investor; and
- (b) The applicant must confirm in the allotment results announcement that the investments from all sophisticated independent investors have 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 25 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

33. For applicants listed on other stock exchanges applying to list under MB Chapter 18C, the Exchange acknowledges the possibility that the shareholding of sophisticated independent investors at the relevant times (e.g. the time of the MB Chapter 18C listing application) may not strictly comply with the indicative benchmarks set out in paragraph 26.
34. In assessing whether such an applicant has received meaningful investments from sophisticated independent investors, 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 MB Chapter 18C listing application.

E. Path to Achieving Revenue Requirement

35. The Exchange will retain the discretion to determine whether the evidence provided by a Pre-Commercial Company to demonstrate a credible path to the commercialisation of its Specialist Technology Product that will result in it achieving the revenue requirement for a Commercial Company is satisfactory. For this purpose, a Pre-Commercial Company applicant must also:
 - (i) Explain and disclose, in detail, the timeframe for, and impediments to, achieving the revenue requirement for a Commercial Company; and
 - (ii) 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 for a Commercial Company, describe the potential funding gap and how it plans to further finance its path to achieving such revenue requirement after listing.
36. Pre-Commercial Companies should exercise caution when disclosing the timeframe for, and the path to, achieving the revenue requirement for a Commercial Company, 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

37. Non-exhaustive examples of a credible path for Pre-Commercial Companies to achieving the revenue requirement for a Commercial Company include:
 - (i) 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 that the applicant has in place; and
 - (ii) 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, 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.

38. For the purpose of paragraph 37:

- (i) 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 18 and 19 above) in assessing the independence of a customer; and
- (ii) 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 illustrative purposes only, the Exchange would generally consider the following as examples of a “highly reputable customer”:
 - (a) 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
 - (b) A State or State corporation as defined under MB Rule 1.01.

39. The factors referred to in paragraphs 37 and 38 are non-exhaustive examples. 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 does not meet all the requirements as set out in paragraphs 37 and 38, a Pre-Commercial Company applicant should describe how it plans to achieve the revenue requirement for a Commercial Company in the listing document.

40. 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 37 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, as supported by appropriate evidence such as confirmed orders.

41. 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, and retains the discretion to determine whether the evidence provided by a Pre-Commercial Company applicant satisfies the requirement of, MB Rule 18C.06.

F. Minimum Allocation to Independent Price Setting Investors

42. 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).

43. Independent price setting investors are determined as follows:

Independent price setting investors

- (i) Institutional Professional Investors⁹; and
- (ii) Other types of investors with AUM, fund size or investment portfolio⁹ size of at least HK\$1 billion.

Excluding

- (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.

-
44. A fund managed by a fund manager, or a wholly-owned subsidiary of such entity, that has AUM of an amount that meets the threshold set out in paragraph 43(ii) would qualify as an independent price setting investor.
45. In the case of a Specialist Technology Company listing 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 price setting investors.
46. In the case of a Specialist Technology Company listing by introduction under MB Chapter 7, the Exchange will take a holistic approach and consider granting waivers, on a case-by-case basis, from the requirement under MB 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 MB 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

47. 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.
48. 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.

⁹ See MB Rule 18B.01 for the definition of Institutional Professional Investors and paragraph 22 of this chapter for the definition of "investment portfolio".

49. 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 listing¹⁰.

H. Disclosures

50. 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.
51. The following guidance for Specialist Technology Companies supplements the guidance which the Exchange has published relating to disclosure in listing documents applicable to all 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 MB Rules and may be returned.
52. 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.
53. In addition to the information specifically required under the MB Rules and this chapter, a Specialist Technology Company must disclose all relevant information in its 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 MB Chapter 18C and this chapter.
54. Non-exhaustive examples of such disclosures include: (a) the Specialist Technology Industry and the acceptable sector (as referred to in "A. Specialist Technology Industries" 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 "D. Third Party Investment" above).
55. The following disclosure should also be made in the listing document, where applicable:

Pre-IPO investments	<p>(i) In addition to the existing disclosure requirements on pre-IPO investments¹¹, an applicant should also disclose the implied pre-money and post-money valuations of each round of pre-IPO investment in a table.</p> <p>(ii) Reasons for material fluctuations in valuation (a) as compared to the immediate previous round of pre-IPO financing; and (b) 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.</p>
Burn rate	<p>Disclose in the "Summary" section and other relevant sections:</p> <p>(i) <i>Historical burn rate</i> - the burn rate throughout the track record period, with the basis for determination and reasons for any substantial expenditure</p>

¹⁰ See **Chapter 4.12** and any other relevant guidance as implemented by the Exchange from time to time for guidance on liquidity arrangements for issuers seeking to list by introduction where the securities to be listed are already listed on another stock exchange.

¹¹ See **Chapter 4.2** and any other relevant requirements as implemented by the Exchange from time to time for guidance on pre-IPO investments.

	<p>explained.</p> <p>(ii) <i>Future burn rate</i> -</p> <p>(a) A reasonable period of time, with basis, that the applicant can maintain its viability with existing cash balance and the IPO proceeds.</p> <p>(b) When the applicant expects to raise its next round of financing based on the burn rate.</p> <p>(c) Assumptions in relation to the future burn rate, which should be reasonable taking into account specific facts and circumstances.</p>
Cash operating cost	<p>(i) <i>Historical cash operating cost</i> - disclose an estimate of cash operating costs, including costs relating to R&D incurred in the development of the Specialist Technology Products and costs associated with:</p> <p>(a) Workforce employment;</p> <p>(b) Direct production costs, including materials (if it has commenced production);</p> <p>(c) R&D;</p> <p>(d) Product marketing (if any);</p> <p>(e) Non-income taxes, royalties and other governmental charges (if any);</p> <p>(f) Contingency allowances; and</p> <p>(g) Any other significant costs.</p> <p><i>Note: A Specialist Technology Company must:</i></p> <ol style="list-style-type: none"> 1. <i>Set out the components of cash operating costs separately by category;</i> 2. <i>Explain the reason for any departure from the list of items to be included under cash operating costs; and</i> 3. <i>Discuss any material cost items that should be highlighted to investors.</i> <p>(ii) <i>Future cash operating cost</i> - highlight in the “Summary” section any expected material increase in costs or expenses (e.g. R&D expenses and marketing expenses in connection with its products/services) during the period covered by the working capital forecast.</p>

Products	<ul style="list-style-type: none"> (i) In the “Summary” section, a clear and accurate summary of its key Specialist Technology Product. (ii) For each Specialist Technology Product (including those in the pipeline or not yet commercialised), 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) Technical capabilities and commercial viability of the key technology applied to the Specialist Technology Product. (iv) Origins (i.e. in-licensing or internally developed) and the jurisdiction rights of the intellectual property pertaining to the key Specialist Technology Product.
Disclosure on commercialisation status and prospects	<ul style="list-style-type: none"> (i) Overview of the commercialisation status and the commercialisation plan of the Specialist Technology Products. (ii) With respect to each key Specialist Technology Product: <ul style="list-style-type: none"> (a) Elaborate on the commercialisation status, impediments to commercialisation and the future commercialisation plan; and (b) 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.
Addressable market, market share and industry overview	<ul style="list-style-type: none"> (i) With respect to each key Specialist Technology Product, 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) <i>Current and expected addressable markets</i> <ul style="list-style-type: none"> (a) 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).

	<p>(b) Competitive landscape of the key Specialist Technology Product 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.</p> <p>(c) Substantiate any statements that the applicant's products/services are likely to be more competitive or better.</p> <p>(iii) <i>Current and expected market share</i></p> <p>(a) Basis for determination of the current and expected market shares.</p> <p>(b) 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.</p>
Business model	<p>(i) In the "Summary" and "Business" sections, business model of the applicant which can be one of the following, or a combination of them, and/or other business models:</p> <p>(a) Subscription-based model</p> <p>(b) Transaction-based model</p> <p>(ii) For each key Specialist Technology Product from which the applicant has recorded sales during and after (if applicable) the track record period, the key metrics relevant to its business model. Non-exhaustive examples include:</p> <p>(a) <i>For subscription-based companies</i>: total number of subscribers, total number of paying subscribers, total number of new subscribers, total customer acquisition cost ("CAC"), customer retention rate¹² and net dollar retention rate¹³.</p> <p>(b) <i>For transaction-based companies</i>: 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.</p> <p>(iii) Present the key metrics disclosed by reference to regular intervals, with the basis for determination and reasons for material fluctuations (if any) explained.</p>

¹² 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.

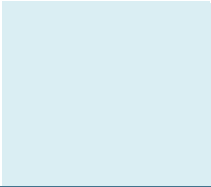
¹³ Net dollar retention rate refers to the ratio of revenue contribution of a customer group in the immediately preceding year to the revenue contribution of the same group of customers for the current year.

**R&D
expenditure,
experience
and specific
risks**

- (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 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:
 - (a) Details of its operations in R&D;
 - (b) The collective expertise and experience of key management and technical staff;
 - (c) 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 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;
 - (d) The relevant experience of the key persons referred to in MB Rule 18C.14(1) in the R&D, manufacturing and commercialisation of the relevant Specialist Technology Product;
 - (e) The salient terms of any service agreements between the applicant and its key management and technical staff;
 - (f) Measures (if any) that the applicant has in place to retain key management or technical staff (e.g. 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; and
 - (g) Statement of any legal claims or proceedings that may have an influence on its R&D for any key Specialist Technology Product.

Industry standards/ competent authority requirements	<ul style="list-style-type: none"> (i) 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 have met such standards, definitions or classifications. (ii) 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, a summary of material communications with the relevant competent authority in relation to its Specialist Technology Product, and the results of such communications. (iv) If applicable, all material safety data relating to its Specialist Technology Product, including any serious adverse events.
Risks	<ul style="list-style-type: none"> (i) 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, information on project risks arising from environmental, social, and health and safety issues.
Intellectual property	<ul style="list-style-type: none"> (i) Details of any material intellectual property right 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: <ul style="list-style-type: none"> (a) Include in the "Summary" section such intellectual property rights; (b) 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; and (c) To the extent that any material intellectual property right is in-licensed, a clear statement of the applicant's material rights and obligations under the applicable licensing agreement. (iii) Details and significance of material intellectual property rights in relation to each key Specialist Technology Product, including: <ul style="list-style-type: none"> (a) The part of the relevant Specialist Technology Product to which the material intellectual property right is attributing or protecting (e.g. whether key technology or product packing); and

	<p>(b) 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).</p> <p>(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.</p>
Warning statement	<p>The following warning statement that must be prominently and legibly displayed on the front cover or inside front cover of the listing document:</p> <p><i>“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.”</i></p>
Additional disclosures for Pre-Commercial Companies	<p>In addition to the disclosures required in paragraph 35 of this chapter, a Pre-Commercial Company is required to disclose, in the listing document:</p> <p>(i) The stage of R&D for each of its Specialist Technology Product.</p> <p>(ii) Development details by key stages and milestones for its key Specialist Technology Product to meet the revenue requirement for a Commercial Company.</p> <p>In defining the key stages and milestones, make reference to the industry-specific standards, definitions or classifications in defining the key stages and milestones, and the relevant regulatory approval required, as disclosed by reference to “Key area – 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.</p> <p>(iii) All relevant risks associated with the commercialisation of each of its key Specialist Technology Product.</p> <p>(iv) Prominently and legibly display the following additional warning statement on the front cover or inside front cover, following the warning statement referred to in “Key area – Warning statement” above:</p> <p><i>“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.”</i></p>

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- (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.
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I. Subscription of Shares by Existing Shareholders

- 56. 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 and/or its close associates may participate in the IPO of a Specialist Technology Company provided that the applicant complies with MB Rules 8.08(1), 18C.08 and 18C.10.
- 57. For the avoidance of doubt, the Existing Shareholders Conditions in **Chapter 4.15** do not apply to Specialist Technology Companies. Instead, the following applies:
 - (i) An existing shareholder holding 10% or more of the shares in the Specialist Technology Company prior to IPO must subscribe for shares in the IPO as a cornerstone investor; and an existing shareholder holding less than 10% of the shares in the Specialist Technology Company prior to IPO may subscribe for shares in the IPO as either a cornerstone investor or a placee:
 - (a) In the case of subscription as a placee, the applicant and its sponsors must confirm that no preference in allocation was given to the existing shareholder; and
 - (b) In the case of subscription as a cornerstone investor, the applicant and its sponsors 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 are substantially the same as other cornerstone investors.
- 58. In addition to paragraph 57 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 “*Anti-dilution rights*” of paragraph 13 of **Chapter 4.2**. 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 MB Rules 8.08(1), 18C.08 and 18C.10 are met.
- 59. Where allocations will be made to core connected persons, the Specialist Technology Company must apply for, and the Exchange will ordinarily grant, a related MB Rule 9.09 waiver, if applicable.

J. Specialist Technology Company with a WVR Structure

- 60. The Exchange presumes a MB Chapter 18C applicant fully meeting the requirements under MB Chapter 18C to have satisfied (i) the Innovative Company Requirements and shall qualify as an innovative company for the purpose of MB Chapter 8A; and (ii) the external validation requirement under **Chapter 2.2**. However, such applicant seeking to list with a WVR structure under MB Chapter 8A shall remain subject to all other applicable requirements under **Chapter 2.2** and MB Chapter 8A.

K. Stock Marker

- 61. The listed securities of a Pre-Commercial Company will be assigned a special stock short name marker that ends with the marker “P”.

L. Lock-up Periods

Key persons

62. An applicant must identify, and disclose the basis for its determination of, the “key personnel responsible for the Specialist Technology Company’s technical operations and/or the R&D of its Specialist Technology Product(s)”. Such key personnel should be subject to restrictions on disposal of its interest in the applicant.
63. The following are examples of, and the factors to be considered in determining whether a person is, a key personnel:

Examples	Considerations
(i) Head and key personnel of the R&D department whose expertise is primarily relied upon by the applicant for the development of the Specialist Technology Product	(a) Shareholding of such personnel (b) His/her remuneration relative to other R&D staff (c) His/her seniority
(ii) Lead developer of the core technologies in relation to the Specialist Technology Product	

64. The Exchange may request an applicant to provide supporting documentation to substantiate the basis on which such key persons have been identified. The Exchange may also deem any person to be a key person based on the facts and circumstances of an individual case.

Existing investors

65. MB 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 MB Rule.
66. The lock-up restrictions of MB Rule 18C.14(2) only apply to such investors identified as the Pathfinder SII that satisfy the indicative minimum investment benchmarks as set out in paragraph 26(i) above. If an applicant has more than the required number of sophisticated independent investors that meet the minimum investment benchmarks for Pathfinder SII as set out in paragraph 26(i) above, it would be free to decide, on a commercial basis, which of these investors are to be designated as the Pathfinder SII, who will then be subject to the lock-up restrictions under MB Rule 18C.14(2).

Disclosure of shareholding

67. 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 MB 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 LPD prior to the issue of the relevant report, for so long as the relevant person remains as a shareholder.

68. A Specialist Technology Company must disclose the total number of securities in the issuer held by each of the persons referred to in paragraph 66 above who are employed by the applicant as at the LPD prior to the issue of the relevant interim and annual reports, as such information is expected to be within the knowledge of its directors.

M. Applicability of Percentage Ratios

69. Since Specialist Technology Companies listed under MB Chapter 18C are not required to meet any of the financial eligibility tests under MB Rule 8.05(1), 8.05(2) or 8.05(3) at the time of listing¹⁴, 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.
70. The Exchange may exercise its discretion under MB Rule 14.20 to disregard the revenue ratio and the profit ratio (where applicable) for any Specialist Technology Company listed under MB 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.

¹⁴ For the avoidance of doubt, a Specialist Technology Company which is able to meet the financial eligibility requirements under MB Rule 8.05 cannot apply to list under MB Chapter 18C.

Example 1

R&D expenditure ratio
calculation
(Pre-Commercial
Company)

Company A is a Pre-Commercial Company (with revenue of less than HK\$150 million for the most recent audited financial year) seeking to list on the Main Board pursuant to MB Chapter 18C. The applicable minimum R&D expenditure ratio is 50% under MB 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\$'millions	Year 2 HK\$'millions	Year 3 HK\$'millions
Revenue	-	-	120
Cost of sales	-	-	(54)
Gross profit	-	-	66
Selling and marketing expenses	-	-	(13)
General and administrative expenses	(320)	(348)	(395)
R&D expenses	(236)	(264)	(450)
Loss from operations	(556)	(612)	(792)
Finance costs	(17)	(18)	(19)
Loss before tax	(573)	(630)	(811)
Income tax expense	-	-	-
Loss for the year	(573)	(630)	(811)

Capital expenditures incurred

	Year 1 HK\$'millions	Year 2 HK\$'millions	Year 3 HK\$'millions
Acquisition of R&D centre (fixed asset) ¹	200	-	-
R&D equipment acquired and capitalised (fixed asset) ¹	65	85	25
Intangible asset acquired from third parties and capitalised ²	120	30	-
Internal development costs capitalised as intangible asset ²	20	30	-
	405	145	25

Note 1: The depreciation expense of these fixed assets is included in R&D expenses.

Note 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 million (included in the line item "R&D expenses").

Computation of R&D expenditure ratios

Step 1: Compute the annual and total R&D expenditure for the trading record period

	Year 1	Year 2	Year 3
	HK\$'millions	HK\$'millions	HK\$'millions
R&D expenses	236	264	450
Adjustments:			
Add: intangible asset acquired from third parties and capitalised	120	30	-
Add: internal development costs capitalised as intangible asset	20	30	-
Less: amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(40)
Annual R&D expenditure (A)	376	324	410
Total R&D expenditure for the three financial years prior to listing (HK\$'millions) (B)			1,110

Step 2: Compute the annual and total operating expenditure for the trading record period

	Year 1	Year 2	Year 3
	HK\$'millions	HK\$'millions	HK\$'millions
R&D expenses	236	264	450
Selling and marketing expenses	-	-	13
General and administrative expenses	320	348	395
Adjustments:			
Add: intangible asset acquired from third parties and capitalised	120	30	-
Add: internal development costs capitalised as intangible asset	20	30	-
Less: amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(40)
Annual R&D expenditure (C)	696	672	818
Total R&D expenditure for the three financial years prior to listing (HK\$'millions) (D)			2,186

Step 3: Compute the annual and total R&D expenditure ratio for the trading record period

		Year 1	Year 2	Year 3
Annual R&D expenditure ratio	(A)/(C)	54%	48%	50%
Total R&D expenditure ratio	(B)/(D)		51%	

Conclusion:

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 MB Rule 18C.04(2)(c).

Example 2

R&D expenditure ratio
calculation
(Commercial Company)

Company B is a Commercial Company seeking to list on the Main Board pursuant to MB Chapter 18C. The applicable minimum R&D expenditure ratio is 15% under MB 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\$'millions	Year 2 HK\$'millions	Year 3 HK\$'millions
Revenue	100	120	290
Cost of sales	(70)	(84)	(203)
Gross profit	30	36	87
Selling and marketing expenses	(75)	(89)	(116)
General and administrative expenses	(51)	(63)	(78)
R&D expenses	(21)	(30)	(42)
Loss from operations	(117)	(146)	(149)
Finance costs	(2)	(3)	(4)
Loss before tax	(119)	(149)	(153)
Income tax expense	(1)	(2)	(3)
Loss for the year	(120)	(151)	(156)

Capital expenditures incurred

	Year 1 HK\$'millions	Year 2 HK\$'millions	Year 3 HK\$'millions
Acquisition of R&D centre (fixed asset) ¹	10	-	-
R&D equipment acquired and capitalised (fixed asset) ¹	7	9	3
Intangible asset acquired from third parties and capitalised ²	5	-	-
Internal development costs capitalised as intangible asset ²	2	3	-
	24	12	3

Note 1: The depreciation expense of these fixed assets is included in R&D expenses.

Note 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 million (included in the line item "R&D expenses").

Computation of R&D expenditure ratios

Step 1: Compute the annual and total R&D expenditure for the trading record period

	Year 1	Year 2	Year 3
	HK\$'millions	HK\$'millions	HK\$'millions
R&D expenses	21	30	42
Adjustments:			
Add: intangible asset acquired from third parties and capitalised	5	-	-
Add: internal development costs capitalised as intangible asset	2	3	-
Less: amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(2)
Annual R&D expenditure (A)	28	33	40
Total R&D expenditure for the three financial years prior to listing (HK\$'millions) (B)			101

Step 2: Compute the annual and total operating expenditure for the trading record period

	Year 1	Year 2	Year 3
	HK\$'millions	HK\$'millions	HK\$'millions
R&D expenses	21	30	42
Selling and marketing expenses	75	89	116
General and administrative expenses	51	63	78
Adjustments:			
Add: intangible asset acquired from third parties and capitalised	5	-	-
Add: internal development costs capitalised as intangible asset	2	3	-
Less: amortisation expense of capitalised intangible assets included in R&D expenditure	-	-	(2)
Annual R&D expenditure (C)	154	185	234
Total R&D expenditure for the three financial years prior to listing (HK\$'millions) (D)			573

Step 3: Compute the annual and total R&D expenditure ratio for the trading record period

		Year 1	Year 2	Year 3
Annual R&D expenditure ratio	(A)/(C)	18%	18%	17%
Total R&D expenditure ratio	(B)/(D)		18%	

Conclusion:

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 MB Rule 18C.04(2)(a).